

The Roundway, Tottenham

Construction Logistics Plan

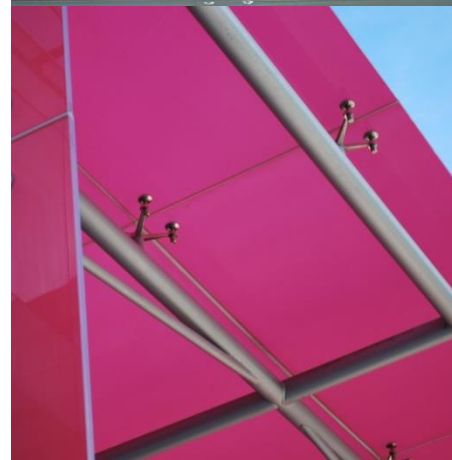
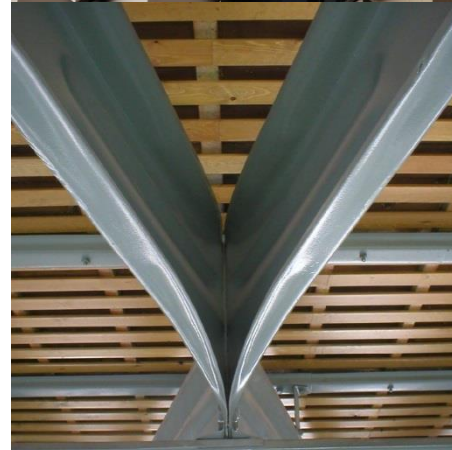
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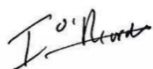
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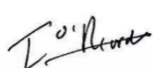
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1.0 Introduction

1.1 Project Overview

1.1.1 Curtins has been appointed by Hill Partnership Ltd to provide a Construction Logistics Plan (CLP) for The Roundway site located in Tottenham, North London. The project includes the development of 5 modular build units for temporary homeless accommodation with associated cycle and refuse storage.

1.1.2 A planning application for the development was consented on 24/03/2022 subject to a number of conditions. Condition 8 sets out the requirement for a construction management and logistics plan. The wording of this condition is set out below:

"8. Construction Management and Logistics Plan

Prior to the commencement of development, a Construction Management and Logistics Plan shall be submitted to and approved in writing by the Local Planning Authority. The document shall follow the best practice guidelines as set out in the Construction Logistics and Community Safety (CLOCS) standard requirements and CLOCS and Transport for London's Construction Logistics Planning (CLP) Guidance (2021).

The document shall include the following matters and the development shall be undertaken in accordance with the details as approved:

- a) The routing of excavation and construction vehicles including a response to existing or known projected major building works at other sites in the vicinity and local works on the highway;*
- b) The estimated peak number and type of vehicles per day and week;*
- c) Estimates for the number and type of parking suspensions that will be required; and*
- d) Details of measures to protect pedestrians and other highway users from construction activities on the highway*

Reason: To provide the framework for understanding and managing construction vehicle activity into and out of a proposed development, encouraging modal shift and reducing overall vehicles numbers. To give the Council an overview of the expected logistics activity during the construction programme. To protect the amenity of neighbour properties and to maintain traffic safety".

1.2 CLP Objectives

1.2.1 The purpose of this CLP is to identify and subsequently mitigate any traffic or highways issues that may arise relating to the construction of the development site. This assessment addresses the requirements of both construction and operational traffic throughout the construction programme. The report is delivered within the framework provided by Transport for London's 'Construction Logistics Plan Guidance' to reduce 'the negative transport effects of construction work on local communities, residents, businesses and the environment'.

1.2.2 Some of the key objectives of the CLP include:

- Reduce emissions due to construction traffic;
- Improve vehicle and road user safety; and,
- Reduce congestion and construction related vehicle trips.

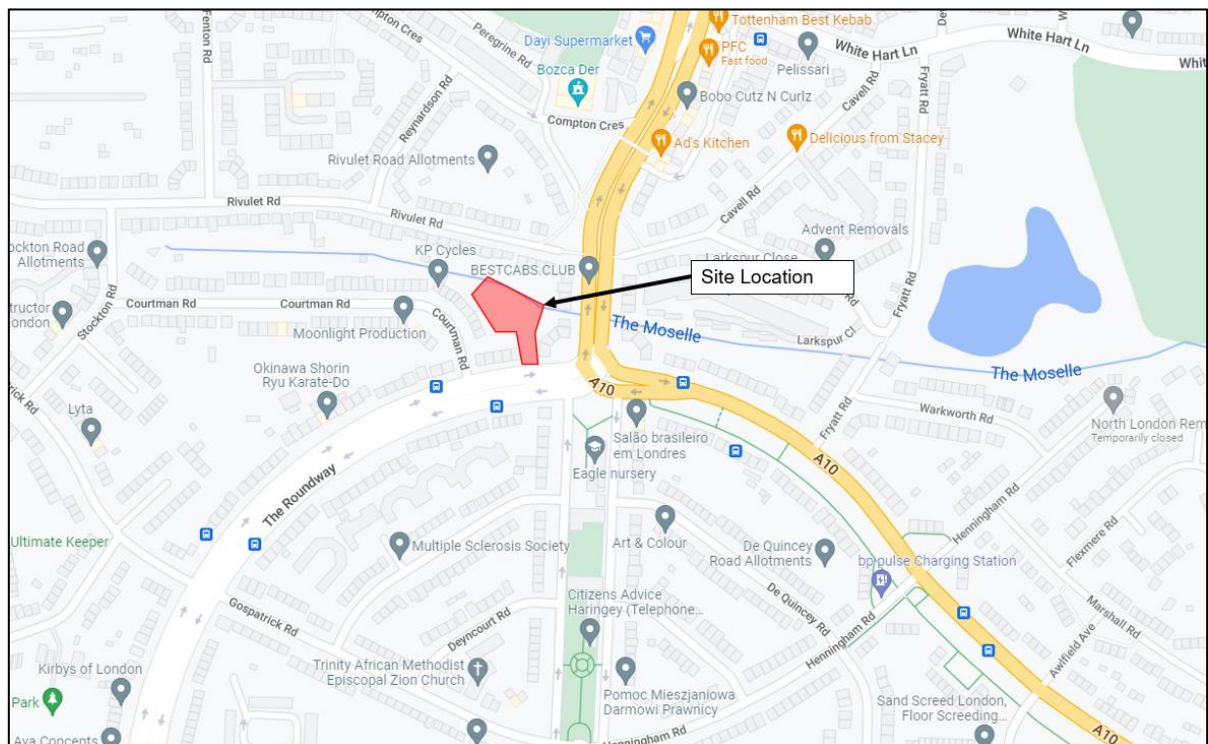
1.2.3 It provides details on the nature of the development, site access arrangements and volumes and types of traffic generated by the site. This information is provided alongside operational details such as construction site opening times, timescales for delivery and any required mitigation measures.

1.3 Site Context

1.3.1 The development site currently comprises of vacant land with grassland and mixed scrubs with scattered trees in the area. The site is enclosed, located at the rear of a number of residential properties on The Roundway, Courtman Road, Great Cambridge Road and Rivulet Road. The site measures approximately 0.2ha and is located just north of the A1080.

1.3.2 **Figure 1.1** below identifies the site location within the context of the surrounding area.

Figure 1.1 - Site location



1.4 Development Description

1.4.1 The development includes 5 modular units which will each be occupied by one person. The consented housing schedule is shown in **Table 1.1**.

Table 1.1 – Gross Internal Floor Space Measurements

Unit	No. of bedrooms	No. of bed space (persons)	Number of storeys	Proposed size of unit (Sqm)
1	1	1	1	24
2	1	1	1	24
3	1	1	1	24
4	1	1	1	24
5	1	1	1	24

1.5 Construction Management Details

Table 1.2 - Construction management details

Contractor	Hill Partnerships Ltd
Site Project Manager	Paul Carter 07919 174820 PaulCarter@Hill.co.uk Hill Site Offices, The Roundway
Estimated Start Date	5 th December 2022
Estimated End Date	10 th March 2023
Site Working Days	Monday to Friday & Saturday (if required) No Bank Holidays or Sundays.
Site Working Hours	Monday to Friday: 08:00 – 18:00 Saturday: 08:00 – 13:00 Sunday and Bank Holidays: No works
Notice Board – Considerate Constructors	Located at the site entrance

1.6 Document Structure

1.6.1 The remainder of the CLP structure is outlined below, and includes the following sections to meet the requirements of a Transport for London (TfL) compliant logistics plan:

2. Site Context
3. Construction Programme, Vehicle Schedule and Phasing
4. Construction Traffic: Access and Routes
5. Mitigation Strategies
6. Construction Traffic Management, Monitoring and Compliance
7. Conclusion

2.0 Context, Considerations & Challenges

2.1 Policy Context

- 2.1.1 A number of policies have informed the development of this CLP which seeks to minimise the impact of construction works on both local highway network and nearby communities. A non-exhaustive overview of the considered policy is included below.

TfL Construction Logistics Plan Guidance (2017)

- 2.1.2 The revised 'Construction Logistics Plan Guidance' (July 2017) provides a robust framework from which to produce an effective CLP and the principles set out within this document have been incorporated where appropriate to ensure a compliant plan. This guidance sets out four main goals of a logistics plan, which aims to reduce:

- *"Environmental impact: Lower vehicle emissions and noise levels*
- *Road risk: Improving the safety of road users*
- *Congestion: Reduced vehicle trips, particularly in peak periods*
- *Cost: Efficient working practices and reduced deliveries"*

The London Plan (2021)

- 2.1.3 The London Plan was produced by the Mayor of London to address the key transport challenges faced by London, with a particular focus on the need to encourage sustainable travel and road safety. Policy T7 addresses the requirement for a logistics plan to mitigate the impact of construction activities on the highway network and consider the impact of freight transport across the city.

The Mayor's Transport Strategy (May 2018)

- 2.1.4 The Mayor's Transport Strategy was adopted in May 2018 and sets out the transport strategy for London which is focused on the Healthy Streets approach. The document supports the policies listed in the London Plan that *'all new development proposals to demonstrate in the Construction Logistics Plans that all reasonable endeavours have been taken towards the use of non-road vehicle modes.'*

2.2 Context Maps

- 2.2.1 The existing site is situated approximately 1.2km from White Hart Lane Overground Station. The site is located adjacent to The Roundway, which connects to the A10 providing connections to the M11. Access to/from the site is achieved via The Roundway.
- 2.2.2 The site abuts residential housing to the south, north, west and east. The Roundway routes in a north-south trajectory clockwise to the site, joining the A10 to the north-east of the site.

2.2.3 **Figure 2.1** comprises a regional plan that shows the location of the construction site in the context of the highway network and the Transport for London Road Network (TLRN). **Figure 2.2** comprises a local plan that shows the location of the construction site in the context of the local highway and cycle networks.

Figure 2.1 – Regional Plan: TLRN

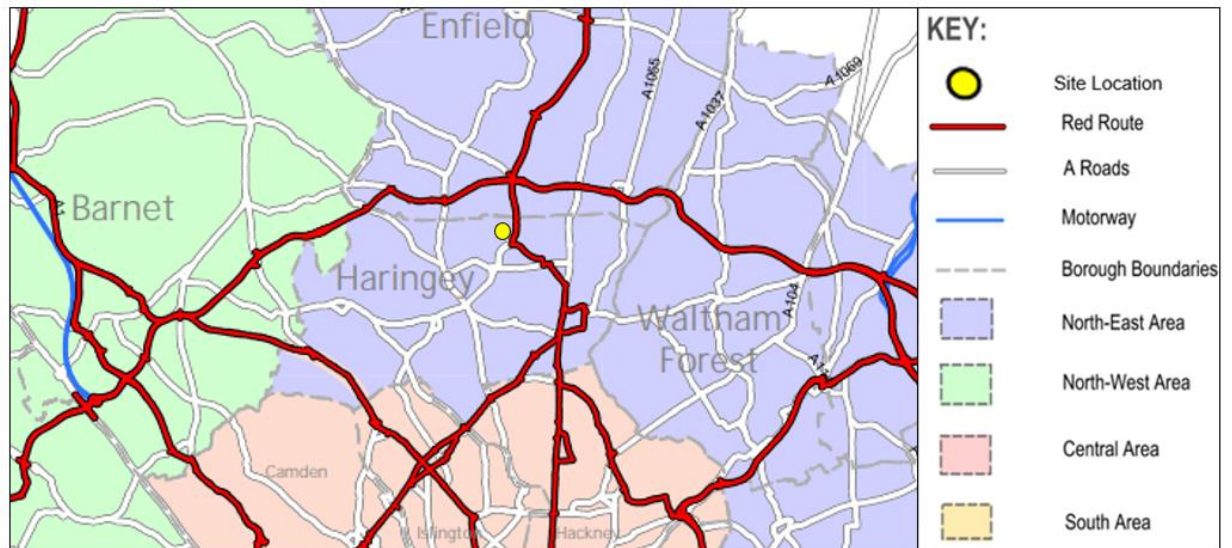
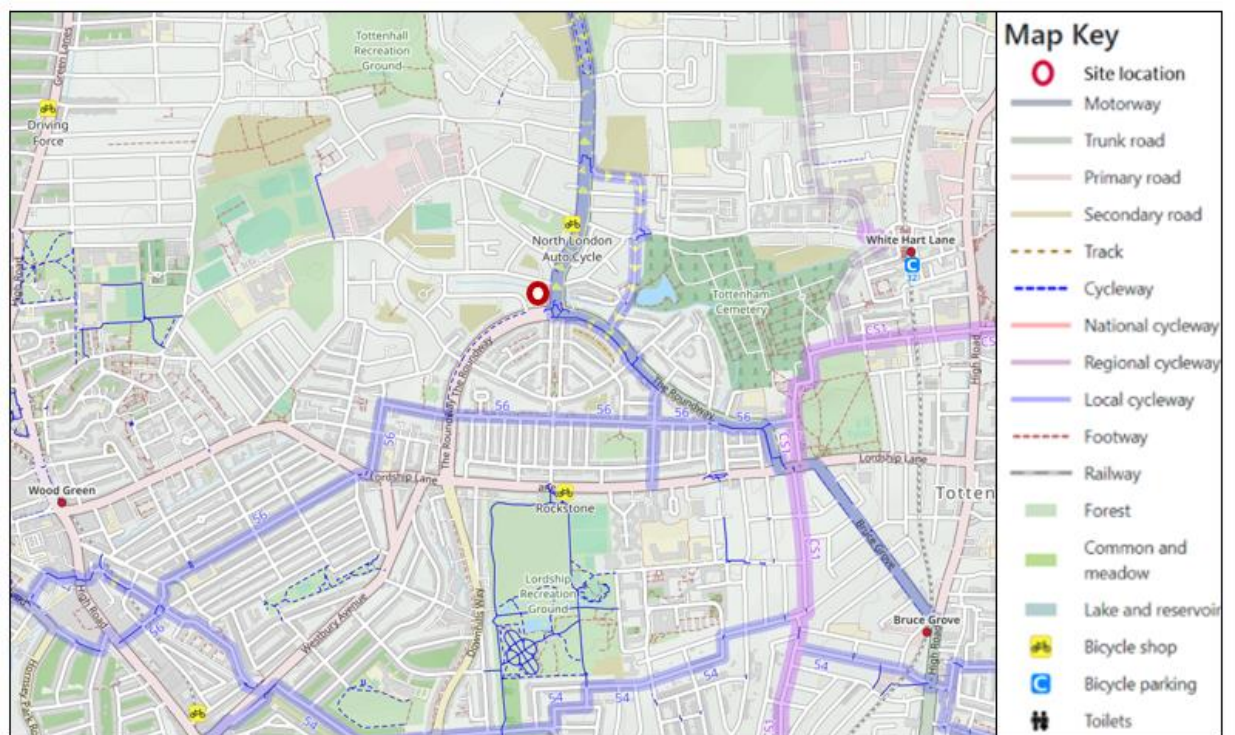


Figure 2.2 – Local Plan: Local Context



2.3 Surrounding Highway Network

The Roundway

- 2.3.1 The Roundway is subject to a speed limit of 30mph. The road is formed of a two-way carriageway in each direction circa 24m wide with a central reservation. The carriageway connects the West Green Road and the A10. Either side of the road is a wide pedestrian footpath with drop down kerbs at crossing points. There is controlled parking for permit holders which is in place Monday – Friday between 8am – 8:30pm.

Great Cambridge Road/A10

- 2.3.2 The A10 is major road connecting London Bridge in Southwark to King's Lynn in Norfolk. In the vicinity of the site the road is subject to 30mph speed limit and benefits from a two-way carriageway in either direction with an outer bus lane. The road forms part of the Transport for London Road Network (TLRN) with double red lines prohibiting stopping at any time.

A406

- 2.3.3 The A406 also known as the North Circular routes from Chiswick in the west to Woolwich in the east of London. In the vicinity of the site the road benefits from a three lanes per direction and is subject to a speed limit of 40mph. The road forms part of the Transport for London Road Network (TLRN) with double red lines prohibiting stopping at any time

2.4 Local Considerations

- 2.4.1 The Roundway site is located in Tottenham, a predominantly residential area of the London Borough of Haringey (LBH).
- 2.4.2 Due to the small scale of the proposals and modular nature of the construction, it is not expected that the surrounding area of the site will see any negative impacts as a result of the construction works, however, information relating to the logistics management of the site will be shared to ensure any mitigation necessary can be set in place. There will be delivery restrictions in place during the AM and PM peak periods to avoid disruption. If any temporary disruption is likely to occur, early engagement with local residents and organisations will ensure appropriate measures are introduced to ensure that users can access the site without safety issues. The Construction Logistics Manager will also share information with nearby existing land use in relation to the development to maximise child and pedestrian safety for those travelling by the site.
- 2.4.3 Other community considerations include the nearby White Hart Lane Overground Station. Communication and consultation will be undertaken with White Hart Lane Overground Station where necessary to ensure the works do not negatively impact on these facilities. It is not expected that the construction works will result in any disruption of this site.

3.0 Construction Programme & Methodology

3.1 Construction Programme

- 3.1.1 The estimated start date for this program of works is December 2022 with an assumed completion date of March 2023. **Table 3.1** below provides an overview of the construction programme for each development and has been produced based on the CLP logistics plan tool provided by TfL. **Table 3.1** is also included to provide an overview of the anticipated construction programme.

Table 3.1 – The Roundway Site Construction Programme

Construction phases (CPL guidance)	Start month	End month
Site Setup and Clearance	December 2022	December 2022
Footing for pods	Mid December 2022	Mid December 2022
Drainage	January 2023	January 2023
Delivery of modular pods	January 2023	January 2023
Electrics	January 2023	February 2023
Landscaping, bin/bike store	February 2023	March 2023
Finalising site	March 2023	March 2023

3.2 Workforce

- 3.2.1 The largest number of staff expected during construction is 20 staff on-site.

3.3 Construction Compound

- 3.3.1 During the construction stage, a site compound complete with welfare facilities will be present on site.
- 3.3.2 A security hub will be located at the entrance to the site to co-ordinate deliveries and minimise the potential for conflict between site users.

3.4 Suspension of Car Parking Bays

- 3.4.1 During construction the parking bays closest to the site (for 12m) will be suspended to allow access/egress. The parking bays to temporarily suspended are shown in **Figure 3.1**.
- 3.4.2 S278 works are proposed to permanently adjust the kerb line and reduce the parking space in front of the site access.

Figure 3.1 – Car Parking Suspension Bays

3.5 Parking

3.5.1 No car parking will be provided in the site compound. Staff will primarily access the site via sustainable modes of transport and occasionally car/van sharing, although this will be limited due to extensive on-street parking restrictions around the site. There are a number of public transport interchanges within 1km of the site. There are overground rail stations at White Hart Lane and Bruce Grove. White Hart Lane Overground Station is located 1.3km from the site providing services to London Liverpool Street Station, Chesnut and Enfield Town. In addition, bus stops are located on The Roundway within circa 50m of the site. Staff will also be employed locally wherever possible to minimise the distance travelled to the site.

3.6 Delivery Times

3.6.1 The following section details the anticipated working hours of the site and restriction of delivery times imposed on large construction vehicles. Furthermore, times have been identified to avoid heavy vehicles being in close proximity to the development site to minimise congestion during AM and PM peak periods.

3.6.2 Hill Partnerships Limited will undertake regular safety inspections of paths especially after deliveries.

Working Hours of the Site:

Monday to Friday:	08:00 – 18:00
Saturday:	08:00 – 13:00
Sunday and Bank Holidays:	No works

Large Vehicle Delivery Time Restrictions – no deliveries between:

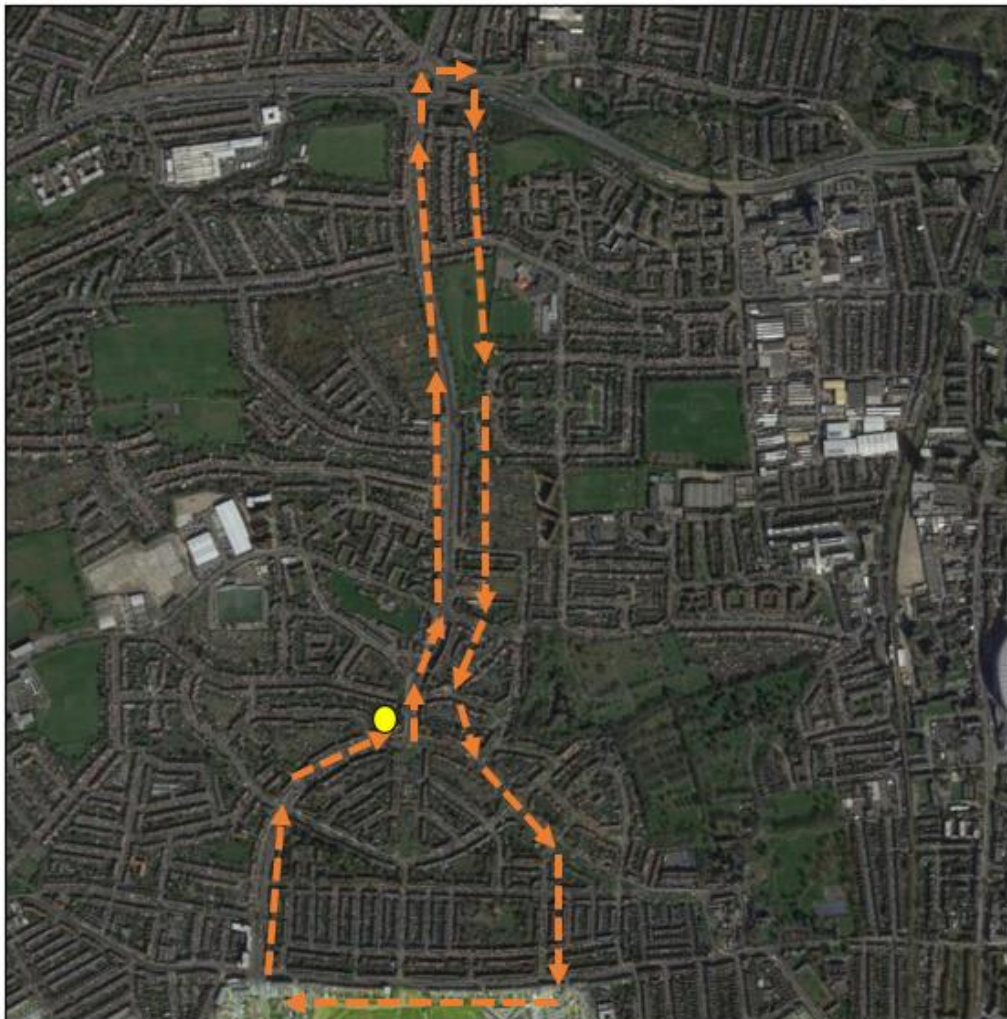
Monday to Friday	07:30 to 09:30 and 16:00 to 18:00
Saturday and Sunday	No restrictions
Bank Holidays	No works or deliveries

4.0 Vehicle Routing & Access

4.1 Routing Strategy

- 4.1.1 Vehicle access will be directed from the Roundway. This will be for the delivery of plant and materials to site. This gate will be manned by a banksperson, who will log and receive all deliveries. Delivery times will be allocated to reduce the build-up of traffic to the surrounding area. Maps of routes to the site will be provided with material and contract orders to show HGV routes to the site, to avoid traffic build up in minor roads and estates.
- 4.1.2 The site is widely accessible from a number of important national routes including the A10 and A406 via TfL's Red Routes and London's comprehensive 'A' road network. It is anticipated that regional construction traffic will largely access the site from the north and south via the A10 which provides access to the A406, M11 and M25.
- 4.1.3 The proposed construction vehicle routing from the TLRN is shown in **Figure 4.1**.

Figure 4.1 - Construction Traffic Access



- 4.1.4 Construction delivery vehicles will be managed on-site to avoid issues relating to unscheduled deliveries. They are also subject to a number of restrictions as outlined previously where operationally feasible.
- 4.1.5 All drivers will be briefed prior to making deliveries to ensure they adhere to the permitted routes outlined above.
- 4.1.6 Loading and unloading will take place on-site to avoid disruption within the local highway network, with space also provided on-site to hold delivery vehicles where necessary. Holding space will be provided on-site throughout the process will be managed to ensure that typically only one delivery will occur at a time.
- 4.1.7 This is subject to change dependent on the proposed methods of the delivery company. It is proposed that deliveries of the pod will offload via a hiab within the site. If this is not possible then pods will be delivered via a mobile crane.

4.2 Accessing the Site

- 4.2.1 The entrance to the construction site will be through the consented operational development access, accessing the site from The Roundway. Vehicles arriving and/or exiting the site will use the established routes designated.
- 4.2.2 Swept path analysis has been completed to demonstrate how an articulated vehicle can access and egress the site safely. This is presented in **Figure 4.2** and contained in **Appendix A**. The swept path analysis highlights that bankspeople will be required to temporarily halt traffic to allow the articulated vehicle in/out as it requires both carriageway lanes to manoeuvre. The vehicle is expected to reverse in and egress in forward gear.

Figure 4.2 – Swept Path Analysis – Artic

4.2.3 In order to minimise the potential for conflict between construction vehicles and vulnerable road users, the site access will be monitored by a gate-person at the control point. The control point will be operational for the working hours of the construction site. Turning, loading and unloading will all be undertaken on-site and managed by Hill Partnership Ltd staff. Vehicles will be able to reverse back into the site and unloaded in the designated bay located within the site, close to the site entrance and as set out in **Figure 4.2**.

4.2.4 During all phases, access and egress will be monitored and provided. All unloading/loading for materials and storage yard will take place within the site for the duration of the construction programme. Where operationally possible, typically large deliveries such as the pods will be undertaken during off-peak periods such as weekends and holidays to minimise impact on the surrounding road network.

4.2.5 A large notice board will be located at the site access which identifies the site manager including contact details and a 'Considerate Constructors' contact telephone number.

4.3 Pedestrian Access

4.3.1 Pedestrian access will be via the main access off the Roundways. The existing footways on The Roundways will remain undisturbed throughout the construction process.

4.4 Communication

- 4.4.1 When sub-contractors are appointed and materials are ordered, clear instructions will be issued to the suppliers to ensure they know any relevant delivery restrictions and routes to access the site. Verbal and written briefings will be provided to all suppliers, contractors and visitors, noting restrictions or terms that are applicable to them. This information will help reduce any impact of the works on the surrounding highway network.
- 4.4.2 Temporary provisional directional signage (AA style or any similar approved format) will be installed and maintained by Hill Partnership Ltd or their traffic management agent to highlight user accesses. This will be clearly visible from both directions and changed accordingly during different phases of the construction programme.

5.0 Strategies to Reduce Impact

5.1 Planned Measures

- 5.1.1 This section of the report provides a suite of measures (committed, proposed and considered) which could be implemented by the contractor to achieve the objectives of the CLP and mitigate challenges outlined in Section 2. **Table 5.1** presents the committed, proposed and considered measures.

Table 5.1 - Planned mitigation measures

Planned Measures	Committed	Proposed	Considered
Measures influencing construction vehicles and deliveries			
Safety and environmental standards and programmes	✓		
Adherence to designated routes	✓		
Delivery Schedule	✓		
Re-timing for out of peak deliveries		✓	
Re-timing for out of hours deliveries		✓	
Use of logistics and consolidation centres		✓	
FORS accredited suppliers / contractors	✓		
On site logistics manager	✓		
Material Procurement Measures			
Re-use material on site		✓	
Smart procurement		✓	
Encouraging Sustainable Freight			
Freight by river			✓
Freight by rail			✓
Other Measures			
Nuisance & mitigation measures	✓		
Collision reporting	✓		
Collaboration with other local sites	✓		
Staff Travel Plan			✓
Community engagement	✓		
Wheel wash facilities			✓
Dilapidation survey			✓

5.2 Measures Influencing Construction Vehicles and Deliveries

Safety & Environmental Standards & Programmes

- 5.2.1 Hill Partnership Ltd are committed to ensuring compliance with safety measures and standards as set out by this document, the wider Construction Environmental Management Plan and the Construction Phases Health and Safety Plan.
- 5.2.2 All internal project management, safety and sustainability procedures will be implemented at the site and communicated with all sub-contractors and third parties. A qualified site Logistics Manager will be appointed to manage vehicle movements in and out of the site and record any operational incidents.
- 5.2.3 The main contractor and their subcontractors will be required to adhere to several contractual agreements, in line with TfL's CLP Guidance for Developers. The main contractor will be required to comply with TfL's 'Standard for construction logistics: Managing work related road risk (WRRR)'.

Adherence to designated routes

- 5.2.4 All construction related traffic and deliveries will be carefully managed to ensure that journeys to and from the site adhere to agreed routes along the Strategic Road Network (SRN), which can be found previously in this report. These routes have been produced to minimise conflict with other users of the site and reduce the impact of the works on the surrounding highway network and local communities. The movement of pedestrians and cyclists both within the site and surrounding the site have particularly been considered in establishing these routes.
- 5.2.5 Copies of the route plan will be given to all suppliers and sub-contractors to ensure drivers are aware of the designated route. This will be supplemented by on-site briefings which will further enhance this understanding.

Delivery Schedule

- 5.2.6 The main contractor will adopt a (DMS) Delivery Management System, this system will be a web-based portal that all deliveries must be booked in on. The system will be used any company that wants to make a delivery or collection to/ from site.
- 5.2.7 Delivery scheduling will not be limited to receiving material deliveries into site, but will be fully coordinated with all materials, waste and plant & equipment leaving site. Hard copies of daily delivery schedules will be displayed at prominent locations e.g., provided at the gate/off-loading points, at hoists and also issued to drivers, forklift drivers and any other materials handling equipment operators, all of whom need to be in constant radio communication with one another.

- 5.2.8 All deliveries / collections must be booked 24 hrs in advance and will be on a first come first served basis, each delivery / collection will log on to the system and select a time and be assigned a gate, dependent on the type and size of the delivery, as well as parking suspensions in place at the time.
- 5.2.9 This system will enable the main contractor to manage the number, rate and frequency of all deliveries collections, this will enable the main contractor to manage deliveries across the day and regulate numbers.
- 5.2.10 The information inputted on to the system will also gather the data required for servicing and waste monitoring, i.e. type of vehicle, distance travelled, where the vehicle has come from and going to. Unloading of deliveries will be carried out during the approved working hours of:
- Monday to Friday 08:00 – 18:00
 - Saturday 08:00 - 13:00
 - Sunday and Bank Holidays No works or deliveries
- 5.2.11 All special deliveries to site that require licensing, e.g. delivery of tower cranes will be delivered to the site outside standard hours in accordance with the conditions of the licence therefore avoiding any unnecessary closures and minimising disruption to the public highway.
- 5.2.12 The contractor will consider various methods and tools to assist in supply chain management, such as:
- **Just in time delivery:** the delivery of materials to site 'just in time' for usage thereby reducing the need for onsite stock storage and the associated wastage of materials due to damage and theft;
 - **Reverse Logistics:** an enhanced delivery chain which allows for the return of unused goods back to the source supplier; and
 - **Demand Smoothing:** organising deliveries to site so that there are fewer peaks (associated with on site and in traffic congestion) and fewer troughs (with delivery management staff unable to carry out any activity).

The erection and maintenance of security hoarding

- 5.2.13 Existing hoarding will be maintained and only extended as necessary to provide adequate working room within the site boundary. Licences will be applied for and weekly inspection for structural integrity, cleanliness, lighting and general safety and presentation will be undertaken and recorded in the site registers. Flag poles and advertisement will be added to the boundary.

Use of logistics and consolidation centres

- 5.2.14 The use of a consolidation centre will lead to greater logistical efficiency and minimise the impact of any works on the surrounding highway network. The availability of such a facility will be examined by Hill

Partnership Ltd prior to construction beginning and agreed for use by any suppliers and sub-contractors, if suitable facilities can be found.

5.3 Material Procurement Measures

Design for Manufacture and Assembly and off-site manufacture

- 5.3.1 Hill Partnership Ltd are committed to the effective management of deliveries and reducing the impact of their sites, and therefore opportunities for construction off-site will be considered wherever possible as plans are developed.

Measures for disposal/storage of waste

- 5.3.2 During the construction phase there will be a centralised point for collection of waste removal (skips or bin location). Skips will be collected and segregated at the plant. Daily inspections and ownership of areas by site management will ensure housekeeping and safety is managed appropriately. Disciplinary procedures will be documented in the subbie orders.

Protection of services adjacent to the highways during demolition and construction

- 5.3.3 A permit to dig system will be in place to identify all procedures to prevent damage to services such as pipes and water mains.

Re-use of material on site

- 5.3.4 The re-use of materials on site will be implemented at all available opportunities to minimise the number of deliveries required at the site.
- 5.3.5 A SWMP will be in place and local waste removal contractor will be engaged to manage the recycling of the waste.

Smart procurement

- 5.3.6 All measures will be undertaken during the procurement stages to ensure that the impact of the works is minimised. Contractors will be partially selected upon their use of local staff who can travel to the site via public transport, walking or cycling. Suppliers within the local supply chain will also be used wherever possible to minimise the transport of goods and deliveries to the site. It will also be explored as to whether there are opportunities to source materials from suppliers who are working on nearby sites.

5.4 Measures to Encourage Sustainable Freight

Freight by Water

- 5.4.1 Consideration has been given to the viability of transporting freight by water as the site is located approximately 2km west from a number of river access along the River Lea. However, it was determined that this would not be feasible given the disruption that would arise in association this mode of freight transportation.

Freight by Rail

- 5.4.2 Consideration has been given to the viability of using the adjacent railways as a freight network, with Seven Sisters Railway Station located in close proximity to the site. It was determined that the provision of railways around the site is unsuitable for this purpose due to a lack of facilities for unloading and disruption which would arise from the movement of freight.

5.5 Other Mitigation Measures

Nuisance & Mitigation Measures

- 5.5.1 The following measures will be used to control noise, dust and vibration:
- Works plant and equipment will comply with the Noise at Work Regulations 1989. Noisy operations will be further reduced by use of sound reducing enclosures;
 - Skips and removal vehicles will be covered when leaving site;
 - All materials removed from site will be recorded via a ticket system to ensure the disposal is tracked; and
 - All vehicle movements to and from the site will be to a pre-approved route to minimise air quality issues and all vehicles will be required to comply with low emissions requirements and will be registered with FORS Silver or above.

Collision Reporting

- 5.5.2 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.
- 5.5.3 Within 15 days of the contract variation date, the contractor shall provide the authority with a collision report. The contractor shall provide the authority with an updated collision report on a quarterly basis and within five working days of a written request from the authority.

Collaboration With Other Local Sites

- 5.5.4 Hill Partnership Ltd will consult with both LBH and TfL to identify any opportunities for collaboration with other contractors and developers working in the area. This will form part of an ongoing dialogue to minimise disruption and co-ordinate logistics between adjacent sites.

Staff Travel Plan

- 5.5.5 No car parking will be provided on-site. All staff and construction workers will be strongly encouraged to travel by sustainable modes. Similarly, suppliers and sub-contractors will be appointed partially based on their distance from the site to ensure the local supply chain is utilised and staff are travelling from within a reasonable distance to maximise the uptake of sustainable modes.

Community Engagement

- 5.5.6 A leaflet drop will take place to include local residents and businesses within the immediate vicinity of the site, informing them of upcoming works and which areas will be affected. It will also provide a named point of contact within the contractor team to address any queries during the construction period.

Road Sweeping and Wheel Wash Facilities

- 5.5.7 Road sweeping will be in place throughout the demolition and construction phase to ensure public roads remain safe and clear from the removal of soil and debris.
- 5.5.8 A manned jet wash station will be provided on-site, as it is the responsibility of the contractor to ensure that mud/detritus originating from the site is not deposited on the public highway. This will also help to minimise the impact of dust from construction vehicles. Alongside this, all vehicular loads will be covered when entering/egressing the site, to reduce the risk of dust/debris on the local roads.

Dilapidation Survey

- 5.5.9 A full and detailed Dilapidation Survey will be undertaken to form the initial highway condition record and shared with Highways Officers at LBH prior to works commencing on site. Any damages or defects inadvertently caused on the public highway recorded during the construction period will be repaired by the contractor to standards required by LBH or be reported for further investigation/solution.

6.0 Construction Vehicle Trip Generation

6.1 Introduction

- 6.1.1 The proposed construction will take place on a small-scale site. Therefore, the impact of vehicle trips will be very limited on the highway due to the small scale of construction taking place.
- 6.1.2 The proposed vehicle trip rate is expected to be low, with up to 10 vehicles expected a day. The peak number is low and therefore, it is not considered to have an impact on the local highway.
- 6.1.3 The peak number of staff commuting to site during the construction is 20. There is no car parking on site, therefore, staff are expected to travel to site via public transport, walking or cycling. Thus, having no impact on the local highway.
- 6.1.4 The site is highly accessible via public transport and is on key bus routes as well as London Underground and Overground routes.

7.0 Implementing, Monitoring & Updating

7.1 Implementing

- 7.1.1 Hill Partnership Ltd are responsible for implementing that CLP and for ensuring it is kept up to date as the construction progresses.
- 7.1.2 They and their subcontractors will be required to adhere to several contractual agreements, in line with TfL's CLP Guidance for Developers. The main contractor will be required to comply with TfL's 'Standard for construction logistics: Managing work related road risk (WRRR)'.

7.2 Vehicle Safety

- 7.2.1 The contractor shall ensure that any van it uses to provide services shall carry a prominent sign or signs to warn cyclists of the dangers of passing the vehicle on the inside.
- 7.2.2 Any vehicle more than 3.5t must have side guards; close proximity sensors; rear cyclist warning signs; Frensel lens or CCTV; driver licence checks and driver safety training.
- 7.2.3 The contractor shall ensure any subcontractors operating car-derived vans, vans and lorries, comply with the safety clauses as if those subcontractors were party to its contract.

7.3 Driver License Checks

- 7.3.1 The contractor shall ensure its drivers have a driving licence check with the DVLA before starting deliveries and that checks are repeated in line with either the following risk scale, or the contractor's risk scale, provided that the contractor's risk scale has been approved in writing by the authority within the last 12 months:

- 0 - 3 points on the driving licence – annual checks
- 4 - 8 points on the driving licence – six-monthly checks
- 9 - 11 points on the driving licence – quarterly checks
- 12 or more points on the driving licence – monthly checks

7.4 Driver Training

- 7.4.1 The contractor shall ensure its drivers who have not undertaken:
- Approved driver training (or training, which in the authority's reasonable opinion, is an acceptable substitute) in the last three years, undertakes approved driver training or the substitute training within 60 days of the start of the contract.

- A FORS e-learning safety module in the last 12 months, undertakes a FORS e-learning safety module (or e-learning, which in the authority's reasonable opinion, is an acceptable substitute).

7.5 Failure to Comply

7.5.1 If the contractor fails to comply with WRRR requirements and other undertakings contained in the CLP the contractor has committed a material breach of contract. The authority may refuse the contractor, its employees, agents and freight vehicles entry onto any property that is owned, occupied or managed by the authority for any purpose (including, but not limited to, deliveries).

7.6 Monitoring

7.6.1 During the works monitoring and reviews will be undertaken by the main contractor as listed hereafter:

- A general review of site activities and compliance with the CLP. If conditions have changed or noncompliance is recorded this should be actioned within an agreed period depending upon the degree of variance;
- A ground movement analysis will be completed and a monitoring regime and trigger levels will be agreed with LBH and third party wall representative;
- Boundary monitoring for noise and vibration. This will be agreed with LBH and party wall representatives; and
- Boundary monitoring for dust. This will be agreed with LBH and party wall representatives.

7.6.2 Further details of the noise, dust and vibration monitoring processes are provided within the site Construction Environmental Management Plan.

7.6.3 A weekly report will be produced recording the monitoring movement results. The report will record the results, highlight any exceedances above pre-determined trigger levels and record any actions that were taken. The report will also record any complaints that were received and how these were dealt with.

7.6.4 Trigger levels will be set at two values. The first trigger level will be a warning level whilst the second will indicate that an unacceptable level has been reached. This warning level will indicate to the project team that the critical level (noise, movement, vibration or dust) could be exceeded if the works are not adjusted in some way, e.g. change of technique, intensity or duration. The second trigger level will indicate that the works have exceeded an acceptable level and must stop immediately.

7.7 Movement Monitoring

7.7.1 No movement monitoring is proposed given there are no party wall agreements, however, a condition survey of adjacent roads, footpaths and walls will be undertaken.

7.8 Noise / Dust / Vibration Monitoring

- 7.8.1 Noise dust and vibration will be carried out to the BS5528. A full noise, dust and vibration strategy will be developed to assess and carry out all the monitoring.
- 7.8.2 A programme for noise and vibration monitoring will be undertaken and agreed with LBH and TfL prior to the commencement of works on-site. If complaints arise, these will be investigated immediately, and appropriate action taken. Wherever possible, plant and equipment will be switched off when not in use.
- 7.8.3 Routine dust monitoring at sensitive residential locations will be undertaken, with the results and effectiveness of controls reviewed at regular meetings.

7.9 Servicing Monitoring

- 7.9.1 The main contractor will monitor servicing through the Delivery Management System (DMS). This will monitor the number and types of vehicles that service the site. Which will also help to monitor CO2 emissions associated with the construction site.
- 7.9.2 The Main contractor will ensure that all plant and equipment, including any which may be on hire, is well maintained, properly silenced, and used in accordance with the manufacturer's instructions and BS 5228. All non-road mobile machinery (NRMM) is to use ultra-low sulphur tax-exempt diesel (ULSD) where available. NRMM of net power between 37kW and 560kW operated in LBH will be required to meet specific standards. This will apply to NRMM engines for both Nitrogen Oxides (NOx) and all machinery between 37kW and 560kW will be registered on the NRMM on-line register.

7.10 Reporting

- 7.10.1 Monitoring reports for every aspect of construction as set out in this section of the CLP will be produced and made available to LBH and TfL. Where targets have been set the reports will review if the target has been met. If targets are not met the main contractor will discuss the appropriate course of action with TfL following their receipt of the monitoring reports.

8.0 Appendix

Appendix A – Swept Path Analysis

Our Locations

Birmingham

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