Aval Consulting Group.

Delivery and Servicing Plan

Land to the Rear of Larkswood

October 2022

Project Information

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Revision History

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A	October 2022	BS / LS	LS	AC	FINAL

Disclaimer

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1. Introduction

1.1 Overview

Aval Consulting Group Limited has been commissioned by Larkswood Developments LLP ('the client') to provide the Delivery and Servicing Plan to support the residential scheme of 72no. C3 residential dwellings (flats) at an undeveloped site on land to the rear of Larkswood (hereafter referred to as the 'development site'). The site is located in the London Borough of Waltham Forest (LBWF).

This DSP describes the anticipated service and delivery vehicle movements, servicing locations and how such activities will be managed and kept off the public highway. This DSP builds upon the servicing strategy outlined within the Transport Assessment prepared by Aval Consulting in August 2022.

The preparation of a DSP is intended to provide LBWF with a commitment from the applicant to manage the commercial service vehicle trips to and from the development in accordance with the strategy and measures outlined within this document.

This DSP has been carried out in accordance with good practice guidelines and has been prepared in accordance with TfL Delivery and Servicing Planning Guidance, National Planning Policy Framework (NPPF) (2021), Adopted London Plan (2021) and current Planning Guidance documents.

The remainder of this report is structured as follows:

- Chapter 2 outlines the purpose of this document with reference to borough and TfL guidance, in accordance with which this document has been prepared;
- Chapter 3 provides a brief overview of the proposed development and the associated delivery and servicing requirements, including the vehicle routing to the site;
- Chapter 4 identifies the objectives of the Delivery and Servicing Plan; and
- Chapter 5 provides a summary of the conclusions.

1.2 Site Location and Details

Figure 1.1 shows the site location. The site is currently an unused site, which was formerly a landscape contractors' yard. The site is situated to the rear of Larkswood woodland area. The only way to access the site is from New Road to the north.

The site lies immediately north and west of Larkswood woodland area, as a result the woodland forms the boundary to the south and east of the development. New Road forms the northern boundary and to the west lies the Council owned land, which consists of Larkswood Leisure Centre, a health centre, fitness centre, food store, nursery and restaurant.

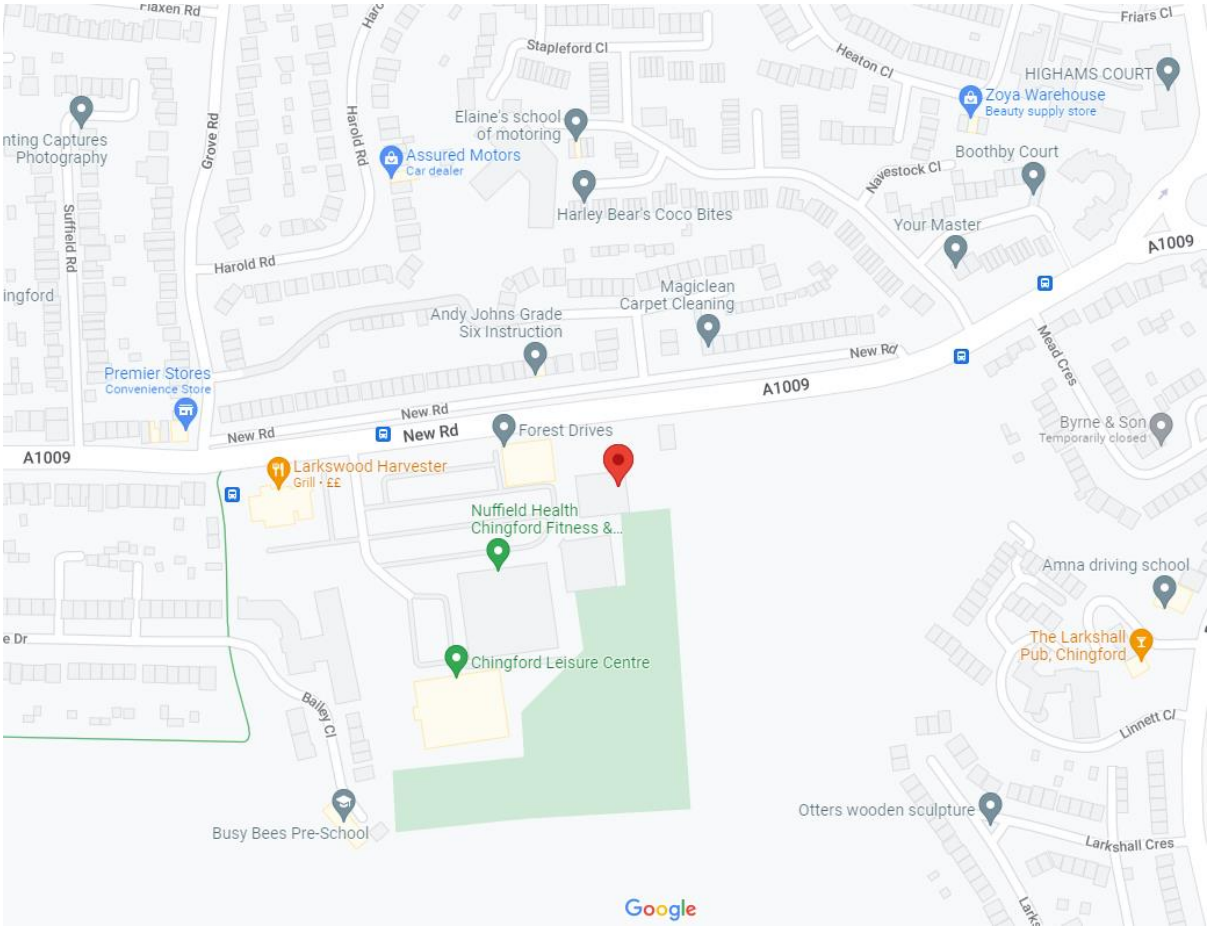


Figure 1.1: Proposed site location (Source: Groundsure Location Intelligence)

2. Policy and Guidance

This section lists all the latest regional and local planning policy guidance specifically applicable to the proposed development.

2.1 National Guidance

2.1.1 National Planning Policy Framework (2021)

The principal national planning policy guidance with respect to the proposed development is the National Planning Policy Framework (NPPF). The most recent update of the NPPF was published on 20 July 2021 by the Ministry of Housing, Communities and Local Government. The NPPF sets out the government's planning policies for England and how these are expected to be applied.

This revised Framework replaces the previous National Planning Policy Framework published in March 2012, revised in July 2018 and updated in February 2019.

Three dimensions to sustainable development have been identified in the NPPF: economic, social and environmental.

The proposed development complies with guidance and requirements set out in this Revised NPPF.

The NPPF has a "presumption in favour of sustainable development" and includes the following principles of relevance to this site:

- To drive and support economic development;
- To seek to secure high quality design; and
- Manage growth by making full use of public transport, walking and cycling and focusing development in locations which are or can be made sustainable.

The policy suggests that plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable modes can be maximised. Development should be located and designed where practical to achieve the following:

- Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians; and
- Consider the needs of disabled people by all modes of transport.

2.1.2 National Planning Practice Guidance (NPPG, 2014)

NPPG is a web-based resource which brings together planning guidance on various topics into one place. It was launched in March 2014 and coincided with the cancelling of the majority of Government Circulars which had previously given guidance on many aspects of planning.

The guidance note on 'Travel Plans, Transport Assessments and Statements' provides advice on when Travel Plans are required, and what they should contain. This has been referred to when preparing this report.

The guidance highlights that TAs, TSs and TPs are important because they can positively contribute to:

- Encouraging sustainable travel;
- Lessening the traffic generation and its detrimental impacts;
- Reducing carbons emissions and climate impacts;
- Creating accessible, connected, inclusive communities;
- Improving health outcomes and quality of life;
- Improving road safety; and
- Reducing the need for new developments to increase existing road capacity or provide new roads.

2.2 Regional Guidance

2.2.1 The Adopted London Plan (March 2021)

The Adopted London Plan sets out the integrated economic, environment, transport and social framework for the development of London over the next 20 – 25 years. The London Plan was adopted in January 2011, and has subsequently been revised a number of times, with a recent version prior to this being the Intend to Publish Draft London Plan (Dec 2019) and then the Publication London Plan (Dec 2020).

It is, however, the most up-to-date London Plan (March 2021) that has been referred to here.

2.2.2 TfL Delivery and Servicing Planning Guidance (December 2020)

One of the purposes of the guidance is to ensure that deliveries and servicing are taken into account from the earliest stage in the planning process.

The DSP covers:

- *"The physical design and layout of the site, and how it provides adequate provision for delivery and servicing activity from day one;*

- *The day-to-day policies and measures which will be implemented so that deliveries and servicing are appropriately managed, and how the disruption and environmental impact of that activity locally will be minimised over time. It should set appropriate targets for continuous improvement; and*

- *It also sets out the forecast trip rates for the site."*

"*The DSP should set out how it will meet the policies set out in relevant:*

- *Local (such as the Local Plan and any Supplementary Planning Guidance)*
- *Regional; and*
- *National policy documents."*

"In London, the Mayor has set a target of 80% sustainable mode share by 2041. This means prioritising walking, cycling and public transport and the adoption of the Healthy Streets approach.

For deliveries and servicing the approach set out in the London Plan (2020), the MTS (2018) and the Freight and Servicing Action Plan (FSAP, 2019) is to promote Safe, Clean and Efficient freight and servicing."

2.3 Local Guidance

2.2.1 SHAPING THE BOROUGH: Waltham Forest Local Plan (LP1) (2020 –2035)

"The Local Plan sets out the Council's planning policy framework for the Borough. This plan sets out the level of growth which needs to be planned for in Waltham Forest and identifies where that growth should be located and how it should be delivered. The policies set out in the Plan will be used to determine planning applications in Waltham Forest."

The key policies affecting this development are:

Active Travel, Transport & Digital Infrastructure

"*Strategic Objective: Improve active and sustainable transport choices across the Borough and beyond building on the success of the 'Enjoy Waltham Forest programme', encouraging wider integrated walking and cycling routes. Ensure timely, strategic and local infrastructure investment and delivery to support good sustainable growth for communities both now and in the future, through working with residents, partners, investors, developers and providers."*

Sustainable Transport:

"*Waltham Forest's Transport Infrastructure Investment Strategy, Vision2020 for Cycling, and Local Implementation Plan 3 (LIP3)(2019), set out the borough's vision for a transport network that improves the quality of life of all residents, and unlocks significant opportunities for growth.*

The Council's main objective is to deliver an affordable, accessible, and future-proofed public transport network that allows residents and business to access

opportunities, while creating attractive, healthy and safe neighbourhoods that share the benefits of active travel across all people that live in, or visit the borough.

Waltham Forest is committed to meeting the Mayor of London's Transport Strategy objectives to deliver a transport network that improves the health and wellbeing of all Londoners, and to achieve an 80% mode share for active and sustainable travel by 2041.

Policy 62 - Promoting Sustainable Transport

All new development will be supported where it contributes to the Council's objective to deliver more attractive, accessible, healthy and safe streets, places and neighbourhoods for all residents in Waltham Forest. Planning permission will be granted for new development that:

a) *Create an environment where residents and visitors actively feel welcomed and choose to walk, cycle or use public transport as part of their everyday life;*
b) *Contribute towards enhancing streets to meet 'Healthy Streets' indicators across the public realm in the borough;*
c) *Increase the number of trips made by walking, cycling and public transport, and improve local connections and facilities for these modes, in line with Policy 63 - Active Travel and Policy 64 - Public Transport ;*
d) *Improve the quality and resilience of the public realm, ensuring accessible and adaptable public space for people and activities from all walks of life;*
e) *Create safe neighbourhood environments, including reducing road danger, improving personal security and meeting the Mayor of London's Transport Strategy objective for 'Vision Zero';*
f) *Provide legible, prominent and coherent wayfinding for walking and cycling to strategic and local active travel networks, public transport hubs, amenities, schools and greenspaces;*
g) *Support permeability for active modes of travel, and prioritise road space for cycling, walking and public transport;*
h) *Ensure neighbourhoods have good connections to public transport, in line with Policy64 - Public Transport;*
i) *Support car club development, cycle hires facilities and other sustainable transport initiatives, such as electric vehicle, charging infrastructure and pocket parks, in line with Policy 68 - Managing Vehicle Traffic and Policy 69 - Electric Vehicles (EV);*
j) *Reduce car dominance in terms of congestion and excessive parking on the street;*
k) *Improve air quality and noise pollution by promoting sustainable transport initiatives; and reducing Nitrogen Oxide (NOx) emissions and exposure of vulnerable people to air pollution, in line with supporting paragraph 18.9 (Policy 90 - Air Pollution)"*

Policy 63 - Active Travel

"All new development will be expected to support a shift to active transport modes and encourage an increase in walking and cycling. Proposals will be expected to:

Walking

a) *Improve the pedestrian environment by supporting high quality and safe public realms with facilities and amenities;*
b) *Contribute towards the delivery of TfL's 'Liveable Neighbourhoods for all' programme, through enhancements to walking connections to local destinations, transport hub sand amenities;*
c) *Maximise opportunities to increase permeability of the public realm in and around the development for people travelling by foot, bike or public transport;*
d) *Provide wide enough footpath for the number of people expected to use them and designed for vulnerable road users;*
e) *Ensure that any improvements to access routes or green corridors would not result in adverse effects on the integrity of the Epping Forest Special Area of Conservation;*

Cycling

f) *Contribute and support the delivery of high quality and safe strategic or local cycle networks in the borough, linked to public transport nodes, as well as public spaces, facilities and amenities;*
g) *Ensure the provision of secure public and on-site cycle parking facilities for occupiers and visitors, that are compliant with Waltham Forest Parking Standards, London Plan requirements and London Cycling Design Standards (LCDS), at prominent locations;*
h) *Deliver accessible cycle parking and appropriate off-street storage for people using cargo bikes or adapted cycles, hand carts and for people who may not be able to lift bikes (when include ground floor retail and take-away food outlets).*
i) *Provide well-designed, accessible facilities including prominent and well-located showers, changing rooms and lockers. The provision should be proportionate to the scale of development and cycle parking provided; and*
j) *Promote and contribute towards the introduction and expansion of cycle hire facilities or any other sustainable transport initiatives and;*
k) *Ensure that any improvements to access routes or green corridors would not result in adverse effects on the integrity of the Epping Forest Special Area of Conservation."*

Policy 64 - Public Transport

"The Council will ensure that development is properly integrated with the public transport network by:

a) *Working with TfL, Network Rail and other partners to facilitate improvements to public transport infrastructure (Bus, National Rail, Underground, or*

Overground network) with regard to capacity, provision of interchanges and step-free access;

b) *Ensuring connectivity and integration of the public transport network with other transport modes including walking, cycling within and outside the borough;*
c) *Supporting public transport schemes that seek to improve connectivity to local areas with lower Public Transport Accessibility Level (PTAL); in line with Policy 96 -Infrastructure and Developer Contributions;*
d) *Seeking development contributions towards enhancing public transport provision and infrastructure in order to mitigate likely adverse impact of development."*

Policy 66 - Deliveries, Freight and Servicing

"All development within the borough should seek to minimise the adverse impacts of deliveries, freight and servicing by:

a) *Using sustainable transport initiatives and zero emission vehicles, such as cargo bikes and electric vehicles, for servicing trips and last mile deliveries;*
b) *Reducing the number of freight, servicing and delivery trips to and from developments at the operational and construction phases;*
c) *Managing freight and servicing by utilising local and area wide facilities to consolidate and time deliveries;*
d) *Operating facilities and measures to reduce waste collection trips, such as consolidated waste collection for businesses, and underground waste storage;*
e) *Arranging deliveries outside of peak hours and in the evening or night-time;*
f) *Managing road danger resulting from freight and servicing vehicles by using suppliers that meet Fleet Operator Recognition Scheme (FORS) Silver standard;*
g) *Where appropriate, promoting facilities to enable efficient online retailing and minimise additional freight trips arising from missed deliveries, including storage lockers or concierge services."*

3 Proposed Development

3.1 Scheme Outline

The proposed development consists of demolition of existing buildings for residential development (Use Class C3) comprising of two buildings (Blocks A and B). Block A will have five storeys and Block B will have seven storeys. Each block will have associated pedestrian access, cycle parking, refuse stores and the site will have landscape and amenity areas.

The scheme proposes:

- Flat Block A consists of 5no. 1-bedroom flats, 7no. 2-bedroom flats and 11no. 3-bedroom flats, making a total 23 flats.
- Flat Block B consists of 18no. 1-bedroom flats and 31no. 2-bedroom dwellings, making a total 49 flats.

The LBWF encourage low car / car-free developments. Given this development only proposes small mostly 1- and 2-bedroom flats, car-lite and car free provision is supported. Residents at this development are expected to walk and/or cycle to the key local amenities which are within a few minutes' walk away next door and are expected to have a higher mode share of walking and cycling compared to other residents in the area / borough.

Based on the proposed provision of 3no. disabled spaces for this development, all 3no. parking bays on-site will have active electric vehicle charging facilities

The site layout plan is provided in Appendix A.

3.2 The Development

3.2.1 Main Vehicular Access

The proposed development utilises New Road to enter the site. The main access into the development from New Road caters for cars, refuse vehicles, fire tender vehicles, delivery vehicles, servicing vehicles, pedestrians and cyclists. The proposed access road is approximately 6m wide with a 2m footway on the left (western) side, adjacent to the building. The road is two-way.

Visibility is not considered to be an issue at the entrance of the proposed development site as New Road is relatively straight.

The development accords with the NPPF 2021, as not having an unacceptable impact on highway safety or severe residual cumulative impacts on the road network.

3.2.2 Pedestrian Access

There are a few pedestrian accesses to the site from New Road. One pedestrian access is situated in the north-west corner of the site and this leads to the communal entrance to Block B. The entrance in the middle of the site leads to the communal entrance to Block A and the entrance adjacent to the access road leads to the

residents' courtyard, the play area and bin stores. There are also minor pedestrian access points around the development to access individual doorways to the blocks and ground floor flats.

The proposed pedestrian friendly area in the south of the site, combined with play space, including fitness equipment will benefit the new residents.

3.2.3 Cycle Parking

Cycle parking is being provided at the development in line with Policy T5 of the Adopted London Plan (2021). This states that cycle parking should be provided at least in accordance with the minimum standards set out below, ensuring that a minimum of two short-stay and two long-stay cycle parking spaces are provided where the application of the minimum standards would result in a lower provision.

Based on the minimum standards of 1 space per studio/1-person 1-bedroom dwelling, 1.5 spaces per 2-person 1-bedroom dwelling and 2 spaces per all other dwellings, this development requires a minimum total of 133no. cycle spaces for residents. This is based on having 23no. 1-bedroom flats and 49no. 2 and 3-bedroom flats. An additional 5no. (minimum) short-stay cycle spaces are required for visitors. It is proposed that 6no. visitor cycle spaces (in 3no. Sheffield cycle stands) will be situated within the public open space in the north-western corner of the development, close to New Road pedestrian entrance.

It is proposed that Block A cycle store will comprise 56 standard cycle spaces and 4 non-standard cycle spaces. The cycle store for Block B will accommodate 90 standard cycle spaces and 4 non-standard cycle spaces. This provides a total of 154 residential cycle spaces, which exceeds the minimum required and is welcomed by the local authority.

The cycle store for Block A can be accessed from the communal entrance hall inside. This can be accessed from the communal entrance at the front (New Road) and from the residential courtyard/parking area at the rear of the site.

The cycle store for Block B can also be accessed from the communal residential reception inside the building and also from an external door leading to the residential courtyard/parking area.

Cycle parking will be designed and laid out in accordance with the guidance contained in the London Cycling Design Standards 144.

3.2.4 Delivery and Servicing

It is proposed that all deliveries will take place on-site from the residents' courtyard area, where delivery vehicles can turn around.

3.2.5 Waste Strategy

Waltham Forest's Waste and Recycling Guidance for Developers (June 2019) sets out the waste strategy for new developments. The Section '3.3.2 Access' of that document states that:

"It should be ensured that there are no steep inclines, door lips or flights of stairs between the location of the external bin store and the collection point. Residents should not have to carry waste more than 30 metres from their home. If it is not possible to put bin store within 30 meters, contact the Council for an agreed solution. Recycling and refuse facilities should be next to each other, with equal ease of accessibility to each. Waste collection crews and caretakers should not have to:

- carry refuse or recycling sacks more than 10 metres,
- move wheelie bins or carry bins more than 25 metres, or
- move a Bulk bin or other large wheeled bin more than 15 metres."

Waltham Forest's Development Management Policies Local Plan (adopted version on 24th October 2013) also sets out the waste strategy for new developments. Policy DM32 'Managing Impact of Development on Occupiers and Neighbours' sets out the local policy for waste and recycling, as follows:

"In managing the impact of new development on neighbouring amenity, the Council will refer to planning standards as set out in the Urban Design Supplementary Planning Document (SPD). New development including extensions, modifications to existing homes and where applicable, changes of use should:

Ensure the provision of facilities for the storage, collection and disposal of refuse. In assessing such provision, the Council will have regard to the following matters:

- the level and type of provision - For residential development, space for the storage of individual recycling and refuse containers or communal recycling facilities and refuse bins (where justified) will be required;
- the location of the provision - safe and convenient access for occupants/users and satisfactory access for refuse collection vehicles and operatives must be provided and maintained;
- the impact of the provision on visual amenity and measures in place to screen or minimise the prominence of the facilities."

The Council has also published a Supplementary Planning Document (SPD) on Urban Design which seeks to raise design standards in the Borough.

Although re-use and recycling rates construction, excavation and demolition waste in London are high, the London Plan sets a target of 95% to be recycled by 2020. London Plan policy 5.18 states that boroughs should require developers to produce site waste management plans to arrange for the efficient handling of construction, excavation and demolition waste."

The London Borough of Waltham Forest is a member of the North London Waste Authority (NLWA), and as such is committed to contributing to the regional target of a 50% recycling rate across north London by 2020.

The 'North London Waste Prevention Plan 2018-20' (the Plan) is a two-year programme aiming to reduce the amount of waste that needs to be managed in north London.

The Plan was driven by European, national, regional and local statutory drivers as well as NLWA's, and the seven boroughs', strategic priorities. It follows principles of the waste hierarchy (shown in Figure 1) as introduced by the Waste Framework Directive (2008/98/EC) and was also developed in the context of priorities and guidance set out in the 'EC Circular Economy Package', the 'Waste Prevention Programme for England 2013' and a number of industry reports and publications.

It is expected that new building (residential) developments for which communal bin-stores are planned should provide adequate external space (footprint) for the accommodation of refuse and recyclables to be stored in the containers as designated by the Waste Collection Authority (WCA). A total of 180 litres of waste storage space should be provided per dwelling of two bedrooms or less, with 240 litres provided per dwelling of more than two bedrooms.

3.2.6 Refuse Collection

The communal refuse and recycling stores for the residential development will be built within both residential blocks on the ground floor. Each Block will have its own bin store for waste, food waste, bulky waste and recycling. The bin stores will be accessed from the internal access road.

The residents will be expected to carry their waste to the ground floor store prior to the refuse and recycling collection day.

The refuse bins for the ground floor flats (with front terraces) require a management company to collect and move bins to a secure refuse holding area prior to collection.

According to local guidance, the location of any waste storage area should not be more than 25 metres away from the collection vehicle and should be step free. The location of the refuse storage areas both conform to this.

The bin store for Block A will be 45.8sqm in size and will hold 2x1100litre bins and 2x660litre bins. It will also accommodate 1xfood waste bin and a 12.4 sqm bulky waste area/section. It can be accessed from the access road and also from the residents' courtyard area, where refuse vehicles will turn around.

The bin store for Block B will be 51.8sqm in size and will hold 4x1280litre bins and 2x660litre bins. It will also accommodate 2xfood waste bins and an 8.5 sqm bulky waste area/section. It can be accessed from the residents' courtyard area, where refuse vehicles will turn around.

Refuse and recycling collections will occur once per week and will take place outside peak traffic hours.

It is expected that the waste storage provision for the flats are based on British Standard BS5906 'Waste Management in Buildings'. This guidance is considered a best practice.

4 DSP Measures and Vehicle Routing

4.1 Overview

This chapter provides details of the DSP including vehicle routing to the site.

4.2 Objectives

Delivery and Servicing Management Plans developed through the planning process seek to support sustainable development. They are drafted within the context of the guidance provided within the London Freight Plan and TfL's best practice guidance.

The DSP objectives are:

- Goods and services will be delivered, and waste removed, in a safe, efficient and environmentally-friendly way, on-site and not on the public highway;
- Identify deliveries that could be reduced, re-timed or even consolidated through consultation with suppliers;
- Improve the reliability of deliveries to the site;
- Reduce the operating costs of building occupants; and
- Reduce the impact of freight activity on residents and the environment.

4.3 Measures

In accordance with TfL's best practice guidance contained within their document 'Delivery and Servicing Plans: Making Freight Work for You' for the proposed management measures and initiatives have been grouped into the following areas: Design; Procurement Strategy; Operational Efficiency; Waste Management; and Road Trip Reduction. Each of these is considered below.

4.3.1 Design

The London Freight Plan recognises that good design can minimise disturbance for residents at or travelling to the site and the impact of servicing upon the surrounding highway network. Design related measures implemented as part of the proposed development are set out in turn below.

- Servicing Facilities

The proposed development has been designed to ensure that servicing activities are undertaken on-site. Bin stores are on site.

- Risk Assessment of Servicing Areas

A risk assessment would normally be undertaken by suitably trained site management staff prior to occupation. This could be a concierge manager or facilities staff. This assessment will examine the following issues:

- Implementation of safe working practices; and
- Interaction with servicing vehicles.

4.3.2 Waste Management

- Waste Reduction, Storage and Removal Measures

Guidance contained within the London Freight Plan identifies that developments should provide sufficient facilities for storage and collection of segregated waste.

- Refuse Collection Procedures

Refuse collection will be undertaken outside of the peak hours where possible.

- Enforcement

The contents of this DSP have been prepared in order to inform the planning authority of the servicing strategy for the site.

4.4 Delivery and Service Vehicle Access

Servicing will be undertaken within the confines of the site off the internal access road and in the residents' courtyard. It is envisaged that the largest vehicle that would access the site is the LBWF refuse collection vehicle. As a result, a refuse vehicle swept path for a 10.52m long x 2.53m wide refuse vehicle has been undertaken. This vehicle also has a 10.85m wall to wall turning radius. Given these dimensions, this is considered to represent a worst case. Fire tender vehicles, delivery vehicles and removal pantechnicon vehicles are expected to be smaller in size compared to this.

The swept path of the refuse vehicle (10.52m length x 2.53m wide) on the access road shows that this vehicle can manoeuvre along the internal access road and turn.

The vehicle can reach the bin collection points around the site adequately. The maximum bin carry distance is 25m and the vehicles can pull-up to the bin stores comfortably within that distance. See Appendix B for the swept paths of this refuse vehicle.

4.5 Delivery and Service Trip Generation

The TRICS database shows that a negligible number of light goods vehicles (LGVs) and servicing vehicles are expected to be generated by this residential development every day. The numbers expected on a daily basis based on the TRICS data (v.7.9.1) are shown in Table 4.1. The sites used to generate this forecast are the same as those used to calculate the trip generation in the TA.

It is forecast that of this, up to two refuse vehicles (one being recycling) may arrive on site every week.

Table 4.1 Forecast Light Goods and Heavy Goods Vehicles

Time of Day	**LGVs**		**Servicing Vehicles (vans and HGVs)**	
	Arrival	**Departure**	**Arrival**	**Departure**
07:00-08:00	0	0	0	0
08:00-09:00	1	1	1	1
09:00-10:00	3	1	0	0
10:00-11:00	1	1	0	0
11:00-12:00	0	1	0	0
12:00-13:00	1	1	1	1
13:00-14:00	0	0	0	0
14:00-15:00	0	0	0	0
15:00-16:00	1	1	0	0
16:00-17:00	1	1	0	0
17:00-18:00	1	1	0	0
18:00-19:00	1	1	0	0
19:00-20:00	0	0	0	0
20:00-21:00	0	0	0	0
TOTAL (whole day)	**10**	**9**	**2**	**2**

This shows that the expected number of delivery and servicing vehicles forecast to access the site is not expected to cause highway safety issues within the development.

4.6 Vehicle Routing to Site

It is anticipated that up to two refuse vehicles (one being recycling) may arrive on site every week. This should therefore not detriment those living and working within surrounding streets and on-site.

The most suitable routes for the LGVs (and HGVs) are proposed to be via the A406 onto the A1009/New Road in the east and west, and the M11 in the north and south. Figure 4.1 shows the proposed vehicle routes in outline.

It is considered that the routes used by refuse vehicles will remain the same.

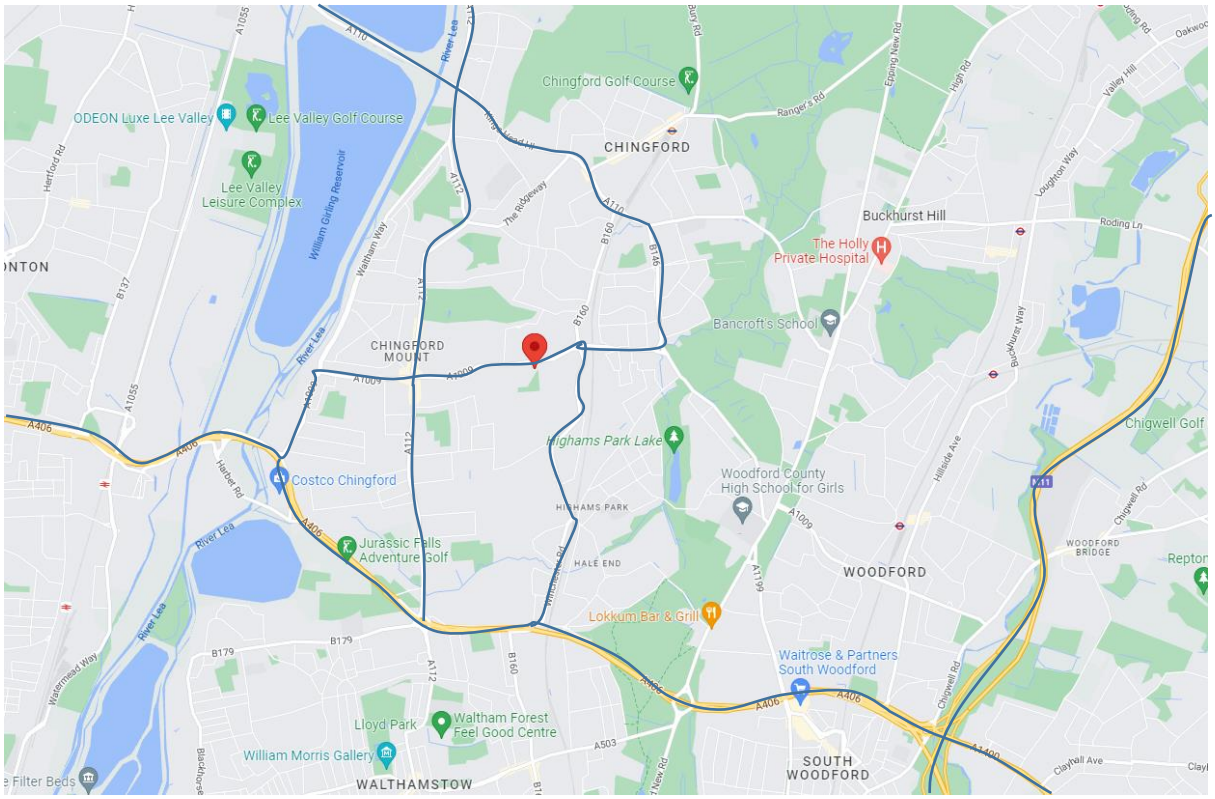


Figure 4.1: Proposed Vehicle Routings to Site (Source: Google Maps)

5 Summary

This document has provided details of the DSP for the proposed redevelopment of Land to the Rear of Larkswood.

It is evident there will be a low number of delivery and servicing trips of low-medium size vehicles.

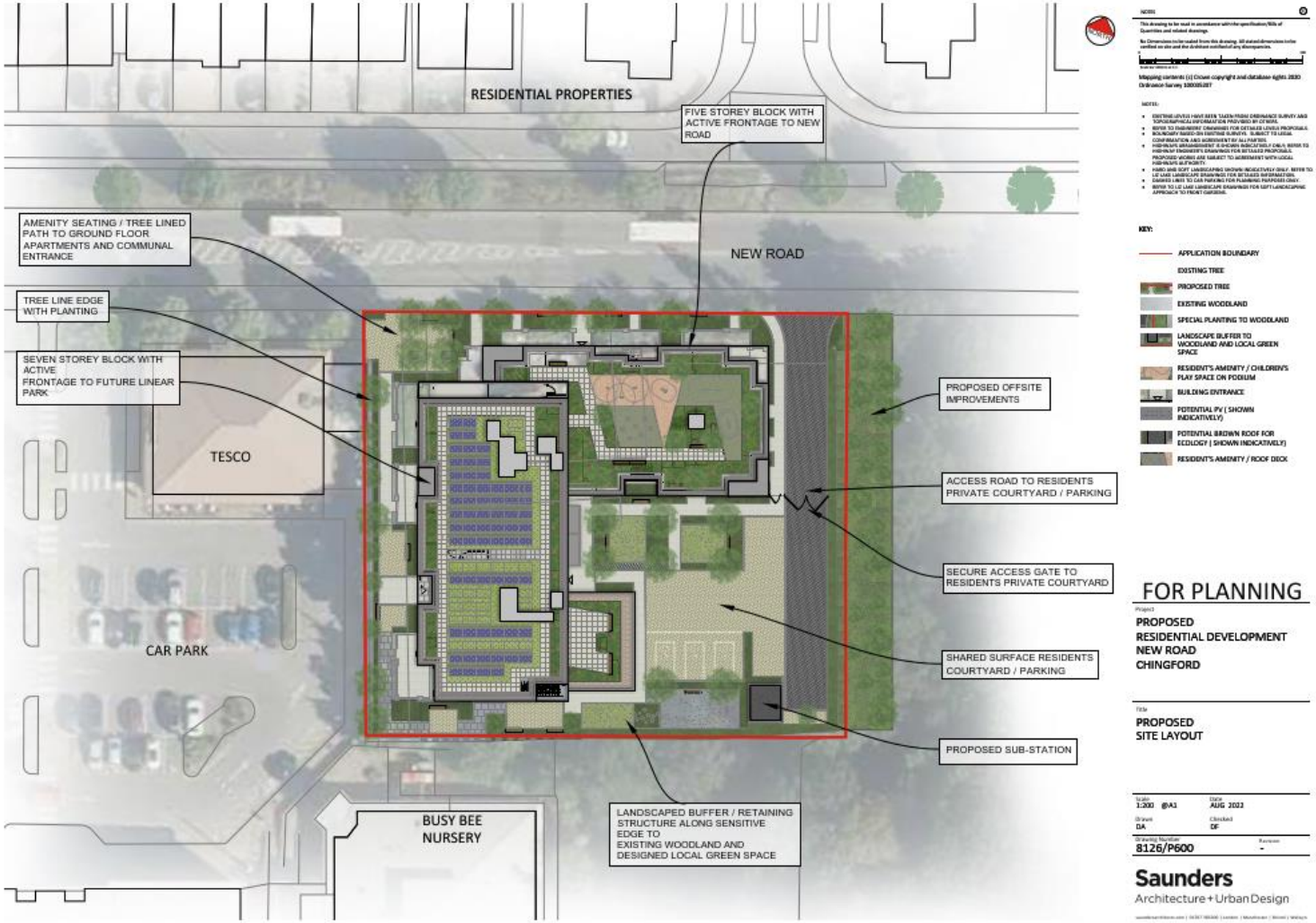
For servicing which does take place, including refuse, it is considered that the site and its surrounds provide adequate opportunities for loading to take place safely and without impacting upon traffic congestion.

The proposed development utilises New Road to enter the site. The main access into the development from New Road caters for cars, refuse vehicles, fire tender vehicles, delivery vehicles, servicing vehicles, pedestrians and cyclists. The proposed access road is approximately 6m wide with a 2m footway on the left (western) side, adjacent to the building. The road is two-way.

It is envisaged that the measures set out in this document will limit the impact on the surrounding area in terms of road safety, traffic congestion and noise. However, it is important that the DSP is subject to a regular monitoring process to gauge progress against the actions set out, as well as providing an opportunity for appropriate mitigation to be established if required.

Appendices

Appendix A: Site Layout Plan



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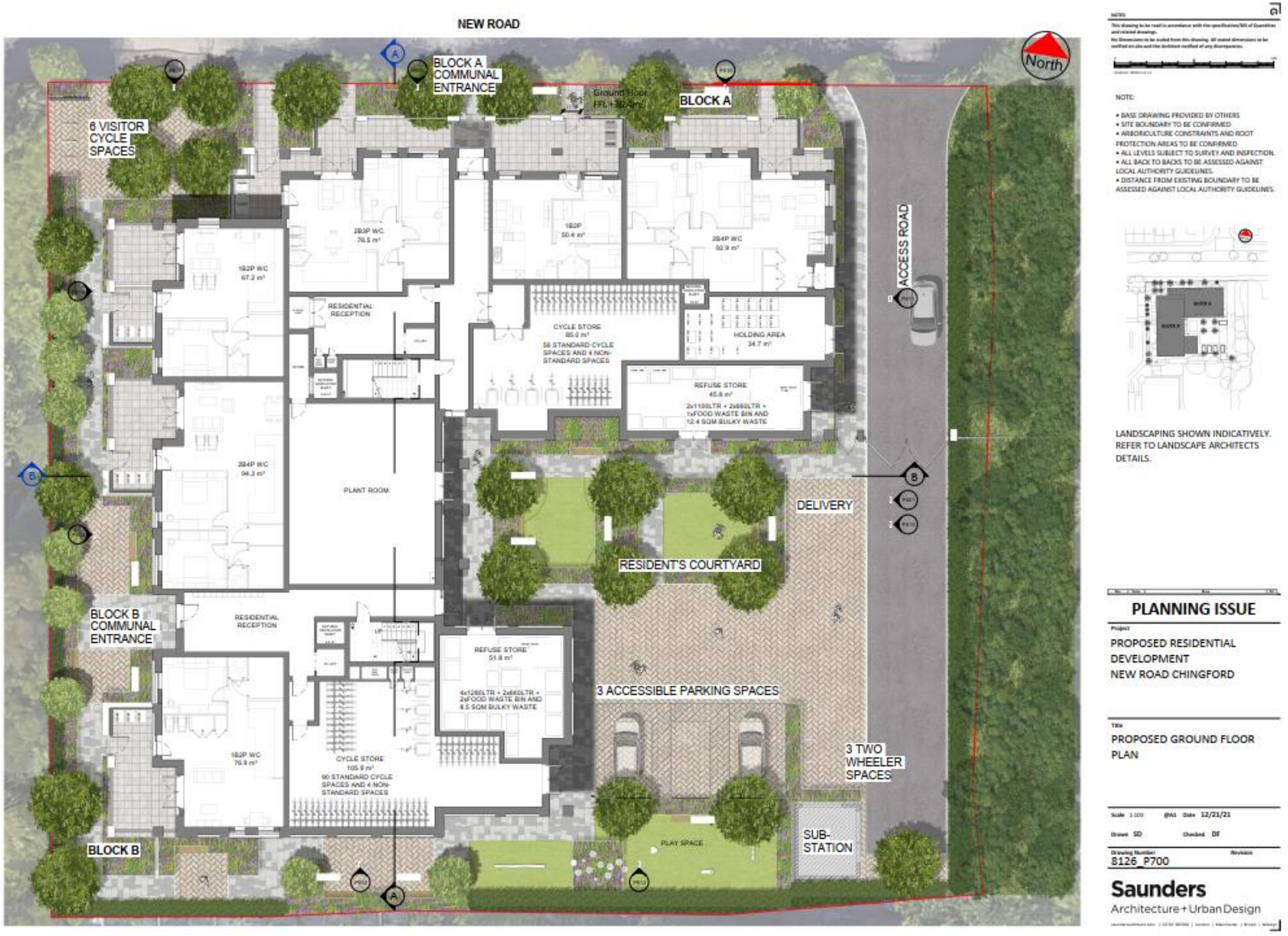

NOTE:

- BASE DRAWING PROVIDED BY OTHERS
- SITE BOUNDARY TO BE CONFIRMED
- ARBORICULTURE CONSTRAINTS AND ROOT PROTECTION AREAS TO BE CONFIRMED
- ALL LEVELS SUBJECT TO SURVEY AND INSPECTION.
- ALL BACK TO BACKS TO BE ASSESSED AGAINST LOCAL AUTHORITY GUIDELINES.
- DISTANCE FROM EXISTING BOUNDARY TO BE ASSESSED AGAINST LOCAL AUTHORITY GUIDELINES.

LANDSCAPING SHOWN INDICATIVELY. REFER TO LANDSCAPE ARCHITECTS DETAILS.

PLANNING ISSUE

PROPOSED RESIDENTIAL DEVELOPMENT
NEW ROAD CHINGFORD

PROPOSED GROUND FLOOR PLAN

Scale 1:100 @A1 Date 12/21/21
Drawn SD Checked DF
Drawing Number 8126_P700 Revision

Saunders
Architecture+Urban Design

Aval Group.

NOTES

This drawing to be read in accordance with the specification/Bills of Quantities and related drawings.

Do Dimensions to be scaled from this drawing. All stated dimensions to be verified on site and the Architect notified of any discrepancies.

0 100

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NOTE:

- EXISTING LEVELS HAVE BEEN TAKEN FROM ORDNANCE SURVEY AND TOPOGRAPHICAL INFORMATION PROVIDED BY OTHERS.
- REFER TO ENGINEERS' DRAWINGS FOR DETAILED LEVELS PROPOSALS.
- BOUNDARY BASED ON EXISTING SURVEYS. SUBJECT TO LEGAL CONFIRMATION AND AGREEMENT BY ALL PARTIES.
- HIGHWAYS ARRANGEMENT IS SHOWN INDICATIVELY ONLY. REFER TO HIGHWAY ENGINEER'S DRAWINGS FOR DETAILED PROPOSALS. PROPOSED WORKS ARE SUBJECT TO AGREEMENT WITH LOCAL HIGHWAYS AUTHORITY.
- HARD AND SOFT LANDSCAPING SHOWN INDICATIVELY ONLY. REFER TO LIZ LAKE LANDSCAPE DRAWINGS FOR DETAILED INFORMATION.
- DASHED LINES TO CAR PARKING FOR PLANNING PURPOSES ONLY.
- REFER TO LIZ LAKE LANDSCAPE DRAWINGS FOR SOFT LANDSCAPING APPROACH TO FRONT GARDENS.

KEY:

MASTERPLAN BOUNDARY

APPLICATION BOUNDARY

FOR PLANNING

Project
**PROPOSED
RESIDENTIAL DEVELOPMENT
NEW ROAD
CHINGFORD**

Title
**PROPOSED
SITE LAYOUT
(WITHIN MASTERPLAN)**

Scale	Date
1:500 @A1	AUG 2022
Drawn: DA	Checked: DF
Drawing Number: 8126/P601	Revision: -

Saunders
Architecture+Urban Design

Appendix B: Vehicle Swept Paths