KEW RIVERSIDE

Construction Logistics Plan

DOCUMENT CONTROL ISSUE SHEET

Project & Document Details

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Document History

Issue	Status	Reason for Issue	Issued to
001	Draft	Draft CEMP	ER
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Issue	Date	Author	Contributors	Name	Signature

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Background

This Construction Logistics Plan (CLP) has been prepared by Clipfine Ltd (Clipfine) on behalf of Elysian Residences to discharge planning condition U0079765 regarding 'Demolition / Construction / Logistics Method', planning application reference 18/3310/FUL, for development at the former Biothane Site, Melliss Avenue, Kew TW9 4BD ("the Site") in the London Borough of Richmond upon Thames (LBRuT).

Planning condition U0079765 – 'Demolition / Construction / Logistics Method', states the following:

'*1) Unless otherwise agreed in writing by the LPA, prior to commencement of any demolition, a Construction Management Statement / Logistics Plan for the ground works and demolition phase of the development site shall be submitted to and approved in writing by the Council.*

2) Unless otherwise agreed in writing by the LPA, prior to commencement of the construction of the development, a Construction Management Statement / Logistics Plan for the construction phase of the development site shall be submitted to and approved in writing by the Council.

3) The development shall not be implemented other than in accordance with the approved details through the demolition / construction period. The document shall demonstrate compliance with the guidance found in the Construction Logistics Plan for developers produced by Transport for London and include:

a. The size, number, routing and manoeuvring tracking of construction vehicles to and from the site, and holding areas for these on/off site;

b. Site layout plan showing manoeuvring tracks for vehicles accessing the site to allow these to turn and exit in forward gear;

c. Details and location of parking for site operatives and visitor vehicles (including measures taken to ensure satisfactory access and movement for existing occupiers of neighbouring properties during construction);

d. Details and location where plant and materials will be loaded and unloaded;

e. Details and location where plant and materials used in constructing the development will be stored, and the location of skips on the highway if required;

f. Details of any necessary suspension of pavement, road space, bus stops and/or parking bays;

g. Details where security hoardings (including decorative displays and facilities for public viewing) will be installed, and the maintenance of such;

h. Details of any wheel washing facilities;

i. Details of a scheme for recycling/disposing of waste resulting from demolition and construction works (including excavation, location and emptying of skips);

j. Details of measures that will be applied to control the emission of noise, vibration and dust including working hours. This should follow Best Practice detailed within BS5288:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites;

k. Details of any highway licenses and traffic orders that may be required (such as for licences for any structures / materials on the highway or pavement; or suspensions to allow the routing of construction vehicles to the site);

l. Details of the phasing programming and timing of works;

m. Where applicable, the Construction Management Statement should be written in conjunction with the Arboricultural Method Statement, and in accordance with British Statement 5837:2012 'Trees in relation to design, demolition and construction - recommendations', in particular section 5.5, 6.1, 6.2, 6.3 and 7;

n. A construction programme including a 24 hour emergency contact number;

o. See also TfL guidance on Construction Logistics Plans;

p. Communication strategy for residents during demolition and construction.

REASON: In the interests of highway and pedestrian safety together with the amenity of the area and neighbours'.

The title of planning condition U0079765 states a 'Demolition / Construction / Logistics Method', however the items listed in the condition, items a) to p), set out the requirements of a Construction Logistics Plan.

Therefore, this document will be titled a Construction Logistics Plan. The CLP will be structured in accordance with the Construction Logistics Planning Guidance document (CLOCS, April 2021) and will cover the items listed in planning condition U00079765.

The contractor and site manager for the Site is not known at this stage. When appointed, contact details will be included within this document, and further details would be provided where required.

1.2 The Site

The former Biothane Site is located off Melliss Avenue in the LBRuT. Melliss Avenue is a two-way carriageway and is a private road, which is within the wider Kew Riverside Residential Development (KRRD).

The Site is bordered by Melliss Avenue to the west and the River Thames is to the east. The Site has residential properties on three elevations.

1.3 Proposed Development

The Proposed Development consists of the following:

'Demolition of existing buildings and structures and redevelopment of the site to provide a specialist extra care facility (C2 Use Class) for the elderly with existing health conditions. Comprising, 88 units, with extensive private and communal healthcare, therapy, leisure and social facilities set within a building of ground plus 4 to 6 storeys including set backs. Provision of car and cycle parking, associated landscaping and publicly accessible amenity spaces including a children's play area.'

1.4 Objectives of the CLP

The CLP seeks to achieve the following objectives to mitigate the effects of construction works:

- Establish how construction materials can be delivered, and waste removed, in a safe and efficient manner;
- Identify deliveries that could be reduced or re-timed, particularly during peak hours;
- Assisting in easing construction congestion on the local and wider highway network; and
- Improve the safety and reliability of deliveries to the Site.

1.5 CLP Structure

The structure of the CLP report is in accordance with the Construction Logistics Planning Guidance document (CLOCS, April 2021) as follows:

- Introduction
- Context, Considerations and Challenges
- Construction Programme and Methodology
- Vehicle Routing and Site Access
- Strategy to Reduce Impact
- Estimated Vehicle Movements
- Implementing, Monitoring and Updating
- Conclusions

2. CONTEXT, CONSIDERATIONS AND CHALLENGES

2.1 Introduction

This CLP has been prepared with the following policy and guidance set out in:

- Construction Logistics Plan Guidance (CLOCS, April 2021)
- Traffic Management Act (2004)
- Fleet Operator Recognition Scheme Standard – Version 5.1 (2020)
- The Mayor's Transport Strategy (2018)
- The London Plan (2021)
- London Low Emissions Zone and Ultra-Low Emission Zone
- Freight and Servicing Action Plan (2019)
- London Borough Richmond upon Thames

2.2 National Policy

CONSTRUCTION LOGISTICS PLAN (CLOCS, 2021)

The guidance document outlines the two types of CLP, an Outline CLP for the planning application submission, and a Detailed CLP for the discharge of planning conditions. A Detailed CLP is defined as:

'*A Detailed CLP is submitted to a planning authority at the post-granted discharge of conditions stage and provides the planning authority with the detail of the logistics activity expected during the construction programme*'.

The Detailed CLP is written during the pre-construction/ construction stage and is implemented and monitored throughout the construction programme.

TRAFFIC MANAGEMENT ACT (2004)

The Traffic Management Act (2004) part 2, highlights the duty of local traffic authorities in managing road networks within their ownership; including the efficient use of the local network as well as their ability to adopt measures when necessary to avoid the occurrence of heavy traffic congestion.

FLEET OPERATOR RECOGNITION SCHEME STANDARD – VERSION 5.1 (2020)

Version 5.1 of the Fleet Operator Recognition Scheme (FORS) Standard was published in June 2020 and defines the requirements that must be met by fleet operators if they wish to become FORS Bronze, Silver or Gold accredited.

There are four key areas to the FORS Standard:

1. Management
2. Vehicles
3. Drivers
4. Operations

Version 5.1 of the FORS Standard outlines the requirements of each accreditation level including requirement 'O1 Routing' which requires all FORS operators to have a procedure in place to plan and adhere to compliant, safe and efficient routes.

2.3 Regional Policy

THE MAYOR'S TRANSPORT STRATEGY (2018)

Freight and servicing are frequently mentioned throughout the Mayor's Transport Strategy which contains a strategy considering all methods of freight delivery including road, rail, pipeline, water, bicycles and air.

The document also highlights the importance of the London Freight Plan, Delivery and Servicing Plans, CLPs, and Fleet Operator Recognition Scheme (FORS), to encourage improved efficiency and provide a framework for incentivisation and regulation.

In particular, Proposal 16 states that:

> *"The Mayor, through TfL, and working with the boroughs and members of the Freight Forum, will improve the efficiency of freight and servicing trips on London's strategic transport network by:*
>
> *a) Identifying opportunities for moving freight on to the rail network where this will not impact on passenger services and where the benefits will be seen within London;*
>
> *b) Increasing the proportion of freight moved on London's waterways; and*
>
> *c) Reviewing the potential benefits of a regional freight consolidation and distribution network and completing the network of construction consolidation centres in London."*

,

THE LONDON PLAN (2021)

The London Plan makes reference to deliveries, servicing and construction within Policy T7. The document notes CLPs should be developed in line with TfL guidance and adopt the latest standards around safety and environmental performance of vehicles to ensure freight is safe, clean and efficient.

Additionally, the document highlights the importance of reducing road dangers associated with the construction of new developments, one notable point is the Mayor's introduction of the Direct Vision Standard, which rates Heavy Goods Vehicles on a star rating from 0 (lowest) to 5 (highest), based on how much the driver can see directly through the cab windows.

LONDON LOW EMISSIONS ZONE AND ULTRA LOW EMISSION ZONE

The Low Emissions Zone (LEZ) is a scheme that aims to improve air quality in the city by setting and enforcing new emissions standards for HGV's, large vans and minibuses, and deterring the use of the most polluting vehicles by freight operators. The LEZ operates 24 hours a day, 7 days a week, every day of the year including weekends and public holidays, with a daily charge for vehicles which do not meet the required standards.

The Ultra Low Emission Zone (ULEZ) is in place across all London boroughs, operating 24 hours a day, 7 days a week. Vehicles including cars and vans need to meet exhaust emission standards (ULEZ standards) or be liable for a daily charge to drive within the ULEZ area.

FREIGHT AND SERVICING ACTION PLAN (2019)

The Plan produced by the Mayor of London aims to 'support safe, clean and efficient movement of freight in our city' through collaborative work between boroughs, businesses and industry across London in line with the aims of the Mayor's Transport Strategy.

This involves solving the challenges faced by the freight industry and promoting good practice while road space is reallocated to walking cycling and public transport and new regulations are introduced to make vehicles safer and cleaner.

Action 9 outlines how TfL aim to reduce the impact of the construction supply chain through measures such as 'reducing the number of trips to sites by helping to identify shared vehicle holding facilities, recycling and sharing materials between sites, and compacting waste from multiple nearby sites before removal'.

2.4 Local Policy

LONDON BOROUGH RICHMOND UPON THAMES

The Local Plan (2018) states that there is a need to ensure that occupiers are protected from environmental disturbances during the construction and demolition phase of major developments, and in particular during excavating and construction of subterranean developments such as basements.

The Local Plan (2018) states the council may also consider requiring a CLP in areas that are subject to high traffic congestion to ensure that vehicles entering the site do not adversely impact on local traffic.

The council may also require a management plan that sets out how developers monitor dust, noise and vibration, and where necessary take the appropriate action if issues arise.

It will also be necessary to control the hours of operation for noisy site works and the processes that would need to be followed in order to work outside these hours when and if required.

As part of the Council's commitment to better air quality, the Council will also request, through planning conditions, that the GLA Regulation relating to Non Road Mobile Machinery (NRMM) is imposed where necessary.

The Draft Local Plan requires developers to demonstrate action has been taken to minimise road danger and congestion and reducing vehicle emission through:

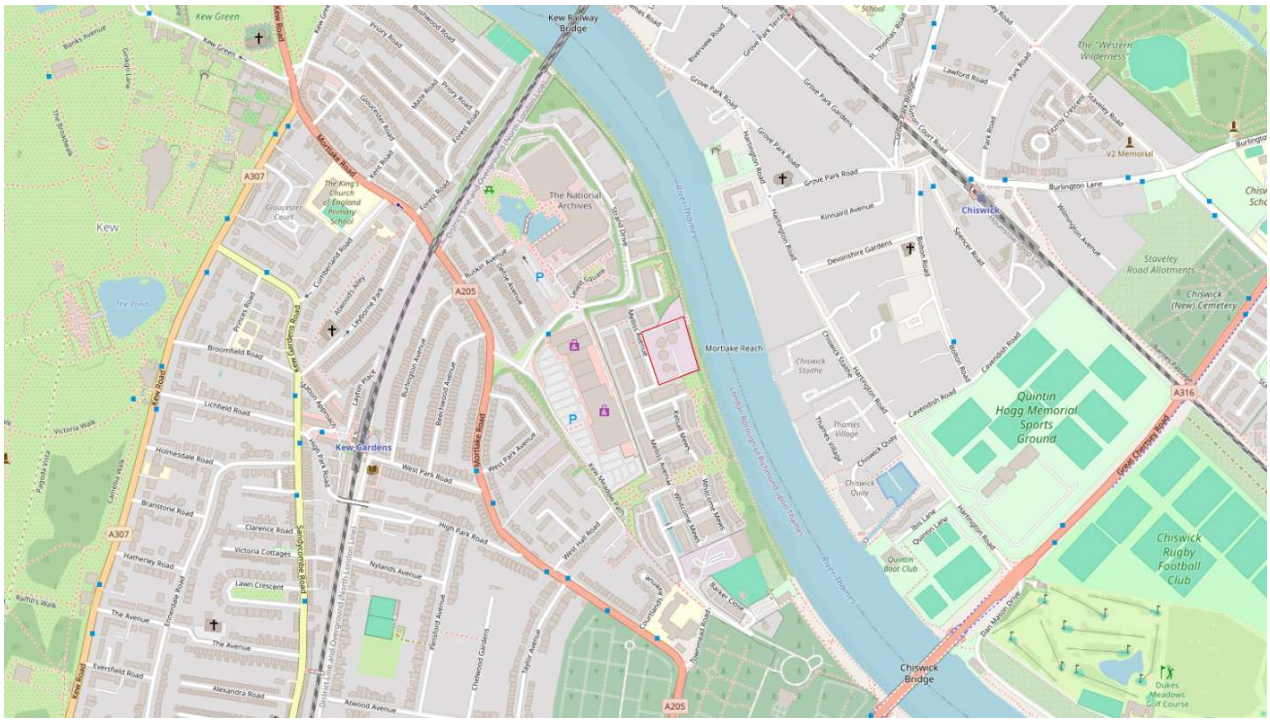
- The production of Construction Logistic Plans (Policy VT 1).
- Minimising the impact of freight and servicing trips through measures including the provision of on-site servicing facilities, the timing of deliveries outside peak hours, the adoption of area-wide solutions and the use of freight consolidation (Policy VT2)

It should be noted the LBRuT has a Construction Management Plan Pro-Forma (July 2021).

2.5 Context Maps

Figure 2.1 shows the location of the former Biothane Site is located off Melliss Avenue in the LBRuT.

Figure 2.1: Site Location Plan



2.6 Highway

The former Biothane Treatment Plant site has a vehicle access at the north of Saffron House via Melliss Avenue. Melliss Avenue is a single lane two-way carriageway and is a private road, within the Kew Riverside Residential development (KRRD), with a speed limit of 10mph and average width of approximately 5.5m, narrowing to around 4.7m along its section which borders the proposed development Site. There is a gated vehicle access to the KRRD, on Melliss Avenue immediately north of the access junction to the nearby Townmead Re-use and Recycling Centre.

Melliss Avenue adjoins the local highway network via Townmead Road and a three-arm mini-roundabout. The junction between Townmead Road and the A205 Mortlake Road is a priority junction, with a ghost right-turn lane on Mortlake Road for vehicles turning into Townmead Road. LBRuT is the highway authority for Townmead Road.

The A205 Mortlake Road forms part of the Transport for London Road Network (TLRN), which is also known as London Red Route and has stopping restriction between 0700 to 1900 from Monday to Saturday. The A205 Mortlake Road also provides wider access to other routes on the strategic road network such as the A316 Lower Richmond Road, A307 Kew Road, A4 and M4 Motorway via Chiswick Roundabout.

With regard to car parking, all private roads within the KRRD site are subject to restrictions with parking for permit holders only. Furthermore, an existing Controlled Parking Zone (CPZ) 'KA' is located along Mortlake Road and around Kew Garden Station. This CPZ is in operation between 1000 to 0000 from Monday to Friday.

It should be noted that vehicle queues occasionally form on Melliss Avenue, at the junction with the Townmead Road Re-use and Recycling Centre, caused by vehicles queuing to enter the recycling centre. These vehicle queues would obstruct access to the KRRD.

2.7 Walking & Cycling

The Site is located within the Kew Riverside Residential development. The Site can be accessed by pedestrians and cyclists via three separate locations, namely:

- the main gated access located on Melliss Avenue, just north of the priority junction access to the Townmead Road Re-use & Recycling Centre;
- a gated access at the end of West Hall Road, which provides access via Kew Meadow Park; and
- from the towpath of the River Thames via Chiswick and Kew Bridge.

There are no footways on either side of Melliss Avenue along its section which borders the former Biothane treatment plant site, as the site boundary fence is located immediately adjacent to the carriageway, with parking bays for the adjacent residential block on the opposite side of Melliss Avenue.

There are footways on both sides of Melliss Avenue between the gate access and the junction with Woodman Mews on Melliss Avenue.

There are cycle routes along the river towpath via Kew and Chiswick Bridge. There are also cycle lanes provided along both sides of the A205 Mortlake Road, which provides a link to the site via Townmead Road and Melliss Avenue.

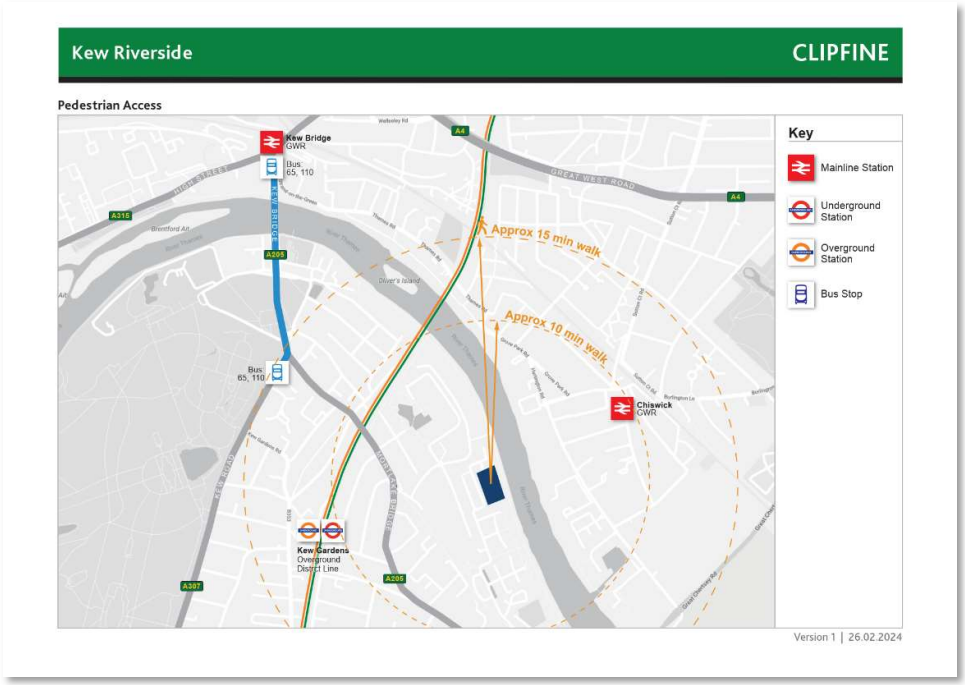
National Cycle Route 4 is located 3 km southeast from the site and it is accessed via the on-road cycling route. Cycle Superhighway 9, which connects Kensington Olympia to Brentford or Hounslow, will also provide a strategic cycle route link to the site via the river towpath at Kew Bridge.

The shortest walking and cycling route between the site and external access point at the Kew Riverside Residential development is approximately 400m, i.e. to the access on West Hall Road

2.8 Public Transport

The Site has a public transport accessibility level (PTAL) score of 0, indicating poor access to public transport services. Figure 2.2 shows the nearest stations to the Site.

Figure 2.2: Public Transport Access



Kew Gardens station is located approximately 1km (12 minutes walking or 4 minutes cycle journey time) west of the Site. The station is located in Travelcard Zones 3 and 4. The station is serviced by the District Line on the London Overground, providing important connections between the Site and both inner and outer London. The

northbound and southbound platforms are connected through a stepped footbridge, although it does not provide direct step free access. There is an indirect route for step free platform interchange via High Park Road with approximately 600m between platforms. There are 28 cycle parking spaces outside the station.

The nearest mainline rail station is Mortlake station, approximately 1,600m (20 minutes walk or 7 minutes cycle ride) southeast of the site. The station is served by South Western Railway routes. There are seven to eight trains to Waterloo per hour with half being direct via Clapham junction and other indirect trains going through Richmond, Wimbledon, Hounslow and Kingston. The northbound and southbound platforms are connected through a sheltered footbridge, although the station does not provide direct step free platform interchange. There is an indirect route for step free platform interchange via the level crossing on Sheen Lane. There are 132 sheltered cycle parking spaces at Mortlake station.

Other rail stations in the local area include Kew Bridge station, Chiswick station, and North Sheen station, which are located 1.8km, 2.1km and 2.2km from the site, respectively.

The nearest bus stops to the site are named as Taylor Avenue (identified as bus stops X and W) and Kew Retail Park (identified as bus stop U). These bus stops are located on Mortlake Road and Bessant Drive respectively within around 550m walking distance of the site.

The Taylor Avenue and Kew Retail Park bus stops have facilities such as flagpole information, shelters and information boards, and provide access to the bus service R70.

The R70 travels between the Kew Retail Park and Hampton Court, via Richmond every 15 minutes during a weekday. It also provides access to London's wider bus network, with local connections to services 190 and 419 on the Lower Richmond Road.

2.9 Arboricultural Statement

Thomson Environmental Consultants are the appointed Project Arboriculturists for the site at Melliss Avenue. Before construction commences the appointed project arboriculturist shall hold a pre-commencement meeting with the site manager and relevant construction staff to explain and agree the contents of the Arboricultural Method Statement (AMS) to ensure its correct implementation.

Tree protection fencing will be erected initially in the locations shown on the Tree Protection Plan to allow early site works including remediation and demolition. Visits will be undertaken by the Project Arboriculturist to ensure the retained trees have not been damaged by demolition works and that installed tree protection measures remain intact and are positioned in the intended locations.

Further visits will be required where there are works which will impact retained trees, as per the AMS. After each site visit by the arboriculturist, a report of the visit shall be submitted to the client detailing the result of the visit.

2.10 Considerations & Challenges

Table 2.1 details the anticipated construction challenges and proposed responses.

Table 2.1: Construction Challenges

Challenges	Response
Melliss Avenue is a private road.	Stakeholder engagement on the use of the road for construction vehicle activity, including implementation of any traffic management measures required.
Reduced width at Melliss Road access caused by brick pillars and gates.	Measurement of the width required and either works or an operational strategy required to facilitate construction vehicle access.

Conflict with any vehicle queues at the entrance to the Townmead Road Re-use and Recycling Centre.	Possible engagement with the management team of the Recycling Centre and managing vehicles on Townmead Road.

3. CONSTRUCTION PROGRAMME AND WORKS

This section outlines the construction programme and summarises the proposed construction works, which has been informed by input from Elysium Residences.

3.2 Programme and Methodology

The main phases of the indicative construction programme are outlined below in Table 3.1. All dates relating to the demolition and construction phases are at this stage indicative and may be subject to change.

The indicative programme would be split into five main stages and is expected begin in August 2024 and would be anticipated to be completed in May 2027, lasting approximately 33 months.

Table 3.1: Indicative Construction Programme

Construction Task	Duration (Months)	Start Date	Completion Date
Set up and Demolition	9	August 2024	April 2025
Piling & Foundations	4	May 2025	Oct 2025
Super structure	9	Sept 2025	May 2026
Envelope	10	Nov 2025	August 2026
Fit out, testing and commissioning	13	April 2026	May 2027

3.3 Working Hours

It is anticipated that the typical working hours for the construction works would be in accordance with LBRuT's requirements set out below:

- 08:00 – 18:00 hours Monday to Friday
- 08:00 – 13:00 hours Saturday
- No work is permitted on Sundays, Bank or Public Holidays.

Where there is the requirement to operate outside of the above working hours, for specific activities such as tower crane erection and safety matters, notification and permission will be obtained in advance.

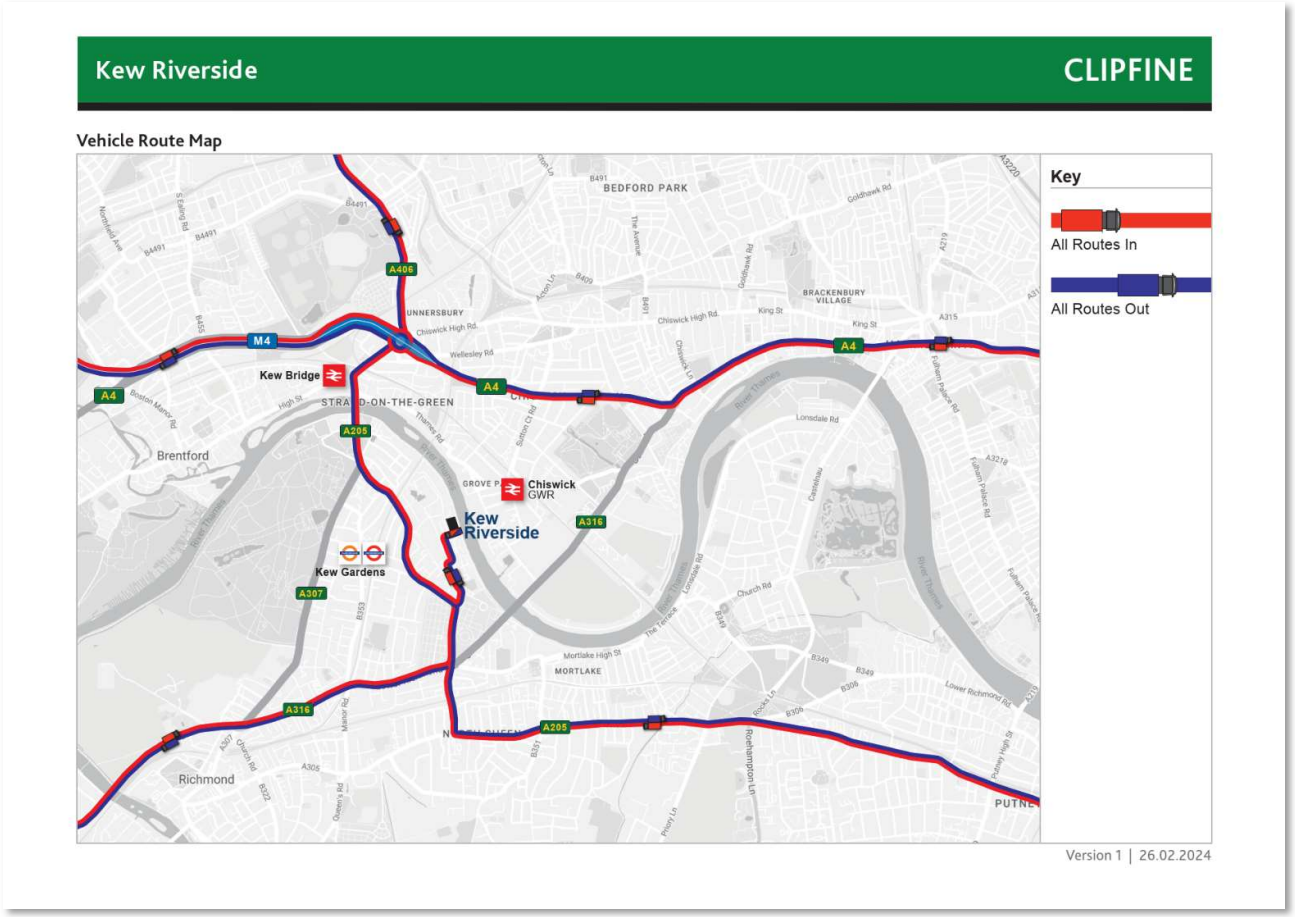
4. VEHICLE ROUTING AND SITE ACCESS

4.1 Vehicle Routes

This chapter sets out the routes for construction vehicles to use when accessing the Site, which will be agreed with TfL and LBRuT.

Figure 4.1 shows the indicative construction vehicle access routes.

Figure 4.1: Vehicle Routes



As shown in Figure 4.1, it is proposed for construction vehicles to enter the Site via the A205 Mortlake Road, following Townmead Road and then Melliss Avenue. The A205 Mortlake Road would be accessed via either the M4 or A4 to the north or the A316 or A205 to the south.

4.2 Vehicle Access

With regard to vehicle access for the site, construction vehicles would enter and exit the site via Melliss Avenue. Vehicles would use Townmead Road to access Melliss Avenue, via a three-arm mini-roundabout. The three-arm mini-roundabout junction has painted road markings only, with no kerbed central island or kerbed refuges, therefore larger vehicle would be able to use the full width of the carriageway when required and when safe to do so. In addition, the three-arm mini-roundabout is currently used by large vehicles accessing the Townmead Road Re-use and Recycling Centre, therefore no issues would be anticipated with large construction vehicles using the mini-roundabout junction to access Melliss Road.

There is a gated access on Melliss Avenue, formed of brick pillars, with an entry lane and an exit lane for vehicles, as shown in Figure 4.2.

Figure 4.2: Brick Pillars and Gates on Melliss Avenue

The width of the vehicle lanes between the brick pillars and gates is approximately 3m for both the entry lane and the exit lane.

Swept path assessments have been undertaken to review construction vehicle access through the gates, both the entry gate and the exit gate. The following vehicles have been used for the swept path assessment:

- 7.8m long tipper truck (3 axle)
- 9.4m long concrete mixer (4 axle)
- 12m long rigid HGV
- 16.5m long artic HGV

The swept path assessments are shown as Appendix A. The assessments show the tipper vehicle and concrete vehicle would be able to enter and exit the site via the respective entry and exit lanes between the brick pillars and gates. However, the longer 12m HGV and 16.5m artic HGV would not be able to enter onto Melliss Avenue using the entry lane between the brick pillars. The swept path assessment shows both the longer 12m HGV and 16.5m artic HGV vehicles would be able to exit Melliss Avenue using the exit lane. Therefore, it would be proposed for the larger construction vehicles, i.e. the 12m HGV and the 16.5m artic HGV to enter the site via the exit lane as a straighter approach is then possible, an arrangement which would need to be managed.

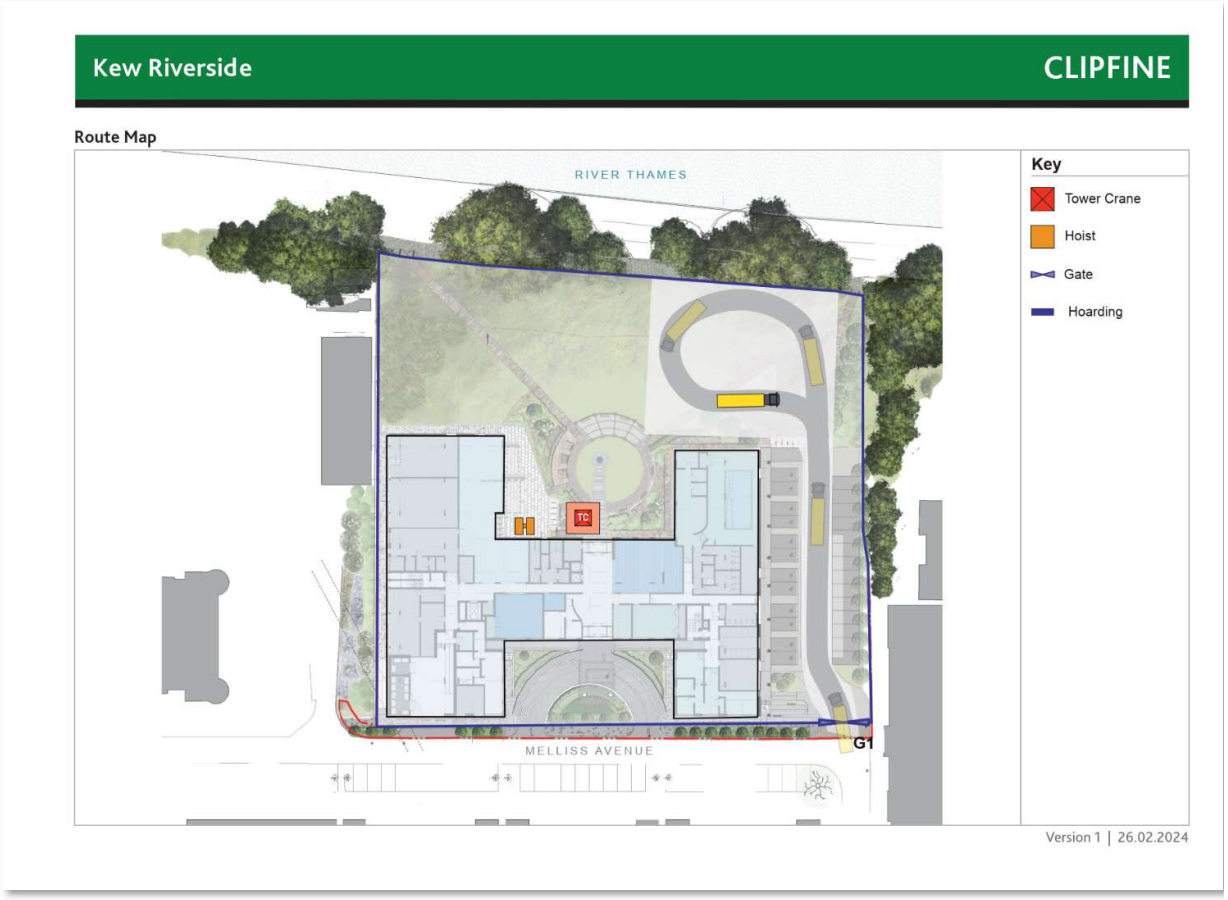
It is proposed that a trained and competent traffic marshal will be positioned at the gated entrance to the KRRD estate during working hours. The Traffic Marshal will be able to converse with the delivery driver and issue them strict instructions on how to proceed when entering and exiting the KRRD site.

The Traffic Marshal will have radio communication with the site and will alert the relevant persons that a delivery vehicle is inbound. Marshals will also be located at the site gates, with a further marshal placed halfway between the entry gates and the site for larger vehicle deliveries.

Melliss Avenue is a relatively narrow private road. Swept path assessment have been undertaken to assess the suitability of the vehicle route for construction vehicles. The same four vehicles, as listed above, have been used for the swept path assessment, the results for which are presented as Appendix B. The swept path assessments show all four vehicles would be able to access the site via Melliss Avenue.

The former Biothane Site will be suitably secured with fencing or hoarding as show in Figure 4.3, with a vehicle access provided on Melliss Avenue in the south west corner of the Site.

Figure 4.3: Site Access Arrangements



Vehicular access to the Site would be managed to mitigate any potential conflict with construction vehicles, existing highway users, cyclists and pedestrians. This will be developed into a detailed logistics plan by the relevant contractor. Vehicles would access and egress the Site on Melliss Avenue in forward gear.

Any welfare accommodation buildings will be designed so that there are no windows overlooking neighbouring properties and lighting is controlled to prevent glare.

With regard to pedestrian access to the Site would also be accessed via Melliss Avenue.

5. STRATEGY TO REDUCE IMPACT

5.1 OVERVIEW

The following planned measures have been identified to assist the contractor achieve the objectives of the CLP and to better manage the challenges identified. Table 5.1 outlines the planned mitigation measures.

Table 5.1: Overview of Planned Measures

Planned Measures	Committed	Proposed	Considered
Measures Influencing Construction Vehicles & Deliveries			
Safety & Environmental Standards & Programmes	✓		
Adherence to Designated Routes		✓	
Delivery Scheduling		✓	
Re-timing for Out-of-Peak Deliveries		✓	
Re-timing for Out-of-Hours Deliveries		✓	
Use of Holding Areas & Vehicle Call-off Areas			✓
Use of Logistics / Consolidation Centres			✓
Measures to Encourage Sustainable Freight			
Freight by River			✓
Freight by Rail		N/A	
Use of Electric Vehicles			✓
Material Procurement Measures			
DfMA & Off-site Manufacturing			✓
Re-use of Material on Site			✓
Smart Procurement		✓	
Other Measures			
Collaboration Amongst Other Sites in the Area	✓		
Implementation of a Staff Travel Plan	✓		
Dust / Noise Pollution	✓		

Waste Strategy	✓		
Cleaning	✓		
Mitigation for Road / Footway Closures	✓		
Mitigation for Pedestrians / Cyclists	✓		
Neighbours and Public Liaison	✓		

5.2 PLANNED MEASURES

MEASURES INFLUENCING CONSTRUCTION VEHICLES & DELIVERIES

Safety & Environmental Standards & Programmes

It will be a requirement for all vehicles and driver management practices to comply with the FORS and Construction Logistics and Community Safety (CLOCS). FORS Bronze, with progression to Silver within 90 days, will need to be confirmed by all sub-contracted transport/haulage providers that the Contractor intends to use. An up-to-date list of trained companies and drivers is available at www.fors-online.org.uk. The applicant is committed to ensuring all contractor and sub-contractor vehicles arriving at Site comply with sufficient safety measures and requirements relating to Work Related Road Risk.

A collision reporting system will be mandated to ensure all collisions and accidents involving the projects' vehicle and drivers are reported to the Project Manager and any relevant parties. The 'FORS Manager' reporting tool will be used; www.fors-online.org.uk.

The Site will be registered with the 'Considerate Constructors Scheme'. This is a national initiative through which construction sites and companies registered with the scheme are monitored against a code of considerate practice, designed to encourage best practice beyond statutory requirements.

All construction HGVs of more than 12 tonnes arriving at the Site would be required by TfL to hold a HGV Safety permit in line with the Mayor's Vision Zero plan to eliminate all deaths and serious injuries on London's transport network by 2041. To receive a HGV Safety Permit, vehicles would be required to achieve the minimum Direct Vision Standard star rating (One star) or be required to fit a 'Safe System' to the vehicle to provide additional safety equipment.

The Principal Contractor would have a dedicated logistics team to co-ordinate all construction deliveries and collections to / from the Site and ensure that as far as possible:

- All delivery and collection vehicles are aware of the proposed routing;
- Prior to a delivery or collection, hauliers would notify the relevant authorities;
- Regular liaison meetings and reviews would be undertaken with neighbouring sites and LBRuT to plan the works so that they do not cause unnecessary disruption to the wider area;
- Liaison would be undertaken with occupants of adjacent buildings to avoid delays to service deliveries; and
- Larger vehicle movements would be scheduled to avoid peak hours on the local road network, if possible.

Adherence to Designated Routes

All construction vehicles accessing the Site would be required to use the preferred routes as specified in chapter four, following the agreement with LBRuT and TfL. Monitoring of vehicles entering and exiting the Site would be implemented.

The Contractor would maintain an up-to-date log of all drivers that would include a written undertaking from them to adhere to approved routes for construction vehicles.

Construction routes to the Site would, where possible, avoid schools, hospitals and care homes. If this is not possible, contractors and construction vehicle drivers would be made aware of these community considerations. Designated cycleways and cycle routes would also be considered by construction vehicle drivers when accessing and egressing the Site.

Delivery Scheduling

Construction deliveries would be carefully planned with delivery times agreed with each contractor using a web-based booking system. The Delivery Management System (DMS) would require each delivery to be pre-booked.

The Contractor's Logistics Manager (who will be responsible for managing deliveries to Site and their distribution to the point of use) would manage the DMS. Sub-contractors and hauliers would need to be booked in advance in order to allow the request to be reviewed and subsequently approved or declined.

Where possible, deliveries will be taken on Site early to allow the vehicles to be off loaded during the peak period and to leave Site once the peak period has ended. Similarly, the latest delivery to the Site will be scheduled to ensure that it can be off loaded by 6pm and that the vehicle leaves the Site as the evening peak is subsiding.

Re-timing for Out-of-Peak Deliveries

Core Working times at the Site would be restricted to 08:00 – 18:00 on weekdays and 08:00 – 13:00 on Saturdays as per LBRuT construction guidance. There would be no working on Sundays or Bank Holidays.

Construction vehicle movements would be restricted to:

- Monday to Friday 0800 – 1800 hours;
- Saturday 0800 – 1300 hours; and
- No Sunday, Bank Holidays or Public Holiday working unless by prior approval for specific works.

There may occasionally be a need to work outside these hours in order to undertake essential works, and the Principal Contractor, the contractor appointed by the developer to oversee and manage the construction works, would make do application to LBRuT should the need arise.

Re-timing for Out-of-Hours Deliveries

Re-timing deliveries to occur out of hours will be considered further by the developer and appointed contractor, whom will commit to deliveries at these times where possible.

Use of Holding Areas, Vehicle Call-off Areas and Materials Storage

Specific method statements will be developed throughout the various stages of the contract to control the delivery, storage and handling of materials. A high priority will be placed on the safe storage and movement of materials around the building footprint.

Where practicable materials will be stored off-site but where this is not possible material storage areas will be prepared and located in a suitable location within the Site boundary.

The Principal Contractor will make adequate provision to avoid accumulation of bulk materials on the Site to prevent inconvenience or disruption and to eliminate the risk of fire, and dust. Contractors will also ensure the Site is left in a clean and tidy manner both during and outside working hours.

Materials will be off loaded and where possible distributed to the place where they are needed for incorporation into the permanent works, this will be undertaken on a just in time basis.

All materials will be stored in an appropriate environment with containers of liquid stored in a bunded area to prevent accidental spills. All materials will be stored in a safe and appropriate condition, i.e. plaster board will be covered to prevent moisture damage and bricks safely stacked and no higher than two pallets high.

At no time will materials be stored or left unattended outside of the construction site boundary.

Use of Logistics / Consolidation Centres

It is proposed that the Principal Contractor would consider the potential use of an off-site consolidation centre to minimise the number of vehicle trips delivering directly to the Site.

The use of an off-site location would be especially useful on days that a high number of deliveries are forecast. Trips could be split between those that come directly to the construction Site, and those that go to the consolidation centre. When the road network is less busy the stockpiled deliveries could then be transferred from the consolidation centre to the construction Site.

If empty vehicles returning to the consolidation centre were instead filled with waste material, there would be further opportunity to reduce separate waste collections to the Site during construction. This would also allow for effective sorting of waste off-site for disposal to an appropriate waste facility.

On appointment of the Principal Contractor, various locations would be considered, and the preferred option would be identified, with any associated strategy would be described.

MEASURES TO ENCOURAGE SUSTAINABLE FREIGHT

Freight by River

The option of transporting materials by water is unlikely to be a viable due to the lack of a suitable dock or moorings next to the Site.

Freight by Rail

The use of rail to transport materials to the Site is unlikely to be viable due to the distance between the Site and rail infrastructure.

Use of Electric Vehicles

The use of electric freight vehicles will be encouraged for deliveries to the Site. The appointed contractor will work with sub-contractors, suppliers, and haulage / transport suppliers to encourage the use of electric vehicles for freight delivery.

MATERIAL PROCUREMENT MEASURES

DfMA & Off-site Manufacturing

The extent to which Design for Manufacture and Assembly (DfMA) methods and other off-site construction methods will be used would be confirmed upon appointment of the Principal Contractor.

Re-use of Material On-site

It is proposed that where possible any construction materials are reused, if possible, for different construction processes to minimise waste.

When materials cannot be used on site, it should be sorted into recycling categories appropriately before removal from the construction Site.

The Principal Contractor would be required to monitor waste generated during the construction works to maximise reuse and recycling potential. This should allow for the levels of reuse and recycling to be increased throughout the construction period.

Smart Procurement

Smart procurement would be implemented where possible, which would involve examining the sourcing of materials and logistics strategies of the supply chain to see if reductions in vehicle movements could be made in those aspects of supplying materials to the Site.

Collaboration between suppliers would be considered, particularly if geographically close in location, offering opportunities to further consolidate vehicle loads.

OTHER MEASURES

Collaboration Amongst Other Sites in the Areas

The Principal Contractor will identify any other construction sites in the area, in addition to any being identified by LBRuT. If sites are identified and a cumulative impact is likely in terms of vehicle movements, etc. then the Principal Contractor for the Site will collaborate accordingly to mitigate any impacts.

Implementation of a Staff Travel Plan

It is anticipated some staff car parking will be provided on-site. A Staff Travel Plan will be prepared by the appointed Principal Contractor.

Dust / Noise Pollution

At all times, the contractor will comply with all relevant Environmental Health Legislation and will take a pro-active approach to pollution by way of noise, dust or airborne particles to minimise risk and disturbance to the site operatives and the general public.

Noise and vibration will be minimised by using modern plant and equipment fitted with suitable silencers, by muffling of all breakers and through the use of crushers in-lieu of impact breakers wherever possible.

Where machines are provided with suppression covers these will remain closed whilst the machine is in operation. Where it is impossible to reposition a potentially noisy piece of machinery hoardings and enclosures will be constructed to contain and minimise the potential nuisance.

Concrete breaking where possible will be undertaken using a crushing machine rather than cutting or grinding equipment which will reduce the dust and noise levels, or removed from Site and crushed elsewhere.

Mud and debris on the road is one of the main environmental nuisance and safety problems arising from construction sites. The project team will make provision to minimise this problem.

Roads will be swept using a road sweeper during site working hours, as and when required.

During the summer months, the risk of dust will be more of an issue. During dry spells, the Site will be dampened to reduce the risk of dust.

Vehicles leaving the Site with the arisings of the construction activity and those carrying loose loads will not leave Site without the load being covered and the wheels cleaned.

Cutting and grinding will be performed by operatives, using machinery preparatory attachments to reduce dust.

There will be no burning of waste on site. All waste material will be placed in a skip and removed from Site to a transfer station for recycling off site.

No loading or skip placement will be required or permitted on public or estate roads. All skips leaving Site will be covered.

Waste Strategy

A Site Waste Management Plan (SWMP) will be prepared which will include details of the forecast and actual tonnage of each waste stream that will be generated on site and their recycling/disposal route. It will be a condition of contract for the contractors to discuss and agree waste recovery rates to be targeted with the developer. A monitoring report will then be generated which will include details of the progress made in diverting waste materials from landfill, against these pre-agreed targets.

Where it is necessary to transport waste to and from the site, transportation will comply with the Duty of Care requirements, including: ensuring waste is transported by registered carriers, disposal to appropriately licensed sites, and maintenance of appropriate waste transfer documentation.

Cleaning

Effective wheel washing facilities would be provided at the Site gates before exiting onto the private road, Melliss Avenue, and the local highway network. Recycled water would be used wherever possible. Supplementary cleaning would be provided as necessary using suitable means to keep the surrounding roads clean.

Mitigation for Road / Footway Closures

Road and footway closures in the public highway are not anticipated to be required at this time, other than for potential limited closures to accommodate tower crane delivery and set up of the pedestrian and cycle gantry on the private road, Melliss Avenue, for the longer-term pedestrian arrangement.

Notices regarding any planned closures or diversion of either roads or footpaths in relation to the construction works shall be given by the Principal Contractor to LBRuT, the police, fire brigade and other emergency services and as otherwise required sufficiently in advance of the required closure or diversion.

Notices and details of traffic management proposals associated with works to the highway and footpaths would be given under the Highway Acts 1980 and Road Traffic Act 1988.

Mitigation for Pedestrians / Cyclists

Notices regarding any planned closures and diversions of footpaths or cycle routes are unlikely, however would be given by the Principal Contractor to the LBRuT, the police, the fire brigade and other emergency services and as otherwise required sufficiently in advance of the required closure or diversion.

Pedestrians, cyclists and the general public would be separated from the construction works at all times. Pedestrian access points for the workforce into the active construction site would generally be located close to the main vehicular access gates with a separate pedestrian gate, security point and footpath provided.

Diverted footpaths would be fully accessible for wheelchairs and pushchairs. The pedestrian routes provided during construction would comply with specific LBRuT requirements, as well as other stakeholders and relevant legislation.

Where diversions are not possible, alternative routes for pedestrians and cyclists would be negotiated with the LBRuT and any other relevant authorities.

Neighbours and Public Liaison

In the event of a complaint from a neighbour or a member of the public in relation to any site activity, it will be recorded in a designated logbook, stating the nature of the complaint, the cause and, where appropriate, the remedial action taken. Should complaints about odour, noise, dust or vibration be received, they will be addressed directly by the appointed contractor to enable the results at the time of the complaints to be reviewed, and where appropriate immediate actions employed to rectify the problem.

Key neighbours will be consulted and informed of any significant changes to the CLP.

The Principal Contractor would be expected to nominate a suitably qualified individual who would act as the Site Manager. The Site Manager will be named at the Site entrance, with a contact telephone number. The contact's name and details would be provided to all the relevant stakeholders by the Principal Contractor prior to the start of the construction and refurbishment works.

The Site Manager would be a suitably qualified individual who would have primary responsibility for dealing with the LBRuT and any other stakeholders on environmental matters. All key stakeholders would be notified whenever a change of responsibility occurs for the Site Manager role. The Site Manager would keep neighbours, the LBRuT and other relevant parties informed of the nature of the on-going works, their duration and outline programme to establish and maintain good relationships with them.

It is anticipated that regular meetings would take place between the Site Manager and the LBRuT to review progress and to agree any necessary actions. The Site Manager would also deal with enquiries from the general public, including any complaints. Any complaints would be logged, responded to, and reported to the relevant individual within LBRuT (and vice versa) as soon as practicable.

The Site Manager would coordinate responses to queries and address issues in a timely and satisfactory manner.

6. ESTIMATED VEHICLE MOVEMENTS

This chapter outlines the forecast number of vehicles expected at the development site over the duration of the construction works.

All dates and times relating to vehicle movements are indicative at this stage.

Vehicles would be expected to arrive and depart from site within the following times:

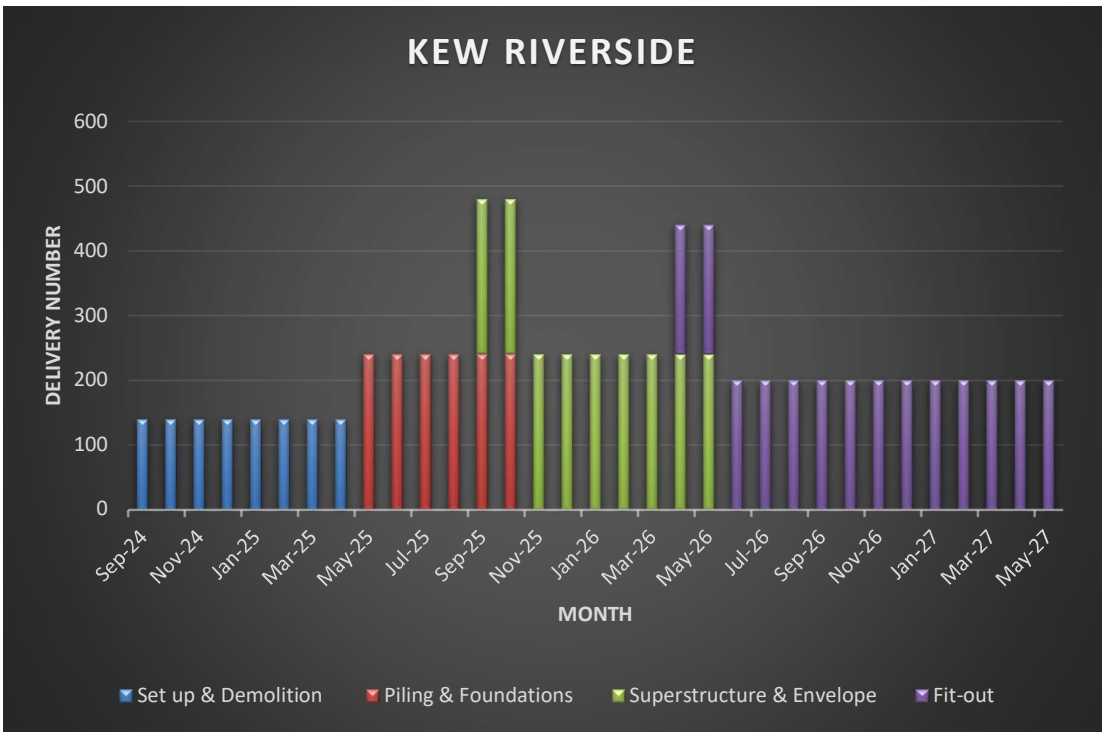
- Monday – Friday 08:00 – 18:00
- Saturday: 09:00 – 13:00

No construction vehicles would arrive at site on Sunday, Bank or Public Holidays.

6.2 Vehicle Movements

Average construction vehicle movements would be expected to peak during the piling and superstructure phase of construction between September and October 2025. There is a further peak during superstructure and fitout between April and May 2026. During these periods, an average of 460 vehicles are forecast to arrive at the Site per month. Figure 6.1 shows the total number of vehicles over the construction period.

Figure 6.1: Total Number of vehicles through construction programme



7. IMPLEMENTING, MONITORING AND UPDATING

An appointed Site Manager will oversee implementing the CLP on behalf of the Principal Contractor. A Contractor and Driver Handbook would also be prepared and distributed to ensure that all contractors are aware of their obligations and required standards of working.

The Contractor's Handbook would contain information regarding safety, environmental responsibility, vehicle routing, delivery scheduling, driver training and standards to be met.

The Driver's Handbook would make the obligations of the individual driver clear. It would contain concise information on the authorised routes to and from the Site, work hours at the construction site, how the booking and scheduling system would work, site access locations, anti-idling requirements, and guidance on vulnerable road users.

The CLP will be agreed in consultation with the LBRuT and TfL. The CLP will be a live document that accounts for any changes in the construction strategy. It would be reviewed on a monthly basis by the Principal Contractor and Site Manager to incorporate collected data and monitoring results. This would ensure that the document remains appropriate to the Site conditions and conditions in the surrounding area and road network.

Data would be collected throughout the construction process to ensure that both the CLP are being followed. The data collected would be reported back by the Principal Contractor with full transparency to the LBRuT. It would be the responsibility of the Site Manager to collect data on the following issues.

VEHICLE MOVEMENTS

Data would be collected through surveys on a monthly basis to monitor delivery vehicle activities. The surveys would address the following:

- Total number of vehicles making deliveries and collections
- Vehicle type, size and emissions
- Total journey time for each trip and the average journey time for all trips
- Time spent on site
- Trip punctuality compared to the schedule

This information would inform the Principal Contractor and Site Manager on how best to modify the CLP going forwards to better match the reality of construction vehicle activity. This would allow more effective mitigation measures to be implemented throughout the construction process.

SAFETY

To ensure that construction activity is carried out responsibly and in line with policy, data would be collected and recorded on the following:

- Any logistics-related accidents
- Fatalities and serious injuries as a result of the construction process
- Vehicles and operators not meeting safety requirements

- Transport modes used by staff travelling to the Site

COMPLIANCES, BREACHES AND COMPLIANTS

To maintain records of the compliance and legitimacy of the construction operations, information would be recorded on the following:

- Community concerns about construction activities
- Vehicle routing
- Unacceptable queuing
- Unacceptable parking
- Compliance with safety and environmental standards and programmes
- Supplier FORS accreditation
- ULEZ Compliance
- Anti-idling

Should complaints or breaches of protocol reach an unacceptable level, the contracted freight suppliers would need to have their position reviewed and potentially terminated. All complaints and breaches would be communicated to the relevant local authority.

8. CONCLUSION

This CLP has been prepared by Clipfine Ltd on behalf of Elysianun Residences for the proposed Kew development at the former Biothane Site, Melliss Avenue, Kew TW9 4BD.

The demolition and construction programme has an estimated duration of 33 months with works beginning in Q3 2024 to forecast completion in Q2 2027.

The main site entry and exit point for vehicles would be on Melliss Avenue. Vehicles would enter the site by heading northbound on Melliss Avenue and enter the site via a proposed gate in the southwest corner of the site. The main pedestrian access point would be located on Melliss Avenue.

Construction vehicle numbers are forecast to peak in months 13, 14, 21 and 22, of (Q2 2023), with 480 vehicle arrivals per month.

The document outlines the construction methodology and works required for the surrounding area. All relevant policies have been reviewed and the construction process would be compliant with all requirements.

A series of objectives are proposed and would be measured and recorded throughout the construction process to ensure that any negative impacts are kept to a minimum. This would be done through the updating of the CLP as a live document incorporating necessary changes to the construction strategy.

Appendix A –

Swept Path Assessments at Gated Access on Melliss Avenue

Appendix B –

Swept Path Assessments on Melliss Avenue