CAPITAL TRANSPORT PLANNING

Construction Management Statement

25 Ham Farm Road, Ham

February, 2022

Capital Transport Planning is a Transport Planning and Highways consultancy, specialised in assisting clients through the planning process. Our transport consultant has vast transport planning experience acting on behalf of clients to overturn refused planning applications, providing documents to support planning applications, working on the behalf of Highway Authorities within a County Council and London Borough Council.

Prepared for:

Proctor and Shaw

Prepared by:

Capital Transport Planning LTD

Michael Okubajo BSc, MSc, MCIHT, MRTPI

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Transport Consultant
Construction Logistics Practitioner (00232)

Revision History

Project and Document Details

Project Name	**Ham Farm Road**
Project No	00170
Document Title	Construction Management Statement

Document History

Rev	Amendments	Prepared By	Date
First Issue	N/A	MO	28/02/2022

Table of Contents

List of Figures and Tables

1. Introduction

1.1. This Construction Management Statement (CMS) has been prepared by Capital Transport Planning on behalf of Proctor and Shaw (the agent) the proposed development at 25 Ham Farm Road in the London Borough of Richmond-upon-Thames (LBRUT).

1.2. The Construction Management Statement is required by LBRUT and contains and is not limited to:

1. The size, number, routing and manoeuvring tracking of construction vehicles to and from the site, and holding areas for these on/off site
2. Site layout plan showing manoeuvring tracks for vehicles accessing the site to allow these to turn and exit in forward gear;
3. 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);
4. Details and location where plant and materials will be loaded and unloaded;
5. 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
6. Details of any necessary suspension of pavement, roadspace, bus stops and/or parking bays;
7. Details where security hoardings (including decorative displays and facilities for public viewing) will be installed, and the maintenance of such
8. Details of any wheel washing facilities;
9. Details of a scheme for recycling/disposing of waste resulting from demolition and construction works (including excavation, location and emptying of skips);
10. 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 & Best Practice produced by the Greater London Authority (GLA).
11. Details of any highway licences 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);
12. Details of the phasing programming and timing of works;
13. 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; 14. A construction programme including a 24 hour emergency contact number.

1.3. This CMS has been prepared in accordance with Transport for London's (TfL) Construction Logistics Plan Guidance and with reference to Richmond council's guidance on construction logistics.

1.4. This logistics plan will be treated as a working document and requires input from various stakeholders.

1.5. The key elements that we have considered to produce the document are:

- Traffic management
- Pedestrian routes
- Site security
- Personnel Access
- Vehicle Access
- Welfare facilities and accommodation

Site Context

1.6. The application site is located to the west of Ham and towards the centre of the London Borough of Richmond-upon-Thames.

1.7. The application site is located on Ham Farm Road, which is under the jurisdiction of the Local Highway Authority (LHA). The site is located approximately 1.5 miles north of Kingston rail station, which is a 30-minute walk from the application site.

Development Proposal

1.8. It is proposed that a residential dwelling is constructed following the demolition of an existing dwelling within the application site.

1.9. The site achieves a PTAL rating of 1b (poor) using Transport for London's (TfL) online WebCAT planning tool.

Operational information

1.10. Standard hours well be as per best practice of permissible hours for noisy works:

- 08:00 to 18:00 hours Monday to Friday
- 08:00 to 13:00 hours Saturday

1.11. Operations that need to be undertaken outside of standard working hours will be agreed with the local authority with notice being provided to the neighbours at least 14 days ahead of these activities occurring or on the day for extenuating circumstances.

1.12. All employees on site will be made aware of the requirements and will be briefed on the methods employed to reduce the levels of disruption and noise. Special consideration will be taken when piling and in the movement of vehicles to and from the site. Notification will be given if any concrete crushers are to be used on site.

1.13. All vehicles and equipment operation on the site will be maintained in good condition to minimise smoke discharge.

1.14. The guidelines set out in the Mayor of London's 'The Control of dust and emissions from construction and demolition', Best practice guidance will be followed and all potential emissions will be prevented, suppressed and contained wherever possible. By following the above measures, the air quality impact of the development on the environment will be reduced. An adequate water supply will be provided to minimise the formation and spread of dust.

1.15. Machinery will utilise noise suppression/silencers to minimise nose and frequent checks will be made to ensure equipment is working correctly.

1.16. The contractor will register the site with the Considerate Constructors Scheme and will heed recommended guidelines.

1.17. Parking suspensions will not be required during construction.

Banksman

1.18. A trained banksman will be on site to assist with any movements of construction vehicles and machinery within and interacting with the application site. Full details of banksmen on site can be obtained from the community liaison contact.

Protection of the Public

1.19. A good quality site hoarding will be erected prior to any demolition activities and will remain in place until the final stages of the build, fit out and landscaping. It will be subject to regular check and maintenance as required. The hoarding will advertise the hazards associated with the demolition and construction work.

1.20. Separate inward opening gated vehicle and pedestrian access is will be established at existing dropped curb positions. Gates will be kept closed at all times except when deliveries/waste removals are occurring. Vehicles and pedestrians will be segregated. Vehicle entrances will be guarded by traffic marshals to protect the public using the pedestrian pavement outside the property.

1.21. Safety procedures at gates will include the following:

- No unsupervised vehicles to access the site;
- No unloading of vehicles will be permitted in the road.

Site Specific Objectives

1.22. The objectives of the site during construction are:

- Working considerately and not causing disruption to residents in the immediate vicinity of the site;
- Minimising the impact on parking and the local highway network;
- Minimise any impact to bus services operating on Upper Ham Road (A307).

CMS Community Liaison Contact

1.23. Name: TBC
Company: TBC
Role: TBC
E-mail: TBC
Phone: TBC

1.24. A contractor has not yet been appointed on the project and the will likely go to a competitive tender at the appropriate stage with detailed technical tender information to be provided post planning

2. Context, considerations and challenges

Policy Context

National Planning Policy Framework (NPPF)

2.1. The NPPF promotes the use of sustainable transport throughout the UK, safe road design, and the efficient and sustainable delivery of goods and supplies. The NPPF sets out the long-term strategy for sustainable development.

Traffic Management Act (2004)

2.2. Part 2 of the Traffic Management Act sets out the responsibility of local authorities to manage traffic networks within their geographical area of responsibility. This includes efficient use of the network and the requirement to take measures to avoid contributing to traffic congestion. Part 5 outlines the responsibility of local authorities in Greater London to manage the strategic route network. This includes TfL's role to manage certain areas of the Greater London route network.

The London Plan (2021)

2.3. Policy T4 of the Plan requires the submission of CLPs to ensure construction is safer, cleaner and makes efficient use of the road network, including through the use of non-road modes wherever available.

'When required in accordance with national or local guidance,179 transport assessments/statements should be submitted with development proposals to ensure that impacts on the capacity of the transport network (including impacts on pedestrians and the cycle network), at the local, network-wide and strategic level, are fully assessed. Transport assessments should focus on embedding the Healthy Streets Approach within, and in the vicinity of, new development. Travel Plans, Parking Design and Management Plans, Construction Logistics Plans and Delivery and Servicing Plans will be required having regard to Transport for London guidance.'

The Mayor's Transport Strategy (MTS) (2018)

2.4. The MTS promotes the use of CLPs as a 'travel plan that aims to improve the sustainability of construction freight movements by establishing site management and procurement processes to reduce the impact of construction traffic on the street network.

Healthy Streets

2.5. The Healthy Streets document makes specific reference to CLPs: 'Construction phase of any development will have an impact on the surrounding community, including safety, environmental and congestion impacts on the road network. Impact varies depending on the size, timescale and location of the development'.

Vision Zero

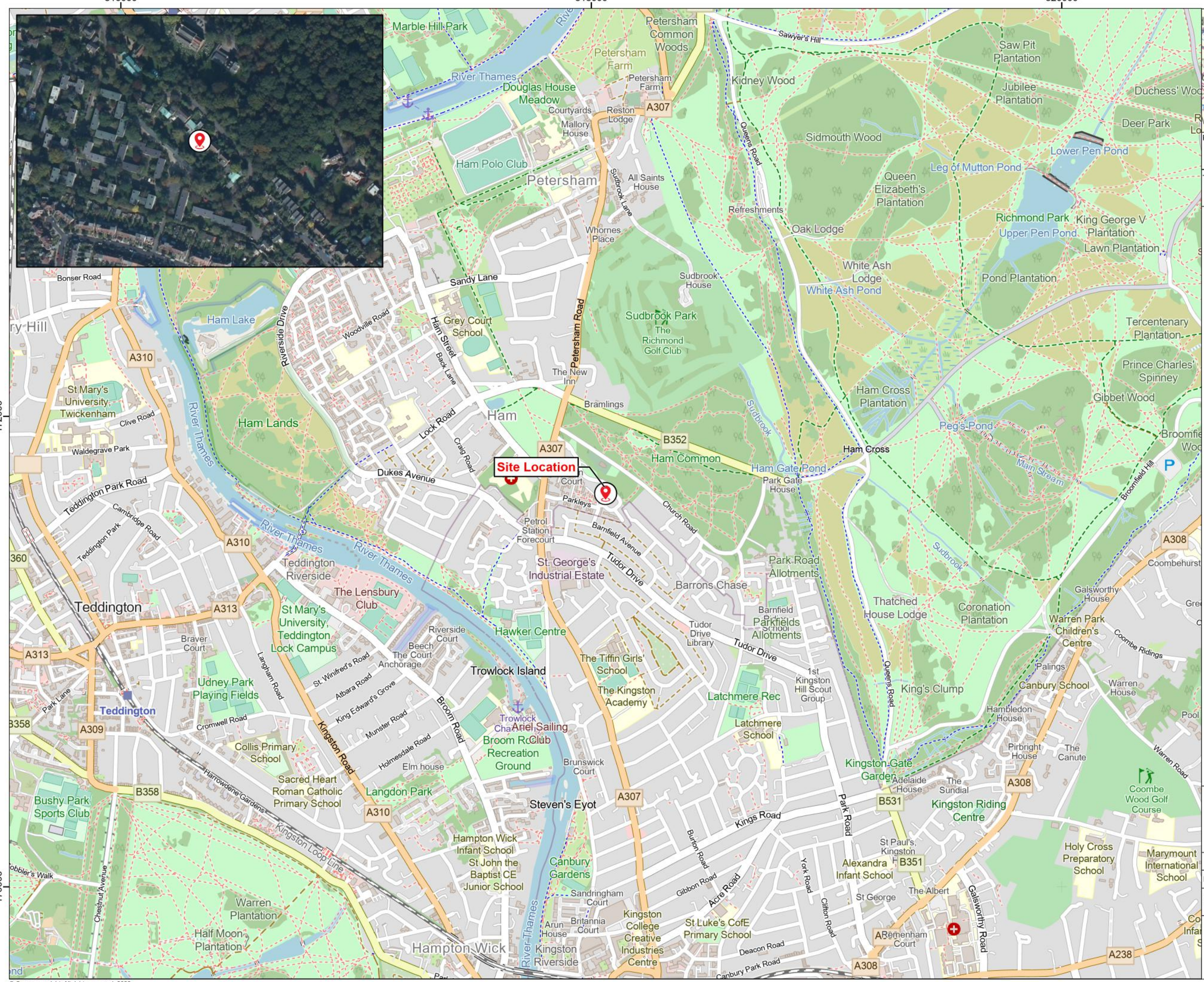
2.6. An approach to road danger reduction that works towards the elimination of road traffic, deaths and serious injuries by reducing the dominance of motor vehicles on London's streets.

London Borough of Richmond upon Thames – Adopted Local Plan (2018)

2.7. Policy LP10: Travel impact and parking standard - 'Construction and demolition G. The Council will seek to manage and limit environmental disturbances during construction and demolition as well as during excavations and construction of basements and subterranean developments. To deliver this the Council requires the submission of Construction Management Statements (CMS) for the following types of developments'

Context Maps

2.8. Below are the TfL required context plans. They are below in Figures 1 and 2.



PROJECT:

25 Ham Farm Road, TW10 5NA

TITLE:

Regional Plan

Legend:

Site Location

Capital Transport Planning
Email: michael@capitaltp.co.uk

Rev	Date	Purpose of Revision	Drawn
A	20/02/2022	Initial Issue	DR

Drawing Reference:
702464

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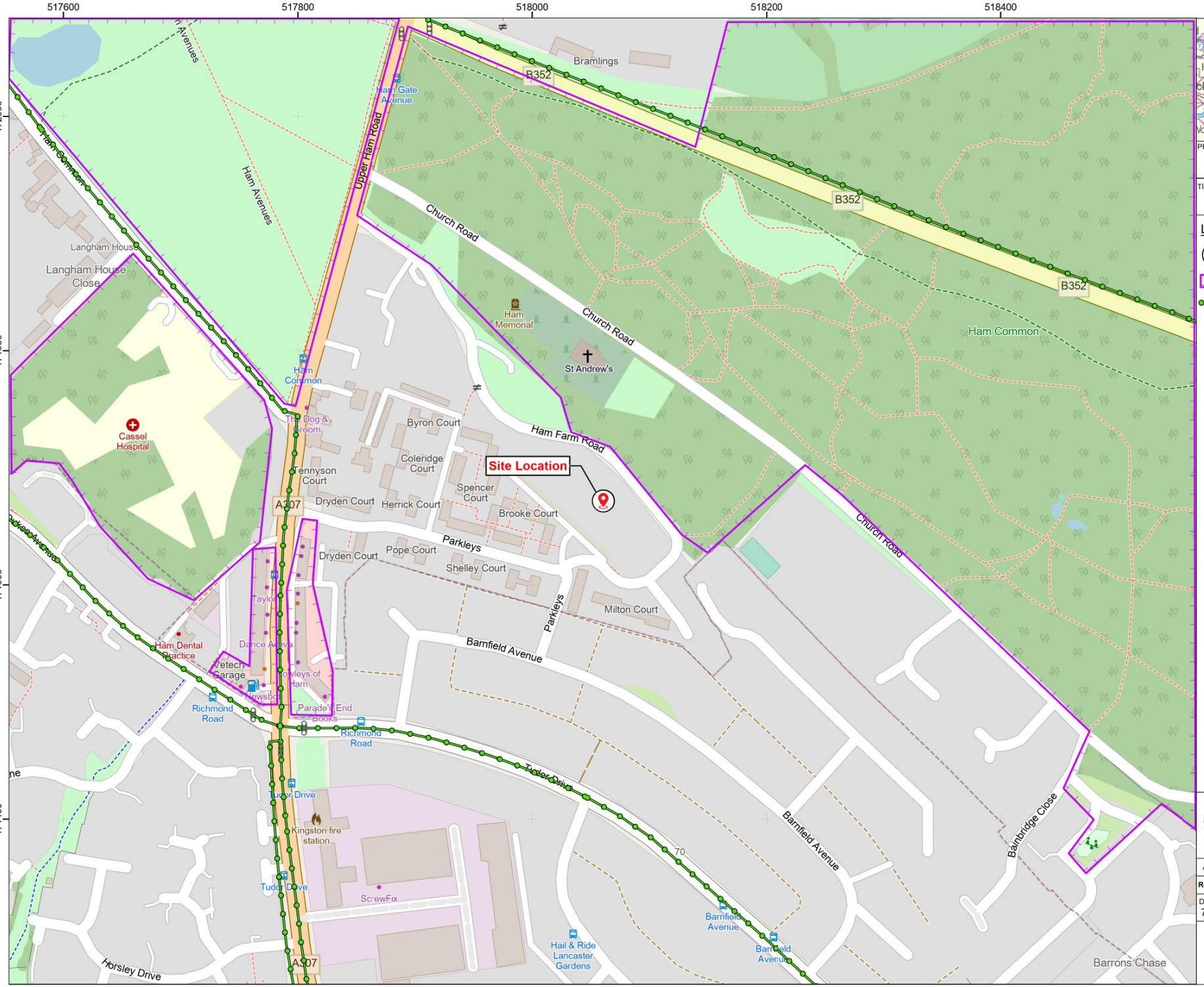
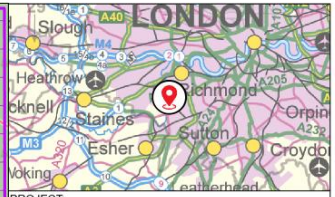
SCALE: 1:15,000

ISO A3

DO NOT SCALE





PROJECT:

25 Ham Farm Road, TW10 5NA

TITLE:

Local Context Plan

Legend:

- Site Location
- Community Considerations
- Cycle Routes

Capital Transport Planning
Email: michael@capitaltp.co.uk

Rev	Date	Purpose of Revision	Drawn
A	20/02/2022	Initial Issue	DR

Drawing Reference: 702464

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SCALE: 1:3,000

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Local Access Including Highways, Public Transport, Cycling and Walking

Highways, carriageways and footways

2.9. The application site is located on Ham Farm Road which adjoins Upper Ham Road (A307) to the north and Parkleys to the south. Ham Farm Road is an unclassified road under the jurisdiction of the Local Highway Authority.

2.10. Ham Farm Road is residential in nature and adequate footways are provided on egress of the application site towards Petersham.

Rail

2.11. The site is located approximately 1.5 miles north of Kingston rail station, which is a 30-minute walk from the application site.

2.12. Kingston rail station is on the South Western Railway line and provides services from Waterloo from Shepperton.

Bus Routes

2.13. The site benefits from a bus services within easy walking distance. The closest being the Ham Common bus stops. Both bus stops are within 6-minute walking distance and provides access to the bus 65 and N65.

Cycling

2.14. There are no established cycle routes located in the immediately vicinity of the application site, however cycling to and from the application site can be easily accommodated in the existing carriageways.

Considerations and Challenges

2.15. The contractor welcomes input from the Local Authority, local businesses, residents and Ward Members should alternatives be proposed. The main challenges with the development are the management site deliveries/collections whilst ensuring the neighbouring residents' daily arrangements are not affected by the works.

2.16. The following community considerations have been presented in Figure 2.

- Local residential properties;
- Bus services located on Upper Ham Road (A307).

3. Construction programme and methodology

3.1. Capital Transport Planning have developed a construction programme in conjunction with the aspirations of the principal contractor. The construction programme can be seen below in table 1.

Table. 1 Construction Programme

Construction phase	Start	End
Site setup and demolition	Jun-2022	Aug-2022
Basement excavation and piling	N/A	N/A
Sub-structure	Sep-2022	Nov-2022
Super-structure	Nov-2022	Jan-2023
Cladding	Jan-2023	Mar-2023
Fit-out, testing and commissioning	Feb-2023	Apr-2023

Site setup and demolition

3.2. Demolition works and site preparations within the site will begin in April. These are forecasted to generate roughly 1 lorry per day removing materials from the site. The lorries will be loaded within the site boundary within the dedicated loading and unloading area. This is expected to take 1-3 months to complete.

Basement excavation and piling

3.3. No basement is proposed and therefore no associated excavation works.

Sub-structure

3.4. The construction of the substructure of the building including any retaining structures and foundation will begin in July 2022. The phase overlaps with the basement, excavation and piling phase. Substructure works are not expected to last for longer than three months.

Super-structure

3.5. HGV's will be required at this stage of construction to deliver the materials required to construct the super-structure. These vehicles will be unloading within the site with the assistance of a banksman. It is forecasted that the super-structure works would be carried out across the course of 1 month.

Cladding

3.6. Façade deliveries will vary in size due to the different elements of façade required. A pre-fabricated factory produced timber frame and timber cladding is envisaged for the structure and envelope that will allow fast and low impact erection on site.

3.7. Deliveries will be well organised and ensure lorries are fully loaded to reduce the number of deliveries required. This will ensure that deliveries are carried out efficiently. This phase of construction is forecasted to take up to 3 months to be completed.

Fit-out testing and commissioning

3.8. This phase of construction will involve deliveries of materials such as metal framing/plasterboard/plastering materials/ceiling materials/mechanical and ventilation materials/electrical materials/flooring materials/painting and decoration etc.

3.9. During the last few months of the project, there will be a large amount of furnishing to be installed at the site. This will involve the use of small vans compared to earlier stages of the construction. The fit-out stage of construction is forecasted to take up to 3 months.

Waste Removal/Skips

3.10. Skip collections/drop-off will be required throughout the entire construction phase of the project. This will be in the form of skips and will be collected on a requested basis.

4. Vehicle routing and site access

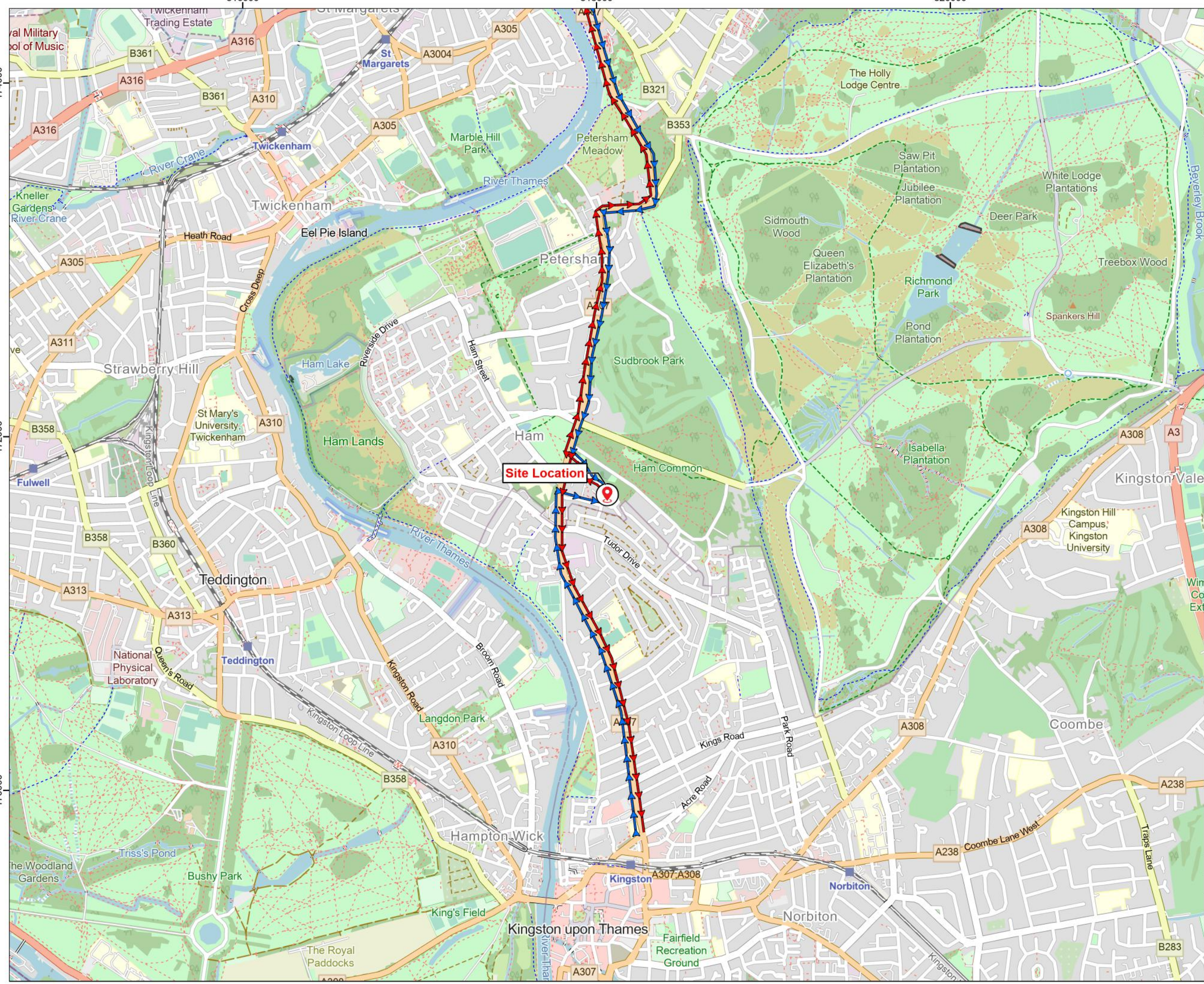
4.1. The most appropriate construction vehicle route from the site has been considered.

4.2. It is proposed that the primary route for construction vehicles would be to approach the site from the north. Construction vehicles would approach the site from the Strategic Road Network, in this case either the A316.

4.3. Vehicles would leave Twickenham Road (A316) at the Richmond Circus roundabout before heading southbound on Kew Road (A307). Vehicles would turn left on to Church Road (B322) and continue southbound across the junctions of Paradise Road and Mount Ararat Road and turn left onto Friars Stile Road (B322). Vehicles would then turn left onto Richmond Hill (B321) and continue southbound until reaching the roundabout of Star and Garter Hill and Sawyer's Hill. Vehicles would continue across the roundabout and continue southbound on Star and Garter Hill (B353). Vehicles would continue southbound on Petersham Road (A307) until reaching the junction with Ham Farm Road. Vehicles would turn left from Petersham Road (A307) onto Ham Farm Road and arrive at the site.

4.4. It is proposed that construction vehicles would leave the site and head towards the strategic road network in the same route as arrival.

4.5. The proposed vehicle routing can be seen below in Figure 3 and 4.



PROJECT:

25 Ham Farm Road, TW10 5NA

TITLE:

Regional Plan with Construction Vehicle Routing

Legend:

- Site Location
- Arrival Route
- Departure Route

Capital Transport Planning
Email: michael@capitaltp.co.uk

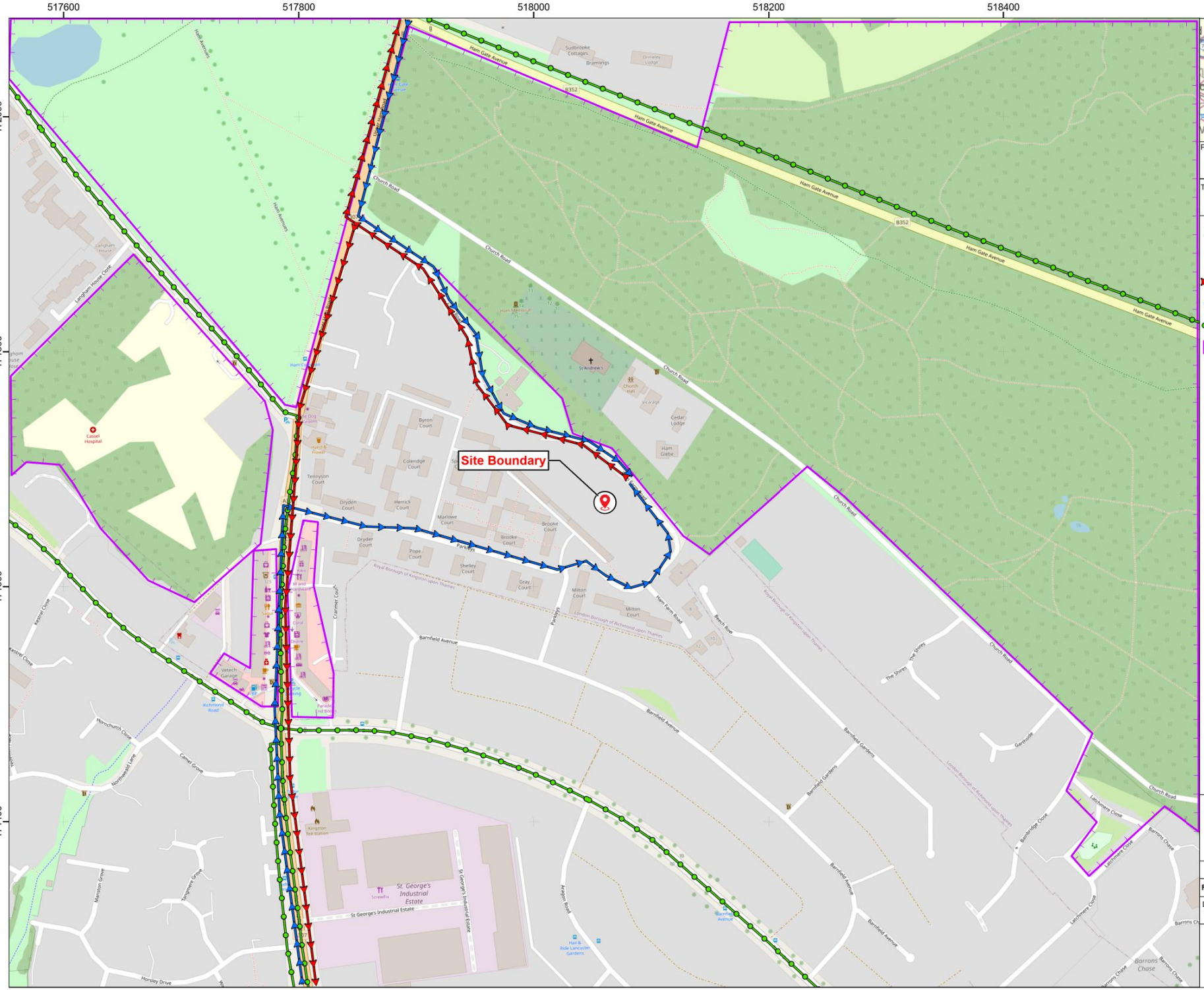
Rev	Date	Purpose of Revision	Drawn
A	20/02/2022	Initial Issue	DR

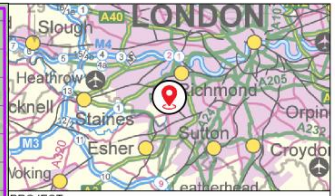
Drawing Reference:
702464

SCALE: 1:20,000

ISO A3

DO NOT SCALE





PROJECT:

25 Ham Farm Road, TW10 5NA

TITLE: **Local Context Plan with Construction Vehicle Routing**

Legend:

- Site Location
- Departure Route
- Arrival Route
- Cycle Routes
- Community Considerations

Capital Transport Planning
Email: michael@capitaltp.co.uk

Rev	Date	Purpose of Revision	Drawn
A	20/02/2022	Initial Issue	DR

Drawing Reference: 702464

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SCALE: 1:3,000

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DO NOT SCALE

Accessing the Site

4.6. The existing vehicular access to the site is to be retained as a part of the development and throughout the construction phases.

4.7. It is proposed that construction and delivery vehicles will enter the site in reverse gear with the assistance of a qualified banksman. Off-street deliveries are proposed in order to prevent any adverse impacts to the public highway. Any loading and unloading of materials using larger construct vehicles will take place directly from Ham Farm Road. Any deliveries undertaken from the highway will priorities any pedestrians on the footway and will be temporarily halted until any pedestrians on the footway have passed.

4.8. Hoarding will be erected within the application site, in order to assist with the construction of the additional floor and transfer of personnel and materials. The proposed hoarding will be located within the site and therefore a scaffolding license is not required.

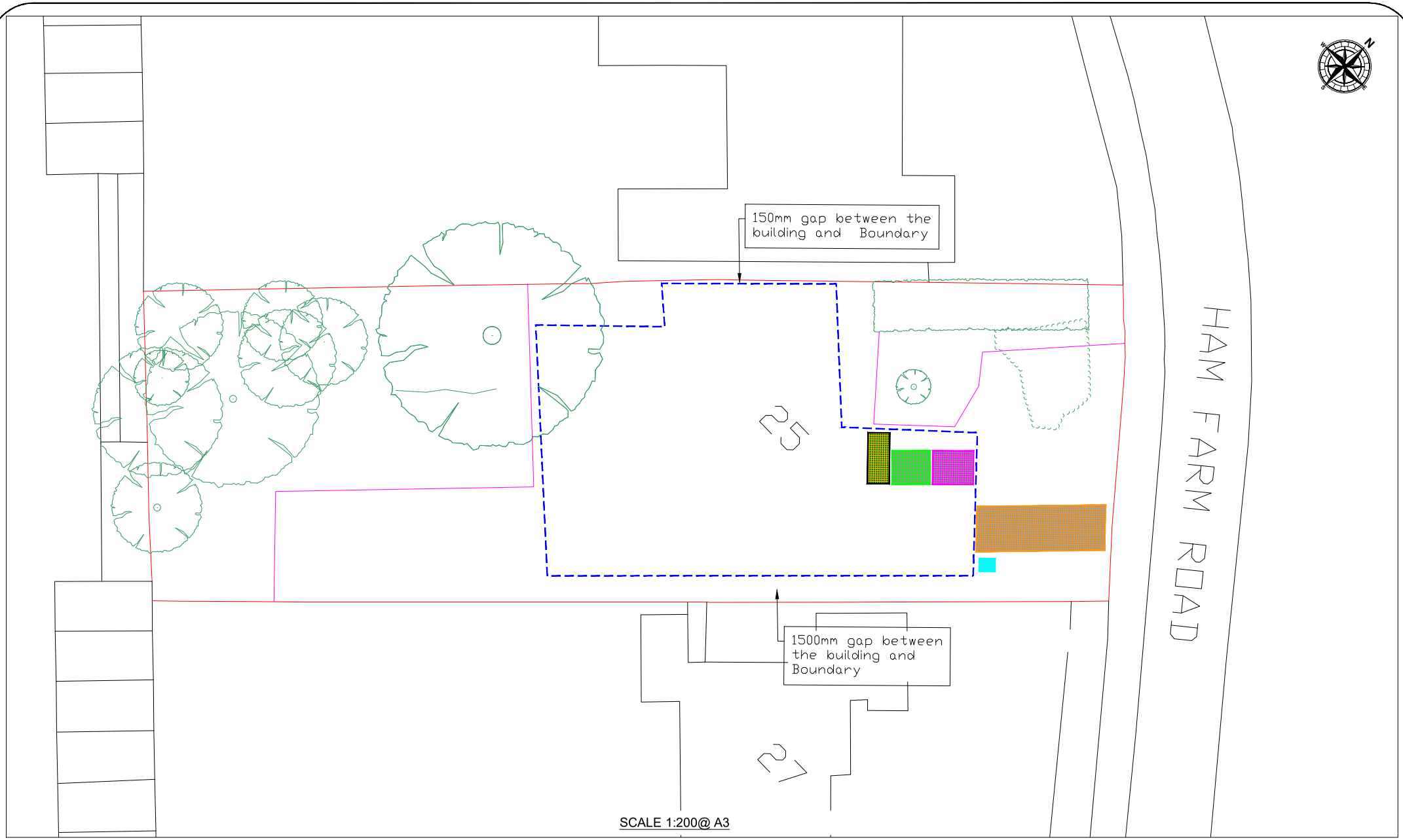
4.9. Waste and recycling are to be provided within the application site and will be collected from the site on a request basis by the site manager. Site welfare is also to be provided within the site for use by site operatives.

4.10. Wheel washing facilities are proposed as the site, which will prevent any mud or debris on the public highway. A site operative will be available to inspect departing vehicles and wash any mud or debris from the vehicle before heading out from the site.

4.11. The location of the loading and unloading area, proposed hoarding, site welfare, recycling/waste and wheel-washing facilities is also indicated in Figure 5.

4.12. It should be noted that the application site is located in an accessible location with a PTAL rating of 1b.

4.13. The principal contractor has stated that contractors will be encouraged to access the site using sustainable modes or travel. There is no parking on site for construction workers or site operatives.



KEYS:

- Site Boundary
- Proposed Hoarding
- Loading Bay
- Storage of plant and materials
- Site Welfare
- Wheel Washing Facility
- Recycling Area
- Temporary Tree Protection Barrier

0 10 20

TRANSPORT PLANNING SPECIALISTS

PROJECT: 25 Ham Farm Road, TW10 5NA

DRAWING TITTLES: Site Construction plan

DRAWN BY: SA

DATE: FEB 2022

Rev	Date	Description
-	-	-

SCALE: AS SHOWN

SHEET: 1 of 1

DRAWING No: XXXXXXXX

REVISION: - - -

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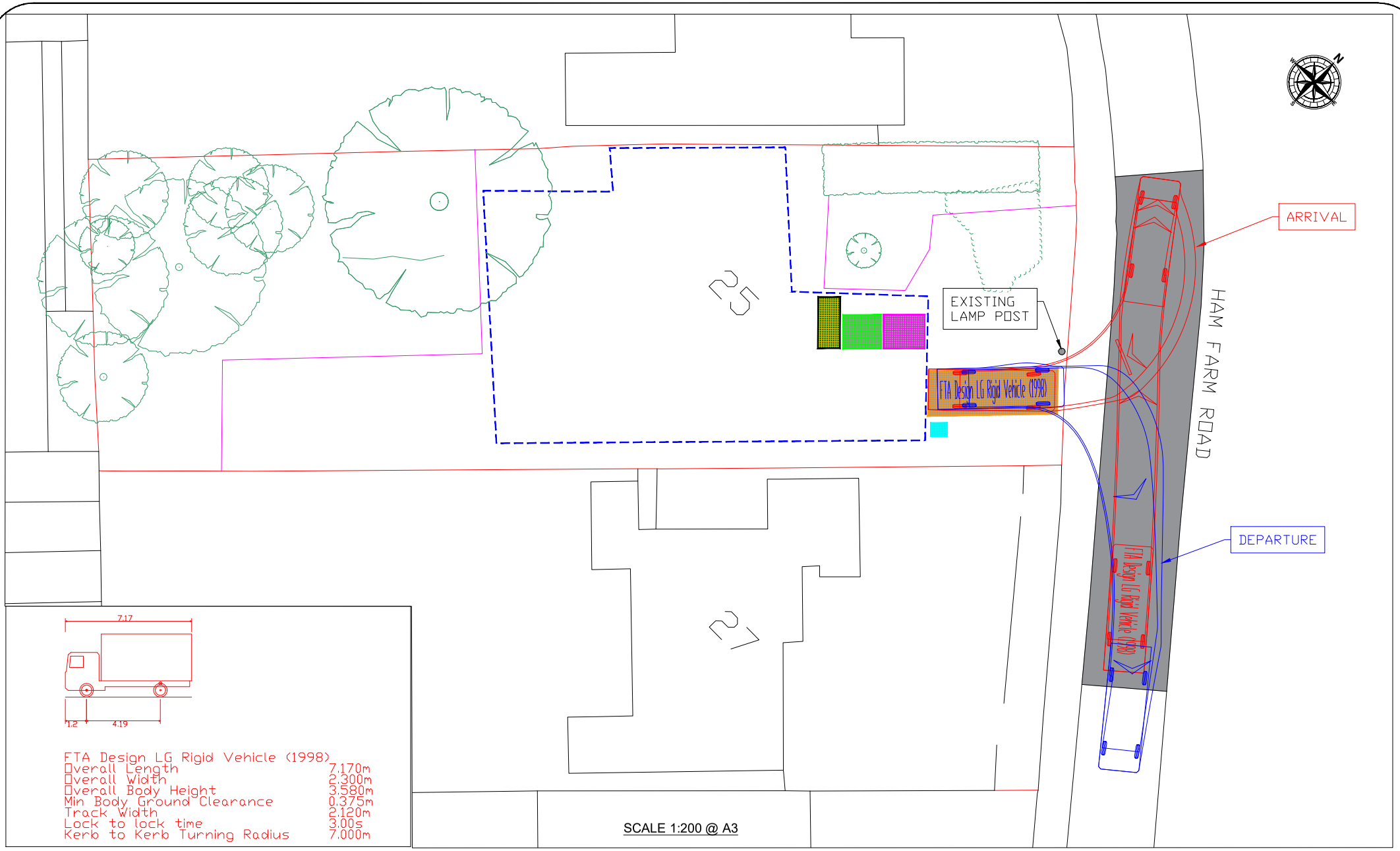

FTA Design LG Rigid Vehicle (1998)

Overall Length	7.170m
Overall Width	2.300m
Overall Body Height	3.580m
Min Body Ground Clearance	0.375m
Track Width	2.120m
Lock to lock time	3.00s
Kerb to Kerb Turning Radius	7.000m

KEYS:

30m Long Parking Suspension

0 10 20

CTP TRANSPORT PLANNING SPECIALISTS

PROJECT: 25 Ham Farm Road, TW10 5NA

DRAWING TITLE: SWEPT PATH ANALYSIS

DRAWN BY: SA

DATE: FEB 2022

Rev	Date	Description
-	-	-

SCALE: AS SHOWN

SHEET: 1 of 1

DRAWING No: --------

REVISION: - - -

A3

5. Strategies to reduce impacts

5.1. The table below sets or the planned measures that are considered to be practical for this site and can either already be committed to, are proposed or being considered.

Table 2. Planned Measures Checklist

Measure	Committed	Proposed	Considered
Measures influencing construction vehicles and deliveries			
Safety and environmental standards and programmes	X		
Adherence to designated routes	X		
Delivery scheduling	X		
Re-timing for out of hours deliveries	X		
Re-timing for out of peak deliveries		X	
Use of logistics and consolidation centres		X	
Measures to encourage sustainable freight			
Freight by Water			X
Freight by Rail			X
Material procurement measures			
DfMA and off-site manufacture			X
Re-use of material on site	X		
Smart procurement	X		
Other measures			
Collaboration amongst other sites in the area	X		
Implement a staff travel plan	X		

Safety and Environmental Standards and Programmes

5.2. The contractor and subcontractors will be required to adhere to several contractual agreements, in line with TfL's Guidance for Developers. The contractor will be required to comply with TfL's '*Standard for construction logistics: Managing work related road risk (WRRR)'*

FORS and CLOCS

5.3. All vehicle and driver management practices will be required to comply with the FORS and Construction Logistics and Community Safety (CLOCS).

5.4. FORS Silver will need to be confirmed by all subcontracted transport/haulage providers that the contractor intends to use.

5.5. Within 30 days of achieving accreditation, or equivalent within an alternative scheme, the contractor shall inform the authority by e-mailing a report to fors@tfl.gov.uk detailing its compliance with the safety clauses (the safety, licensing and training report).

Collision Reporting

5.6. All collisions and accidents involving the projects' vehicle and drivers will be reported to the Project Manager and relevant parties.

5.7. Within 15 days of the contract variation date, the contractor will provide the authority with a collision report. The contractor shall provide the authority with an updated collision report on a quarterly basis or within 5 days of a written request.

Adherence to Designated Routes

5.8. The route plan will be given to all suppliers when orders are placed to ensure drivers are fully briefed on the required route to take. The supplier will be made aware that these routes are required followed at all times unless agreed or alternative diversions are in place.

Delivery Scheduling

5.9. Due to the scale of the development and the projected number of deliveries, it is proposed that a booking delivery system will be used to manage deliveries of materials, plant and equipment to the site

5.10. All deliveries and collections must be booked 24 hours in advance and will be considered on a first come first served basis. Permitted delivery hours are between 09:30 and 15:30.

5.11. All special deliveries to the site that require licensing (e.g. tower crane and piling rigs) would be delivered outside of standard hours in accordance with the conditions of the licence therefore avoiding any unnecessary closures and minimising disruption to the public highway.

5.12. In the event of vehicles arriving outside of acceptable delivery hours, drivers will be penalised to incentivise adherence to the approved hours of delivery. If no other deliveries are on site, the vehicles will be loaded/unloaded as quickly as possible in a safe manner with all operatives on site assisting to speed up the process.

5.13. In the event of a delivery vehicle arriving whilst a delivery is taking place, the delivery will be sent away from the site and told to reschedule as vehicle stacking is not permitted at or in the vicinity of the site.

Retiming for out of peak deliveries

5.14. Wherever possible the contractor will schedule deliveries to avoid the network peaks.

Use of Logistics and Consolidation Centres

5.15. Due to the scale of the development, it is not considered viable or beneficial to use logistics and consolidation centres.

DfMA and off-site manufacture

5.16. Due to the scale of the development, it is not considered beneficial to manufacture elements of the development off-site.

Re-use of materials on site

5.17. The contractor will be required to investigate opportunities to minimise waste and where waste generation is unavoidable, to maximise the recycling and reuse potential of demolition and construction materials.

Smart Procurement

5.18. The contractor will investigate the use of local suppliers wherever possible to minimise the length of journeys associated with deliveries. Opportunities to source materials and equipment from the same supplier will be sought to reduce vehicle movements.

Collaboration amongst other sites in the area

5.19. Due to the scale of the development, it is not considered beneficial to collaborate with other sites in the area.

Implement a Staff Travel Plan

5.20. This is not required due to the low number of staff on site.

Control of Dust & Nuisance

5.21. The contractor has in place health, safety and Environmental procedures to ensure that the site team is fully aware of all those who may be affected by the work and to put in place control measures to minimise any nuisance or inconvenience.

5.22. Effective planning and management of dust control requires a thorough understanding of the construction programme, the operations and their likely impact due to the changing weather conditions. The control measures that will be introduced reflect the site team's knowledge of the programme and site operations to combat dust.

5.23. The contractor will attempt to work in such a way that emissions to the air of dust and pollutants are minimised and that best practicable means are used to avoid creating a statutory nuisance.

5.24. Measures to be considered for limiting emissions and avoiding nuisance from machines and vehicles on site will include one or more of the following as appropriate and as far as reasonably practicable:

- Ensuring that the engines of all vehicles and plant on site are not left running unnecessarily to prevent exhaust emissions and noise;
- Using low emission vehicles and plant fitted with catalysts, diesel particulate filters or similar devices;
- Requiring that all plant will be well maintained, with routine servicing of plant and vehicles to be completed in accordance with the

manufacturers recommendations and records maintained for the work undertaken;

- Requiring that all project vehicles, including off-road vehicles, will hold current MOT certificates where required due to the age of the vehicle, and that they will comply with exhaust emission regulations for their class;
- Avoiding the use of diesel or petrol powered generators and using mains electricity or battery powered equipment;
- Ensure all vehicles carrying loose or potentially dusty material to or from site are fully sheeted;
- Provide and ensure the use of wheel washing facilities near the site exit wherever there is a potential for carrying dust or mud off the site;
- Ensure that any crushing or grinding machine/tools used on site has an appropriate permit issued and is maintained appropriately;
- All steel beams and columns will be cut on the manufacturer warehouse and assembled onsite;
- To minimise the nuisance of dust generated by the other construction operations the following operational constraints will be implemented:
- Provide a length of paved road before the exit from the site. The current site is now tarmacked.
- Ensure that all dust generating materials transported to and from site are covered by tarpaulins,
- Plant and equipment to be selected to minimise the generation of dust;
- Dust migration to adjoining properties to be restricted by the use of debris netting fixed to all the perimeter fences;
- Store materials as far away as possible from sensitive boundaries, whenever possible;
- Ensure no burning of waste materials takes place on site;
- Ensure an adequate water supply on the site;
- Ensure deposal of run-off water from dust suppression activities;
- Maintain all dust control equipment in good condition and record maintenance activities;
- Keep site fencing, barriers and scaffolding clean using wet methods;
- Ensure regular cleaning of hard standings using wet sweeping methods;
- Install hard surfaced long-term haul routes which are regularly damped down and regularly cleaned;
- Inspect haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;
- Ensure that un-surfaced haul routes and work areas are regularly damped down in dry conditions;

- Routinely clean public roads and access routes using wet sweeping methods;
- Impose and signpost maximum speed limits on un-surfaced haul routes and work areas as necessary;
- Where materials are mixed on site, ensure these works are undertaken in designated areas;
- Store material with the potential to produce dust away from the site boundaries where reasonably practicable;
- Ensure that sand and other aggregates are stored on bunded areas and are not allowed to dry out;
- Minimise the amount of excavated material held on site;
- Sheet, seal or damp down unavoidable stockpiles of excavated material held on site;
- Ensure water suppression is used during demolition operations;
- Use enclosed rubble shuts and conveyors where reasonably practicable or use water to suppress dust emissions from such equipment;
- Sheet or otherwise enclose loaded skips or bins;
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever possible;
- Record any exceptional incidents causing dust episodes on or off the site and the action taken to resolve the situation;
- Screen buildings where dust producing activities are taking place with debris netting screens or sheeting;

5.25. In case of work extending to the summer, and during very dry conditions, consideration would be given to suspension of soil handling operations if wind speeds give rise to dust generation that could cause a nuisance to dust sensitive locations in the vicinity of the site, particularly during dry and windy conditions. Being aware of the impact of dust creating operations is key to good dust management. Having good communications, including on-site inductions, toolbox talks, notices, site briefings to staff etc. are therefore essential.

5.26. The monitoring of operations with even minor potential to cause airborne dust emissions will be regularly undertaken by the Project Manager or his appointed representative. This will predominantly take the form of personal visual assessments. All findings, including the prevailing weather conditions, will be recorded in a log book kept specifically for recording site conditions and events. As a minimum, entries in the log book would be made at least daily.

5.27. The hoarding will be 2.9m high to reduce to minimum amount of dust and work as a high noise barrier from the site.

Noise and Vibration Impact

5.28. The minor nature of the proposals means that no special measures are necessary for the ordinary consequences of project execution. Instead, this plan includes measures to practicably mitigate those ordinary consequences from such activities and as a matter of good practice.

5.29. Noise reduction is to best practicable means:-

- All plants/equipment are to be the most modern available for the work;
- All breakers are muffled;
- Sequence of demolition & construction to provide noise and dust barrier to vulnerable facades.

5.30. The use of radios or other audio equipment anywhere on site by our subcontractors will be strictly prohibited and additionally any noisy or offensive language will not be tolerated and any offenders will be immediately removed from site.

5.31. All plant that operates on the site will be fitted with noise suppression equipment such that noise levels do not develop over 85db 1m beyond the perimeter of the works.

5.32. The type of plant, equipment and construction techniques are to be selected to reduce noise production. As part of the planning process for the works and to ensure that noise is kept to a minimum, the following points will be utilised to reduce the effects of noise on site:

5.33. Vibration will be minimised by best practicable means i.e. crushing instead of breaking method and minimise the use of impact breakers. All reasonable measures will be taken by during demolition works to prevent mud being deposited on the site access road and the main road. Such measures will include, but are not limited to:

- Scrubbing equipment for the duration of the contract, to be used in particular prior to vehicle departure from site;
- Reduction of vehicle movement on site as far as is reasonably practicable;

- Silent jet wash type;
- Design and use of site hoardings and screens, where necessary, to provide acoustic screening at the earliest opportunity;
- Where practicable, doors and gates will not be located opposite occupied noise-sensitive buildings. The mechanisms and procedures for opening and closing doors/gates will minimise noise, as far as reasonably practicable;
- Choice of routes and programming for the transport of construction materials, spoil and personnel to reduce the risk of increased noise and vibration impacts due to the construction of the project;
- The positioning of construction plant and activities to minimise noise at sensitive locations;
- The use of mufflers on pneumatic tools;
- The use of non-reciprocating constructional plant as far as practicable;
- The use, where necessary, of effective sound reducing enclosures;
- Ensure all mechanical equipment have silencers fitted at all times;
- Liaise with the client when noisy activities are to take place;
- Form enclosures for noisy equipment;
- Provision of ear protection to operators and designate ear protection.

Monitoring and Reporting Noise

5.34. Site main contractor and site manager appointed by the developer will monitor the noise and vibration on site and will take appropriate action if the noise/vibrations exceed the acceptable levels. This will be monitored by a digital sound level meter. The levels will be monitored twice a day (morning and afternoon), when agreed levels are likely to be exceeded, upon receipt of a substantial claim, and at the request from the LPA/EHO. Our site manager will be working with this equipment and will monitor and compare the noise levels to ensure they do not exceed. If the levels were to exceed, then where practicable and necessary, the above measures will be taken. Main contractor and developer will hold a neighbours meeting and have let them know the details of who to contact if the vibration and noise levels were to cause disruption.

5.35. All above arrangement will insure minimum noise & vibration impact, furthermore that the adjacent buildings to the construction site are not residential and their main operations are outside the working hours of the construction site; ex: The pub operate mainly at the evening after the working hours at the site, while the main activities in the church (in the other side) will be on Sundays when the construction site will be closed.

6. Estimated vehicle movements

6.1. The number of average vehicle movements has been estimated using the TfL toolkit and are summarised in Tables 3 and 4 below.

Table 3. Number of vehicles in peak phase (By phase)

Construction phase	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site setup and demolition	Q2 2022 - Q3 2022	15	1
Basement excavation and piling	N/A	N/A	N/A
Sub-structure	Q3 2022 - Q4 2022	35	1
Super-structure	Q4 2022 - Q1 2023	30	1
Cladding	Q1 2023 - Q1 2023	5	0
Fit-out, testing and commissioning	Q1 2023 - Q2 2023	35	1
Peak period of construction	Q4 2022 - Q4 2022	65	2

6.2. Table 3, presents the number of vehicles in a peak phase throughout the project. Table 3, suggests that the peak number of monthly trips will be 65, occurring in Q4 of 2022.

Table 4. Number of vehicles in peak phase (including overlaps)

Construction phase	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site setup and demolition	Q2 2022 - Q3 2022	15	1
Basement excavation and piling	N/A	N/A	N/A
Sub-structure	Q3 2022 - Q4 2022	65	2
Super-structure	Q4 2022 - Q1 2023	65	2
Cladding	Q1 2023 - Q1 2023	40	1
Fit-out, testing and commissioning	Q1 2023 - Q2 2023	40	1

6.3. Table 4, presents the number of vehicles in a peak phase throughout the project including overlaps. Table 4, suggests that the peak period for construction related vehicles will be between Q1 of 2023 and Q2 of 2023.

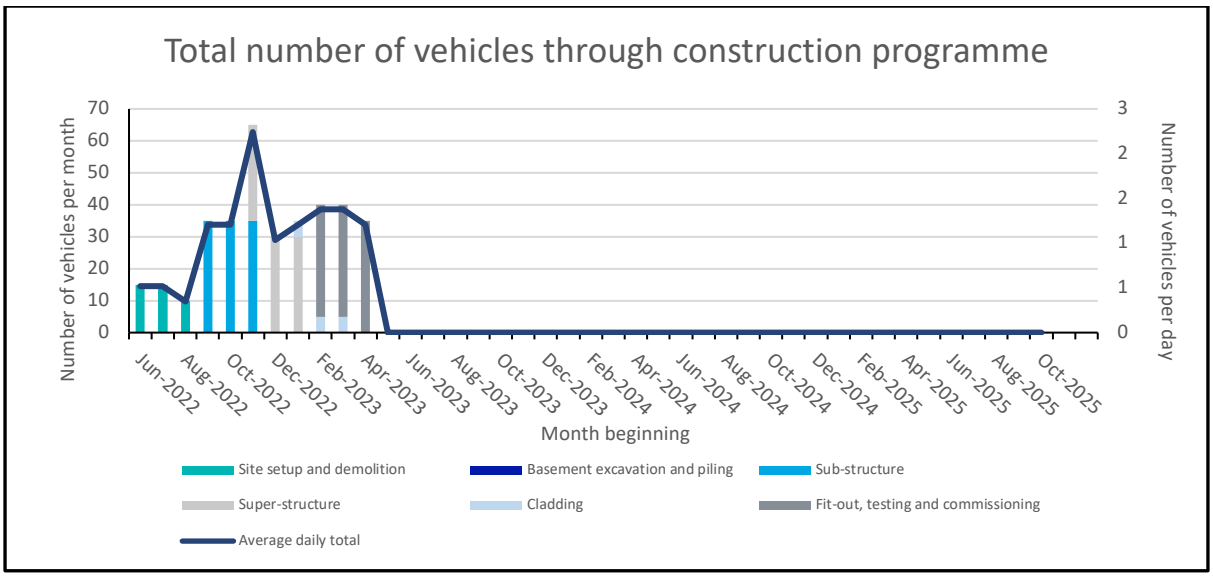

Figure 6. Total number of vehicles through construction programme

6.4. Figure 6, presents the total number of vehicle through the proposed construction programme. The graph demonstrates that peak vehicles per month will occur around November 2022 with approximately 65 vehicles.

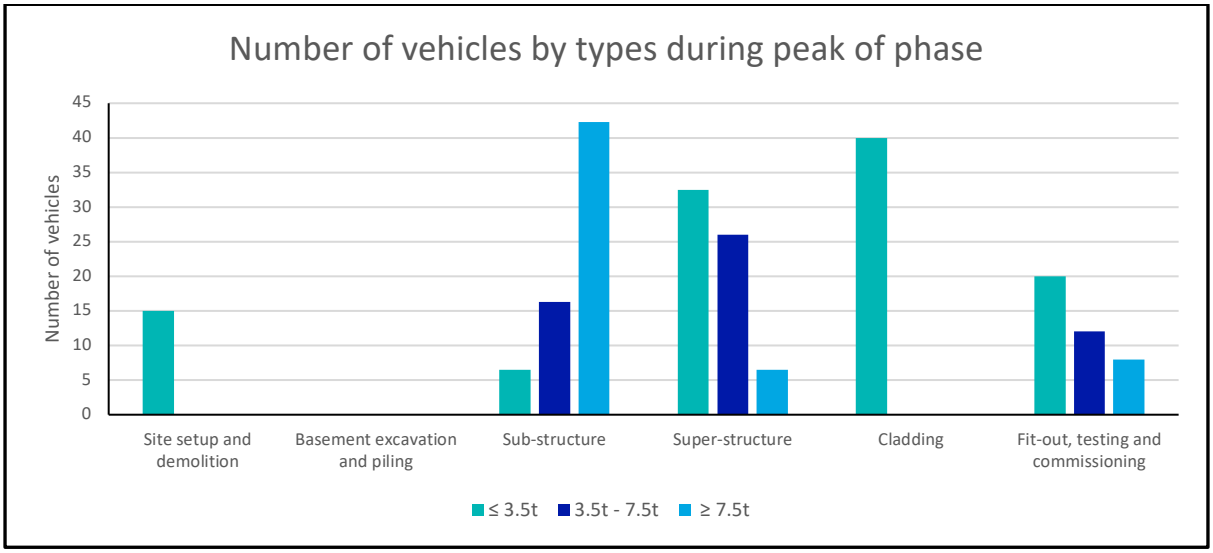

Figure 7. Number of vehicles by type during peak of phase

6.5. Figure 7, presents the number of construction related vehicles by type of vehicle throughout the phases. The types of vehicles are categorised by less than 3.5tn, 3.5tn to 7.5tn and above 7.5tn. Figure 7, demonstrates that larger vehicles will be in use towards the beginning and mid periods of the project, with smaller vehicles required towards the end of the construction.

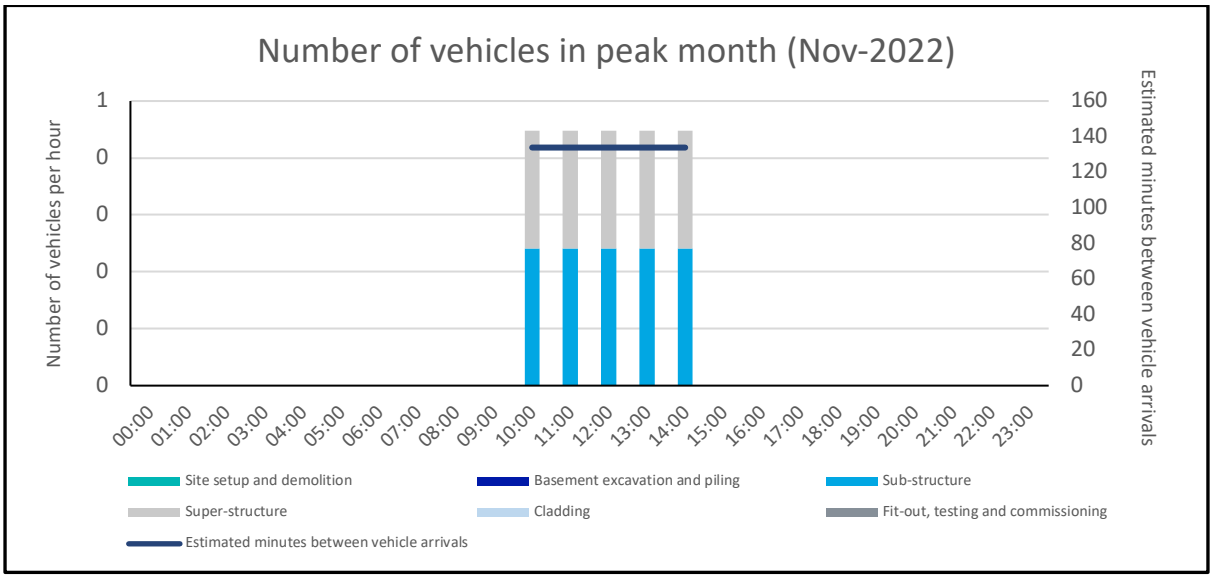

Figure 8. Number of vehicles by types during peak of phase

6.6. Figure 8, presents the number of vehicle by types during peak of phase. The graph also demonstrates the commitment to keep all construction related vehicles and deliveries between the hours of 10:00 and 14:00.

7. Implementing, monitoring and updating

Implementing

7.1. The contractor will be responsible for implementing the CMS and ensuring that it is kept up to date as the construction progresses.

Utility companies

7.2. Each utility company will get the required permit from the local authority at the appropriate time. UKPN or all relevant utility companies will gain all the relevant open notice and work permits required for the excavation and reinstatement to install a new service through the highway if needed.

7.3. The applicant commits to utility co-ordination, which would require effective communication in regard to utility works. All relevant providers would be alerted and given sufficient notice to allow utility companies to collaborate and carry out all works under one road closure.

FORS

7.4. All fleet operators to have Silver accreditation as a minimum within 90 days of being awarded the contract.

7.5. The contractor shall ensure that the fleet operators maintain Silver Accreditation by way of an independent assessment in accordance with the FORS Standard.

Vehicle Safety

7.6. The contractor will ensure that any van it uses to provide services will carry a prominent sign or sign to warn cyclists of dangers of passing the vehicle on the inside.

7.7. Any vehicle more than 3.5t must have side guards; close proximity sensors; rear cyclist warning signs; Fresnel lens or CCTV; driver licence checks and driver safety training.

Driver License Checks

7.8. The contractor will ensure its drivers have a driving license check with the DVLA before starting deliveries.

Driver Training

7.9. The contractor shall ensure its drivers who have not undertaken:

- Approved driver training in the last three years, undertakes approved driver training or substitutes 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.

Collision Reporting

7.10. Within 15 days of the contract variation date, the contractor will provide the authority with a collision report. The contractor shall provide the authority with an updated collision report on a quarterly basis or within 5 days of a written request.

Failure to Comply

7.11. If the contractor fails to comply with WRRR requirements and other undertakings contained in the CMS, 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).

Monitoring

7.12. During the works the contractor will undertake the following monitoring and reviews:

- General review of site activities and compliance with the CMS;
- A ground movement analysis will be completed and a monitoring regime and trigger levels will be agreed with Richmond Council and third parties wall representatives;
- Boundary monitoring for dust;

7.13. Trigger levels will be set at two values. The first trigger will be a warning level while the second trigger will indicate that an unacceptable level has been reached. The first trigger will indicate that works must be adjusted imminently and the second trigger will indicate that work must cease.

7.14. Should a programme for movement, noise, dust or vibration be required for monitoring, this will be undertaken and agreed with Richmond Council prior to commencement of works. Wherever possible, plant and equipment will be switched off when not in use.

7.15. Should the monitoring of waste be necessary, targets can be agreed and set.

Updating the CMS

7.16. Once the CMS has been agreed, the contractor will be required to comply with its contents. If any element of the planned construction is amended during the life of the project that impacts on how the logistics are managed to and from the site, then the contractor will submit a revised version of this CMS for further approval.