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LONDON BOROUGH OF RICHMOND UPON THAMES

NORTH LANE EAST CAR PARK, NORTH LANE,

TEDDINGTON, TW11

OUTLINE CONSTRUCTION MANAGEMENT STATEMENT

May 2021

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Ref: File path P:\ P2379: North Lane East Car Park Outline CMS May 2021

1.0 INTRODUCTION

1.1 Paul Mew Associates is instructed by the London Borough of Richmond upon Thames in relation to the proposed re-development at North Lane East Car Park, North Lane, Teddington, TW11 to prepare an Outline Construction Management Statement (CMS).

CMS OBJECTIVES

1.2 The overall objectives of this CMS are to:

- Encourage construction workers to travel to the site by non-car modes e.g., using either of the six bus routes within 190 metres walking distance of North Lane East Car Park or Teddington rail station;
- Promote smarter operations that reduce the need for construction travel or that reduce or eliminate trips in peak periods;
- Encourage greater use of sustainable freight modes;
- Encourage the use of greener vehicles;
- Manage the on-going development and delivery of the CMS with construction contractors;
- Ensure that pedestrian access to neighbouring properties fronting North Lane is managed safely during the construction works;
- Ensure that vehicle traffic flow is maintained on North Lane during the collection/delivery of waste/materials;
- Communication of site delivery and servicing facilities to workers and suppliers; and
- Encourage the most efficient use of construction freight vehicles.

1.3 The application site's location is presented on a map in Figure 1 of this report; the site's boundary is displayed on an Ordnance Survey (OS) map base in Appendix A.

1.4 The local planning and highway authority for the site is the London Borough of Richmond upon Thames (LBRuT).

1.5 The site comprises of North Lane East car park, which is accessed from North Lane and situated within a short walking distance of Teddington town centre. A parade of local shops, amenities and services are located along the A313 Broad Street, which is connected to the northern end of North Lane.

1.6 A new CPZ 'Area 5' is proposed on North Lane and the surrounding streets. Further consultation regarding the operational hours and design of the new CPZ is expected to take place in May 2021.

Existing Site

1.7 North Lane East car park/depot currently comprises of a vacant depot and a car park, which is currently in use.

Proposed Development

1.8 The proposals seek the construction of a new community centre (Use Class: D1, 533sqm GIA, 587sqm GEA) with on-site parking at North Lane East car park/depot. The proposed floor plans are presented in Appendix B of this report.

1.9 It's also noted the proposals of a residential development of 16 affordable flats replacing Elleray Hall, form part of the same planning submission. However, the construction works will be carried out in two phases with phase 1 comprising of construction of the new community centre and phase 2 proposing that the residential development will be built in place of the demolished Elleray Hall. As such, separate CMS documents will be provided for each development to ensure that separate pre-commencement conditions are implemented for each site.

1.10 This CMS has been prepared to accompany a planning application at North Lane East car park, providing details of the construction logistics.

Construction Hours

1.11 To avoid adding to the local congestion HGV access and egress from the site will take place between 9:30am and 4:30pm. Hours in which site personnel will arrive and depart will be Monday to Friday 8am to 6pm and Saturday 8am to 1pm. No demolition, excavation or construction works will take place outside of these times including Sundays and Bank Holidays.

Site Contact Details

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2.0 SITE & POLICY CONTEXT, CONSIDERATIONS & CHALLENGES

Policy Context

2.1 At the national level the National Planning Policy Framework June 2019 (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.

2.2 At the regional level, the Mayor's newly adopted London Plan (March 2021) is a material planning document which sets out the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London.

2.3 This CMS will be produced in line with the London Freight Plan (2019).

2.4 This CMS accords with Policy T7 of the new London Plan, which sets out the Mayor's adopted requirements for deliveries, servicing and construction logistics.

2.5 Policy T2 of the new London Plan sets out the Mayor's strategy for 'healthy streets' and is an important new feature. This CMS will demonstrate the healthy streets approach through the reduction in vehicle deliveries, noise pollution, emissions and improvement in road safety.

2.6 At the local level, the Richmond Council's Local Validation Checklist for all applications (April 2021) provides information regarding Construction Management Statements. The Validation Checklist has been prepared in accordance with Town & Country Planning (Development Management Procedure) (England) Order 2015 and the Town and Country Planning Act 1990. The Construction Management Checklist for the Borough is extracted below for ease of reference;

Construction Management Statement This may include: 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;	• If substantial demolition/excavation works proposed • Any basement and subterranean developments • Sites in confined locations or near sensitive receptors. • All major development that involves external works (in addition to that specified in bullet points 1-3 above)	LP 10 LP 45 TfL Construction Logistics Plans guidance TfL Delivery & Servicing plans GLA Control of Dust and Emissions during Construction and Demolition SPG Good Practice Guide on Basement Development
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. 15. See also TfL guidance on Construction Logistics Plans.		

2.7 This report has also been prepared in line with Traffic Management Act (2004), which is also stated in TfL's Construction Logistics Plan (also known as CMSs) guidance as being of material importance for reference in CMS's.

2.8 The Mayor's Transport Strategy (MTS) (2018) promotes the use of CMSs 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.

2.9 This report has been prepared with recognition of Policy 3 of the MTS 'Vision Zero', which sets out the goal to eliminate all serious injuries and deaths by road collisions by 2041.

2.10 FORS is a unique, industry-led, membership scheme to help van and lorry operators become safer, more efficient and more environmentally friendly. Its relevance to the CMS is via its mention in the Mayor's Transport Strategy and requirements will be relayed to all operators engaged during the development.

2.11 CLOCS is a national industry standard. It defines the primary requirements placed upon the key stakeholders associated with a construction project. The CLOCS Standard places responsibilities and duties on the regulator, the client, the principal contractor controlling the construction Site and the supply chain including the operator of any vehicles servicing that project.

2.12 The CLOCS standard was devised in collaboration with construction clients, logistic operators and industry associations. It aims to ensure that construction companies follow safe practices in the management of their operations, vehicles, drivers and construction sites. These duties relate to community considerations likely to be impacted by the project. They require the adoption of a CMS/CLP and planned measures to minimise impact and eliminate harm to the community.

Context Plans & Maps

2.13 A regional plan with an approximate scale of smaller than 1:15,000 in accordance with TfL's CLP guidance document showing: the location of the work site in the context of main roads, water ways, railways and other key infrastructure and freight delivery infrastructure has been prepared and is presented at Figure 1 of this report.

2.14 A local context plan with an approximate scale of between 1:2,000 and 1:3,000 in accordance with TfL's CLP guidance document showing: the location of the site in the context of surrounding roads, footways, public transport and other community considerations has been prepared and is presented at Figure 2 of this report.

Public Transport

2.15 A total of six different bus services with high hourly service frequencies can be accessed from stops in close proximity to the site. The closest bus stops to the site are situated on Broad Street, within a 190 metres walking distance of North Lane East car park. These stops serve access to bus routes 481, X26, 281, 285, 33 and R68.

2.16 Teddington rail station is located within a 500 metres walking distance of the site on Victoria Road and is managed by South Western Railway. Services from Teddington station include trains to London Waterloo (via Kingston or Richmond) and Shepperton, which stops at popular destinations such as Clapham Junction, Vauxhall, Wimbledon and Barnes.

2.17 Refer to Figure 2 for the locations of the nearby bus stops and stations.

Walking & Cycling

2.18 The pedestrian footways surrounding both plots are sufficiently wide, well-lit, and in a moderate state of repair.

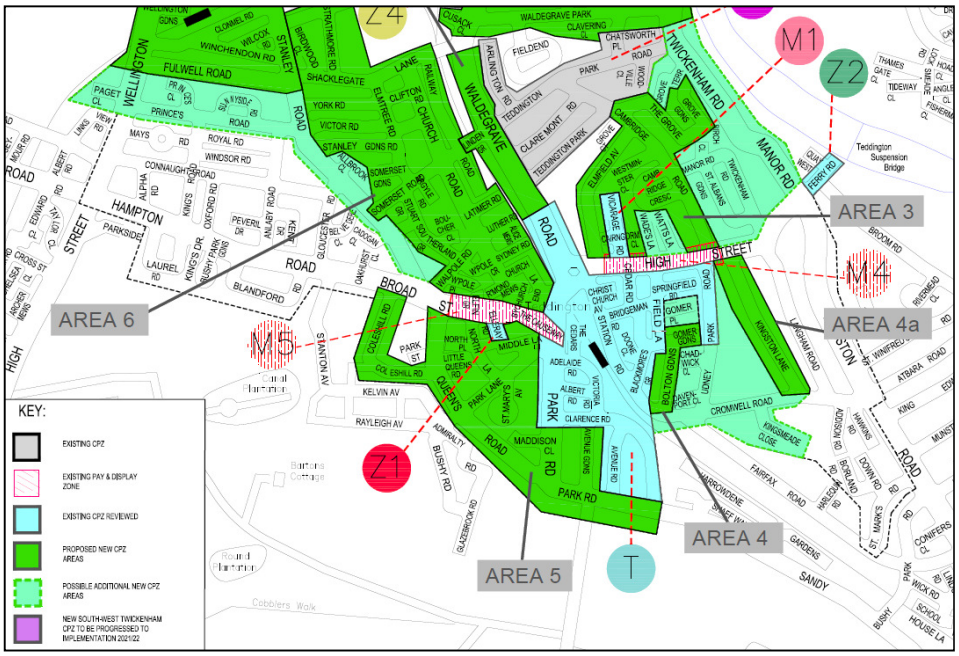
2.19 Pedestrian access to North Lane East car park/depot is currently served from the western footway of North Lane.

2.20 From reviewing TfL's cycle route map (https://tfl.gov.uk/maps/cycle), the site is not located within close proximity of any Cycle Superhighway or Quietway routes.

Highways

2.21 North Lane is a two-way road oriented in a northerly to southerly direction, connecting with the A313 Broad Street to the north at a priority give-way junction. Double yellow lines are marked on both sides of North Lane along the extent of the car park/depot. North Lane is subject to a 30mph speed limit.

2.22 As previously noted, a new CPZ 'Area 5' is proposed on North Lane and the surrounding streets. Further consultation regarding the operational hours and design of the new CPZ is expected to take place in May 2021. The proposed CPZ map has been extracted below for ease of reference:



2.23 Limited on-site parking will be made available for contractors at the proposed community centre.

Community Consideration

2.24 The local community and other land uses have been carefully considered when preparing this document. Figure 2 identifies community facilities situated within the local area. The measures outlined herein aim to mitigate any impacts as much as possible. The site manager will continually liaise with any community considerations.

2.25 To avoid adding to the local congestion, all HGV access and egress from the site will take place between 9:30am and 4:30pm.

Educational Uses

2.26 The nearest educational use to the site is Turing House School on the corner plot fronting the B358 Queen's Road and the A313 Hampton Road. Given that there are waiting restrictions on Queen's Road and Hampton Road, construction vehicles will not conflict with pupil drop-off or pick-up at the school.

Places of Worship

2.27 St Peter & St Paul's Church, and Teddington Methodist Church are both situated near the site as shown in Figure 2. The hours construction vehicles will arrive or depart the site have been scheduled in order to avoid religious services/events where possible.

Local Shops and Community Facilities

2.28 A number of local shops are situated along both sides of the A313 Broad Street, within close proximity of the site. A police station, library, hospital and surgery are also situated within close proximity of the site as shown in Figure 2. The hours construction vehicles will arrive or depart the site have been scheduled in order to avoid the peak hour periods in Teddington.

Community Liaison

2.29 The appointed contractor will be signed up to the Considerate Constructors Scheme and will follow the Code of Considerate Practice. Caring for the community and community considerations is a key part of the Considerate Constructors Scheme and therefore the local community adjoining the development site will be kept well informed over the course of the demolition and construction programme.

2.30 A Community Liaison Officer will be appointed to mitigate and resolve any issues and difficulties in the local community. A key aspect of the successful management of this project will be establishing and maintaining a good relationship with all surrounding neighbours. This CMS has prepared a strategy for preventing potential issues, however any difficulties encountered during construction will be reported/recorded in a full log and resolved through the use of a 24 hour-manned telephone line. Newsletters and bi-monthly community gatherings will deal with issues which may arise during the programme.

3.0 CONSTRUCTION PROGRAMME & METHODOLOGY

3.1 This CMS gives the planning authority details of the logistics activity during the construction project. It details excavation and construction techniques and how construction vehicles will access and exit the site.

3.2 To avoid adding to the local congestion HGV access and egress from the site will take place between 9:30am and 4:30pm. Hours in which site personnel will arrive and depart will be Monday to Friday 8am to 6pm and Saturday 8am to 1pm. No demolition, excavation or construction works will take place outside of these times including Sundays and Bank Holidays.

3.3 Given the early stages of the project a construction contractor has not been formally appointed, therefore a significant amount of the detailed information regarding the demolition, excavation and construction phases of the work programme are not currently available. It is expected that a detailed CMS will be secured as a condition of planning consent.

3.4 The anticipated timescale for the duration of the construction works is approximately 12 months. An estimation of the work programme has been extracted below for ease of reference:

Table 1. Work Programme.

Construction Stage:	Approx. Duration	Start	End
Demolition of North Lane east car park and construction of new community centre	48 weeks	14/02/2022	03/02/2023

3.5 It's proposed that the existing crossover to North Lane east car park will be re-located further to the north following construction to provide access to the parking area for the new community centre. These proposed highways works are expected to secured under a S278 agreement.

3.6 For ease of reference the programme relating to site set up, demolition, excavation and construction are set out in the following section of this report.

Site set-up

- Hoarding will be implemented along the boundary of the site where needed. Access gates located on the hoarding, will provide access for vehicles/pedestrians and security to the site;
- Any asset protection measures to be agreed with LBRuT. Hoarding and scaffolding will be designed and installed in accordance with the requirements of the local authority;
- Figure 3 illustrates the site set-up plan. Construction waste and spoil will be stored near the boundary of the site temporarily for collection;
- Wheel wash facilities for construction vehicles will be provided for the site as shown within the CMS plan within Appendix C of this report;
- Contractors will make safe all electrics, water and gas supplies; and
- Provide on-site welfare facilities within the site.

Demolition and Excavation

- It's anticipated that demolition will be carried out using manual and mechanical methods whilst excavation will be undertaken with mini excavators;
- Demolition and construction waste will be controlled by a Waste & Recycling Action Plan, with site segregation of waste and maximum off-site recycling;
- All demolition waste that cannot be reused and spoil will be transferred into a tipper truck waiting on-site in the existing areas of hardstanding;
- Noise and dust will be controlled by the Considerate Contractors Code. Noisy work will be restricted as much as possible and will be conducted in areas within the construction site that will cause as little disturbance as possible to neighbours;
- No waste materials will be burnt on site;
- Spoil will be securely covered at all time;
- The appointed lead contractor will ensure that the adjoining highway is clean at all times;

Construction

- For the proposed community centre, a combination of timber joists with steel framing will form the amenity block floor structures. The main hall will comprise of a series of Glulam framings with infill timber joists forming the roof structure. For both blocks' cavity masonry load bearing curtain walls are proposed;
- Concrete will be supplied to the site via a ready-mix concrete lorry. Concrete will then be transported from the vehicle to required parts of the site with the aid of a concrete pump;
- The appointed lead contractor will ensure that the adjoining highway is clean at all times;
- Precast planks, manufactured trusses and glazing panels will be delivered to the site on a hoisted truck;
- General materials (timber, bricks etc.) will be brought to the site by either panel bodied vehicles, small articulated vehicles or flat-bed lorries; and
- All delivery and construction related vehicles will be pre-scheduled with reference to the site foreman.

Substructure

3.7 During the main demolition, excavation and ground works period, spoil and other waste materials will be generated and would need to be removed from the site.

3.8 It is proposed that all demolition waste that is not to be recycled nor reused spoil will be transferred into a tipper truck, waiting on-site.

3.9 In addition to the tipper trucks, concrete shall be delivered using a ready-mix concrete lorry, as previously outlined. The ready-mix concrete mixer will park on-site.

3.10 It is estimated that 115 m^3 of concrete will be required for the proposed community centre during the foundation and structural works.

3.11 A trained banksman and two traffic marshals will be employed to ensure that all vehicle and pedestrian/cyclist activity in the vicinity of the site is safe and satisfactory. Before a vehicle accesses either plot it shall call ahead, letting the banksmen and traffic marshals know of the time of arrival.

3.12 Temporary pedestrian barriers in accordance with Chapter 8 of Traffic Signs Regulations and General Directions (TSRGD) will be implemented on the footway either side of the site's access when vehicles are entering/exiting, in order to maintain safety for pedestrians during deliveries/collections. The pedestrian barriers will be removed immediately after each construction vehicle has left the site.

3.13 The driver will always be present at any vehicle called to the site, therefore if there are any instances where an emergency vehicle or other type of vehicle needs to access the site and cannot for whatever reason, the driver of the vehicle would be on hand to immediately and efficiently get out of the way.

Superstructure

3.14 During the superstructure phase, general materials will be brought to the site by either a panel bodied vehicle, small articulated vehicle or flat-bed lorry, which will pull up on site.

3.15 It is anticipated that building materials will be lifted directly into required areas of the site with the assistance of a mechanical hoist. The exact delivery method will be established within the Detailed CMS.

3.16 As previously outlined, banksman and two traffic marshals will be employed to ensure that all vehicle and pedestrian/cyclist activity in the vicinity of the site is safe and satisfactory. Deliveries will be executed in the same manner as detailed in the substructure section.

Fit Out, Testing & Commissioning

3.17 Several additional sub-contractors will need access to the site during fit out. Contractors will arrive in smaller vehicles to service the site.

3.18 Where sub-contractors are not required to transport building tools/materials to the site, they will be encouraged to use public transport or walk/cycle.

4.0 VEHICLE ROUTING & SITE ACCESS

4.1 This section assesses how construction traffic will be managed in terms of routing and access.

Vehicle Routing

4.2 All demolition and construction related vehicles will be carefully routed so as to minimise disruption on the local and the wider highway network adjoining the site. The routing plan is specified to all contractors and sub-contractors' companies who will be involved in sending vehicles to the site.

4.3 Vehicles will approach North Lane east car park/depot from the east or west on the A313 Broad Street then turn left or right onto North Lane and continue southbound before pulling into the site in reverse gear. Vehicles will exit North Lane east car park/depot in reverse gear and continue northbound along North Lane before turning right or left onto the A313 Broad Street and continuing with their journey.

4.4 A Local scale demolition/construction vehicle routing plan for the proposed development is presented in Figure 4.

4.5 Given that a lead contractor has not been appointed yet, vehicle routing plans cannot feasibly be provided on a regional scale. As such, this will be addressed in the Detailed CMS.

Site Access

4.6 Figure 5 of this report presents swept-path analysis of a four-axle tipper truck (18 tonne payload) entering the site in forward and reverse gear and stop within the loading area. Once the tipper truck is loaded, it's then able to leave the site in reverse and forward gear, continuing northbound along Elleray. It's expected that the dwelling time for these vehicles will be 20-30 minutes whilst spoil is being loaded.

4.7 Figure 6 of this report presents swept-path analysis of a small articulated vehicle entering the site in forward and reverse gear and stop within the loading area. Once the vehicle has been unloaded, it's then able to leave the site in forward gear, continuing northbound along North Lane. It's expected that the dwelling time for these vehicles will be 30-40 minutes whilst the vehicle is being unloaded.

4.8 The positions of two traffic marshals, a banksman and temporary pedestrian barriers are also shown indicatively on Figures 5 and 6.

4.9 Considering that a four-axle tipper truck can access the site (10.2m in length) from North Lane, it can be reasonably expected that $6m^3$ concrete mixers (8.3m in length) can do so as well.

4.10 During the fit-out, testing and commissioning stage contractors will arrive at the site in small transit vans, hence there will be sufficient manoeuvring space for vehicles to access the site.

4.11 In order to avoid conflict with refuse/recycling collections on North Lane, the appointed contractor will liaise with Richmond Council to ensure that construction deliveries/collections don't conflict with refuse/recycling collections.

4.12 As demonstrated within the tracking drawings, all vehicles can access the site in a safe and convenient manner.

4.13 The proposed HGV access route and swept path assessment is therefore considered to be entirely practical and safe in line with the Mayor's Vision Zero strategy.

5.0 STRATEGIES TO REDUCE IMPACTS

5.1 The following Planned Measures have been identified to help the appointed lead contractor achieve the goals of the CMS and better manage the challenges identified in Section 2.

Table 2. Impact Checklist

HIGH IMPACT SITE PLANNED MEASURES CHECKLIST	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 PEAK DELIVERIES	X		
RE-TIMING FOR OUT OF HOURS DELIVERIES			X
USE OF HOLDING AREAS AND VEHICLE CALL OFF AREAS			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		

5.2 In terms of the committed measures:

- Safety and environmental standards and programmes – these will be adhered to;
- Adherence to designated routes – the contractor will be fully committed to ensuring that all HGVs that access the site stick to the committed routes as outlined herein. All suppliers and sub-contractors will be sent a copy of the agreed HGV route plan;
- Delivery scheduling – the contractor will devise and work to a delivery scheduling programme to ensure that no more than one HGV is attending the site at any one time;

- Re-timing for out of peak deliveries – HGVs will only be programmed to access the site between 9:30am and 4:30pm on weekdays so as to avoid the peak periods, the contractor will be fully aware and will abide by this procedure;
- DFMA and off-site manufacture – the contractor is committed to exploring and where possible implementing design for manufacture and assembly (DFMA) techniques which can improve productivity and decrease both on-site construction programmes as well as costs;
- Re-use of material on-site – the developer is committed to limiting the amount of spoil and waste which will be taken away from the site by re-using waste and spoil from the demolition works wherever viable;
- Smart procurement - Smart procurement in construction helps to reduce on-site costs and minimise waste, while achieving a 'right first time' delivery. By simplifying processes the contractor will reduce the risk of errors and will streamline its decision making process which will lead to productivity and efficiency benefits in the procurement and construction phases;
- Collaboration amongst other sites in the area – collaboration will take place with site managers of other construction sites in the area wherever possible;
- Implement a staff travel plan – the appointed lead contractor will implement a staff travel plan at this construction site;

5.3 The contractor's site team will have direct responsibility for fostering good community relations with all neighbouring residents. A single point of contact will be established for all liaisons with the general public.

5.4 The contractor will initiate early communications to establish a good rapport with the community which will help reduce problems that may arise during the demolition and construction process. Part of the process will be the inclusion of regular newsletters keeping neighbours up to date with what has and will happen on site. Information boards will be displayed on the site hoarding which will highlight the key personnel on site including their contact details.

Vehicle Call-Up Procedure

5.5 It is proposed that the following vehicle call-up procedures will be in place at the development;

- Deliveries will be given set times to arrive.

- Delivery instructions will be sent to all suppliers and contractors.
- Trained site staff will assist when delivery vehicles are visiting the site.
- Traffic Marshals and Banksmen will ensure the safe passage of pedestrians and vehicular traffic in the street when vehicles are accessing the site.
- The site telephone number will be given to Suppliers, whom must confirm site arrival time at least 20 minutes prior to arrival and only to approach site once confirmation that site is clear is received.

5.6 The site manager will have responsibility for supervising, controlling and monitoring vehicle movements to / from the site. A web based 'freight journey planner' tool will be used by the contractor and sub-contractors to ensure that the route vehicles take to and from the site is as efficient as possible, while avoiding any unsuitable/restricted roads.

5.7 Coordination of transport / deliveries and arrivals will be supervised by the site manager to ensure that the loading/collection area is clear of vehicles and materials before any subsequent lorry arrives.

Noise and Vibration

5.8 Measures will be applied to control the emission of noise, vibration and dust, including working hours as set out herein. Demolition and construction activities will be carried out in such a way that vibrations arising will not cause any significant damage to adjacent structures. The contractor will comply with BS 5228, Part 2, 2014 (Code of Practice for noise and vibration control on Construction and Open Sites, Part 2: Vibration), and comply with BS 6472: 2008 (Evaluation of Human Exposure to Vibration in Buildings).

5.9 Noise and vibrations will remain at levels which do not exceed those which may cause structural damage to adjoining buildings.

5.10 All noisy work will be restricted as much as possible and will be conducted in areas within the construction site that will cause as little disturbance as possible to neighbours, users of nearby buildings and passers-by.

5.11 Operatives will be informed that as a general rule, if they need to raise their voice when standing two metres away from a noise source, it is too loud and hearing protection must be worn. Contractors will be encouraged to purchase equipment that is advanced in technology and equipped with vibration absorbing features. To ensure that operatives are aware of the effects of hand arm vibration they will be provided with adequate information on the hazard and controls and given information in order to reduce the risk. Should it be deemed necessary, contractors are to undertake noise and hand arm vibration monitoring and, dependent on the results, further control measures will be required.

5.12 The appointed lead contractor will carry out noise level checks throughout the work to maintain the correct noise levels associated with the development. This will lower the impact of noise. The contractor will carry out a full pre-qualification check on all sub-contractors along with statements on their environmental policies to ensure compliance on maintaining noise levels and ensure mitigation measures are met.

5.13 All reasonable steps will be taken to minimise any disruption to adjacent occupiers by noisy and vibration causing activities on site. Where possible the contractors will employ construction methods to avoid the amount of noise generated in the first instance. The following measures will be implemented to reduce noise levels on the site:

- Where possible any noisy stationary equipment will be located away from sensitive areas;
- Drop heights of materials will also be kept to a minimum to avoid unnecessary extra noise;
- Where possible the contractor will use quiet or low noise equipment;
- Electrically operated plant will be used where practical;
- Operatives working in noisy areas will also be monitored to ensure they are wearing the necessary protective equipment and that they are not exceeding their permitted exposure periods;
- No radios or other audio equipment will be allowed on site;

- Efficient vehicle logistics ensure that vehicles arrive promptly, are off-loaded quickly and depart quickly meaning that there is less time when noise is generated and it will also prevent traffic build up noise being generated; and
- Where practical all vehicles will switch off engines whilst in attendance.

Dust and Air Quality

5.14 The contractor will comply with the latest version of the Mayor of London's Planning Guidance on "The Control of Dust and Emissions during Construction and Demolition" and will work in such a way that emissions to the air of dust and pollutants are minimised and that measures are in place to avoid creating a statutory nuisance The emission of dust from the site resulting from demolition and construction works will be managed with the following measures;

- No waste materials will be burnt on site;
- Any dust creating activities will be conducted away from neighbouring properties and sensitive areas;
- Any demolition activities will use water as a dust suppressant if necessary;
- As and when necessary the adjoining highway will be swept and washed to keep clean;
- Effective traffic management and well organised vehicle logistics will be applied resulting in less dust and mud being produced;
- Wherever practical all vehicles will switch off engines whilst in attendance, no idling of vehicle engines will be permitted;
- Any open piles of spoil/waste will be securely covered;
- The contractor's site foremen will visually assess any dust emission on site and take further action to mitigate this if necessary.

Other Material Considerations

5.15 In order to ensure the effective and safe management of demolition and construction related vehicles throughout the build programme, the contractor will hire a suitable number of trained and designated banksmen and traffic marshals. Banksmen and traffic marshals will be LANTRA or similarly qualified to carry out the traffic management procedures required during the works.

5.16 The contractor and any sub-contractors or other suppliers sending vehicles to and from the site will be as a minimum FORS Silver members of the Fleet Operator Recognition Scheme (FORS).

5.17 Main contractors to the development must show they and their suppliers are committed to safer and more efficient ways or working on site. As a minimum all operators' vehicles over 3.5 tonnes accessing the site throughout the demolition and construction programme must be FORS Silver accredited.

5.18 In addition to the above, all contractors and sub-contractors operating large vehicles over 3.5 tonnes must meet the following conditions:

- All drivers must have undertaken cycle awareness training such as the Safe Urban Driver module through FORS or similar.
- All vehicles associated with the construction of the development must:
  i. Have side guards fitted, unless it can be demonstrated to the reasonable satisfaction of the employer, that the lorry will not perform the function, for which it was built, if side guards are fitted.
  ii. Have a close proximity warning system fitted comprising of a front mounted, rear facing CCTV camera (or Fresnel Lens where this provides reliable alternative), a Close Proximity Sensor, an in-cab warning device (visual or audible) and an external warning device to make the road user in close proximity aware of the driver's planned manoeuvre.
  iii. Have a Class VI Mirror
  iv. Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

5.19 All subcontractors and suppliers delivering materials to the sites will also follow the conditions outlined in the Standards for Construction Logistics and Cyclist Safety (CLOCS) report.

5.20 Online delivery booking and tracking systems are the best way to record vehicle movements to and around a site. They are also a good way of controlling deliveries.

5.21 As is stipulated in TfL's Construction Logistics Plan guidance document, 'the minimum requirement is for the developer to use a delivery booking management system. The contractor must also give the planning authority access to the data for monitoring and statistical analysis purposes.

6.0 ESTIMATED VEHICLE TRIPS

6.1 This section assesses how construction traffic will be managed in terms of volume of traffic and type of vehicles.

Vehicle Movement and Scheduling

6.2 The anticipated timescale for the duration of the construction works is approximately 12 months. An estimation of the work programme has been extracted below for ease of reference:

Table 1. Work Programme.

Construction Stage:	Approx. Duration	Start	End
Demolition of North Lane east car park and construction of new community centre	48 weeks	14/02/2022	03/02/2023

6.3 Given the early stages of the project a construction contractor has not been formally appointed, therefore a detailed work programme and vehicle trip estimations are not available at this stage. It is expected that a detailed CMS will be secured as a condition of planning consent.

Volume & Type of Vehicles

6.4 The largest vehicle accessing the site is expected to be the small articulated vehicle, which measures 10.7 metres in length and 2.4 metres in width.

6.5 Provided that a basement level will not be built for the development, it's expected that a low volume of spoil and waste will be generated by the demolition and excavation works.

6.6 As previously outlined, 115m^3 of concrete will be required during foundation and structural works. In turn, this will require only 20 trips to and from the site by a 6m^3 ready-mix concrete lorry during the sub-structural works.

7.0 MONITORING, COMPLIANCE, REPORTING & REVIEW

7.1 This CMS has been prepared for submission to the London Borough of Richmond upon Thames for submission with a planning application.

7.2 The site address is North Lane East car park, North Lane, Teddington, TW11.

7.3 The development proposals seek the construction of a new community centre (Use Class: D1, 533sqm GIA, 587sqm GEA) with on-site parking at North Lane East car park/depot.

7.4 The appointed lead contractor will take responsibility for the day-to-day management of the CMS and is the first point of contact for site issues. They will help the development run smoothly by making sure each construction phase complies with the CMS. It is also the lead contractor's job to oversee the effectiveness of the CMS and prepare regular updates to the planning authority when asked.

7.5 It will be the duty of the lead contractor to respond to any questions or queries about the development and put in place any mitigation measures needed to resolve traffic issues connected with the construction work. An example of the duties a lead contractor may need to carry out is illustrated as follows:

- Remind all contractors and subcontractors about designated routes to and from the site;
- Check vehicles arriving at site to make sure they meet the developer's safety requirements;
- Manage the delivery booking and scheduling tool that records deliveries.

7.6 A 'Contractor's handbook' will be prepared prior to any works commencing on the site. Copies of the handbook will be sent to all sub-contractors and key personnel on the site.

7.7 A well-planned handbook will support supervisors and managers in making sure the terms and conditions of the CMS are met by everyone working at the site. The handbook should include the following information:

- Communicate the aims and objectives common to all CMSs;
- Clearly explain all site-specific CMS agreements and methods of working;
- Sets out the main contractor's general practices and standards;
- A site map;
- Hours of site opening;
- Health and safety information;
- Main contact details.

7.8 The planning authority will be responsible for monitoring the CMS, while the developer and their contractor will have responsibility for collecting data according to a schedule agreed between them and the planning authority. LBRuT will nominate a person to be the contact for ongoing monitoring.

7.9 If any changes to the CMS are required at any stage they must be outlined within this report and agreed with the local planning authority.

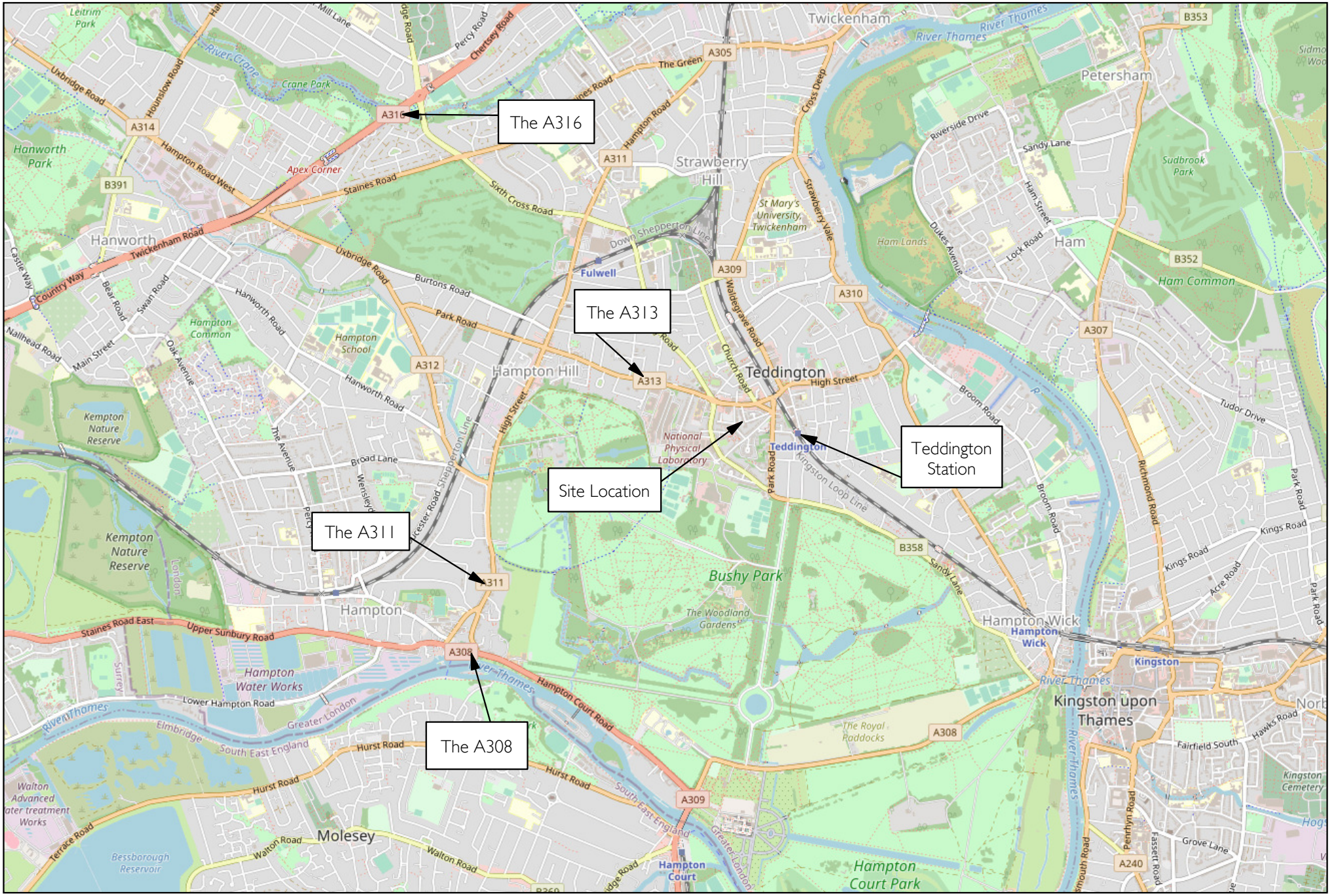
Management

7.10 The CMS will be managed through the lead contractor. Contact details of people who have assisted in the preparation of this CMS are also included:

CMS Author

Jack Massey BA (Hons)
Consultant (Transport)
Paul Mew Associates
0208 780 0426
Jack.massey@pma-traffic.co.uk

FIGURES



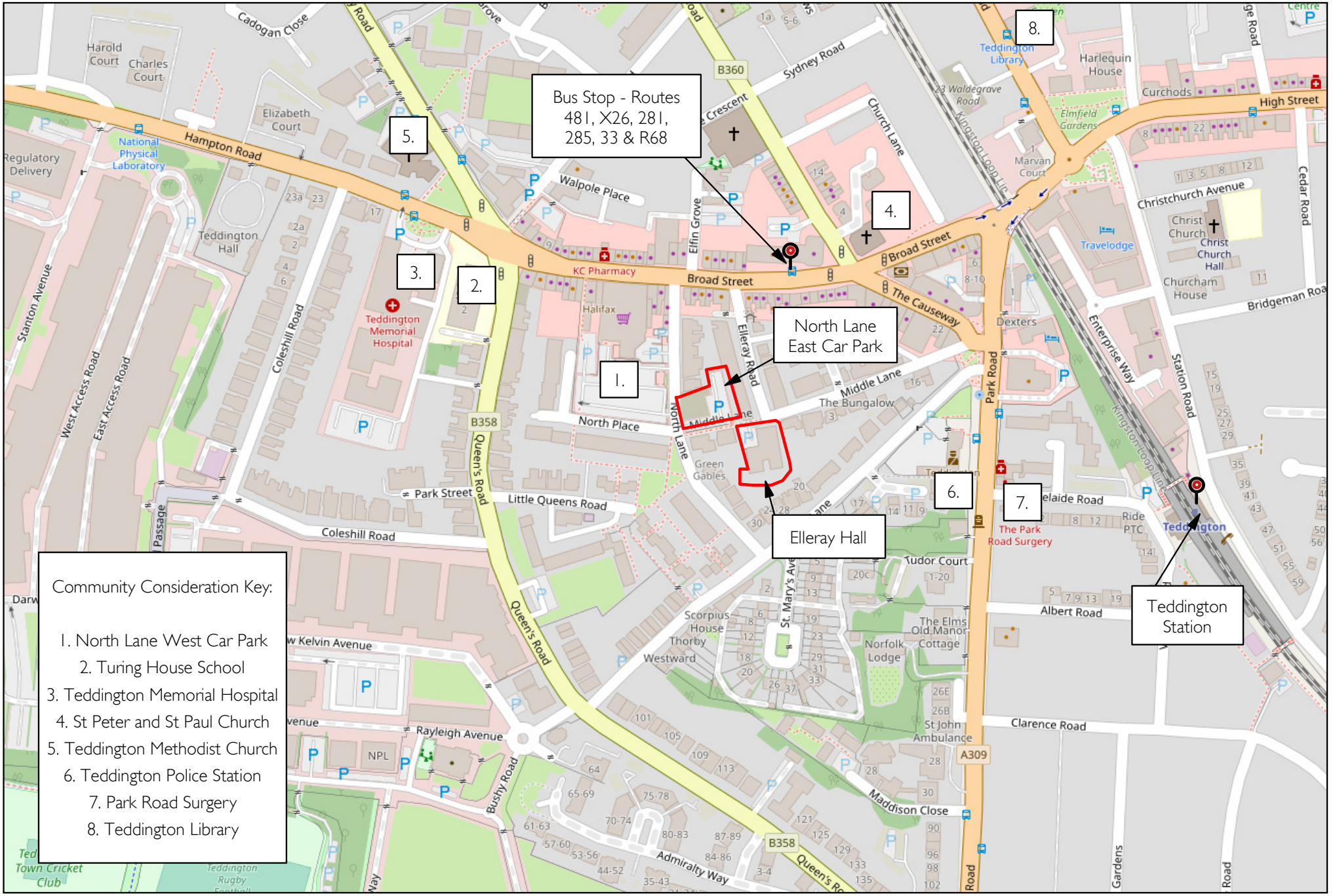
Date: 17 May 2021
Scale: NTS
Source: OpenStreetMap
Drawing No: P2461/CMS/01

P2379: North Lane East Car Park/Depot, North Lane, Teddington, TW11

Figure 1.

Regional Plan

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS

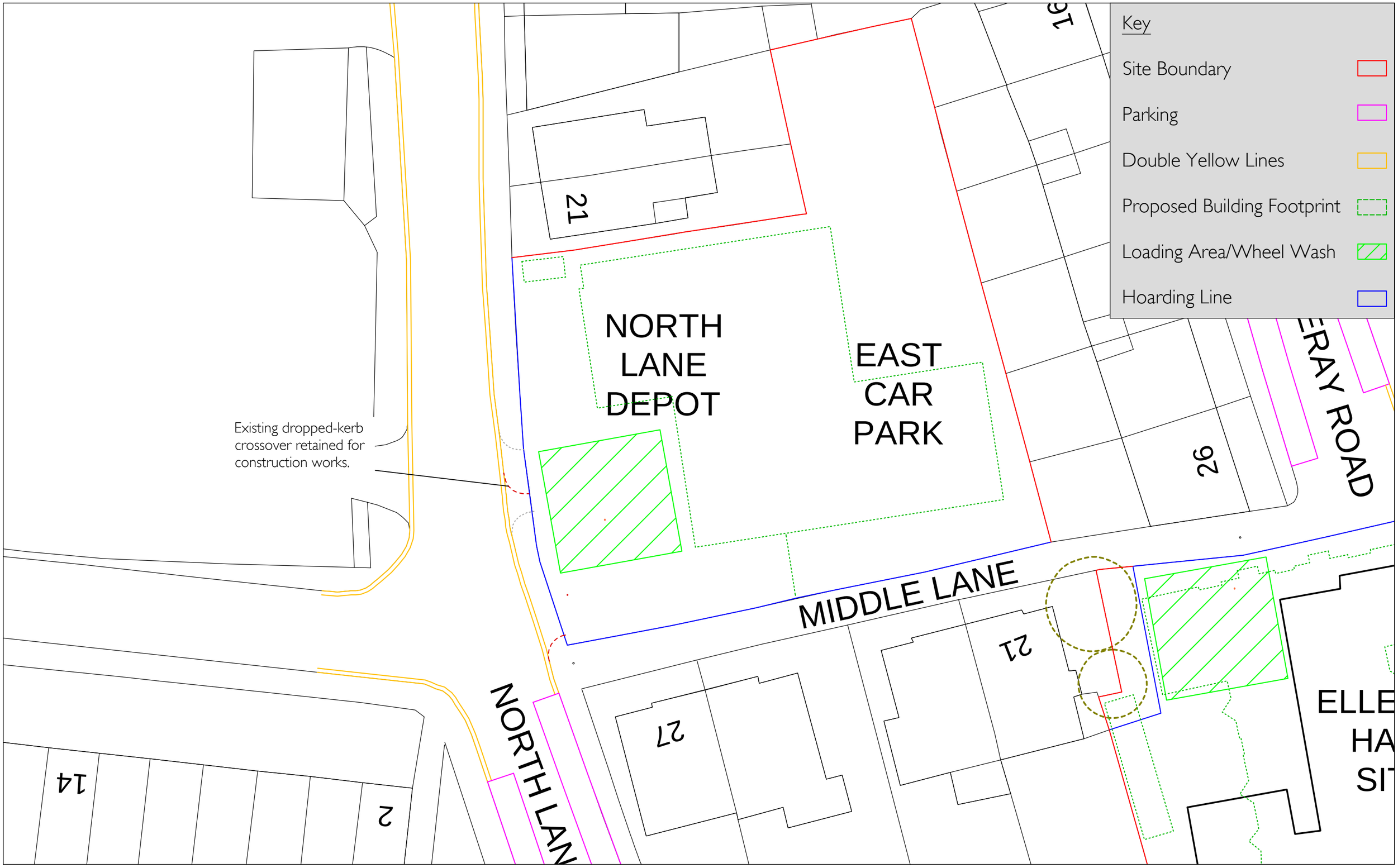


P2379: North Lane East Car Park/Depot, North Lane, Teddington, TW11

Figure 2.

Local Context Map

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS



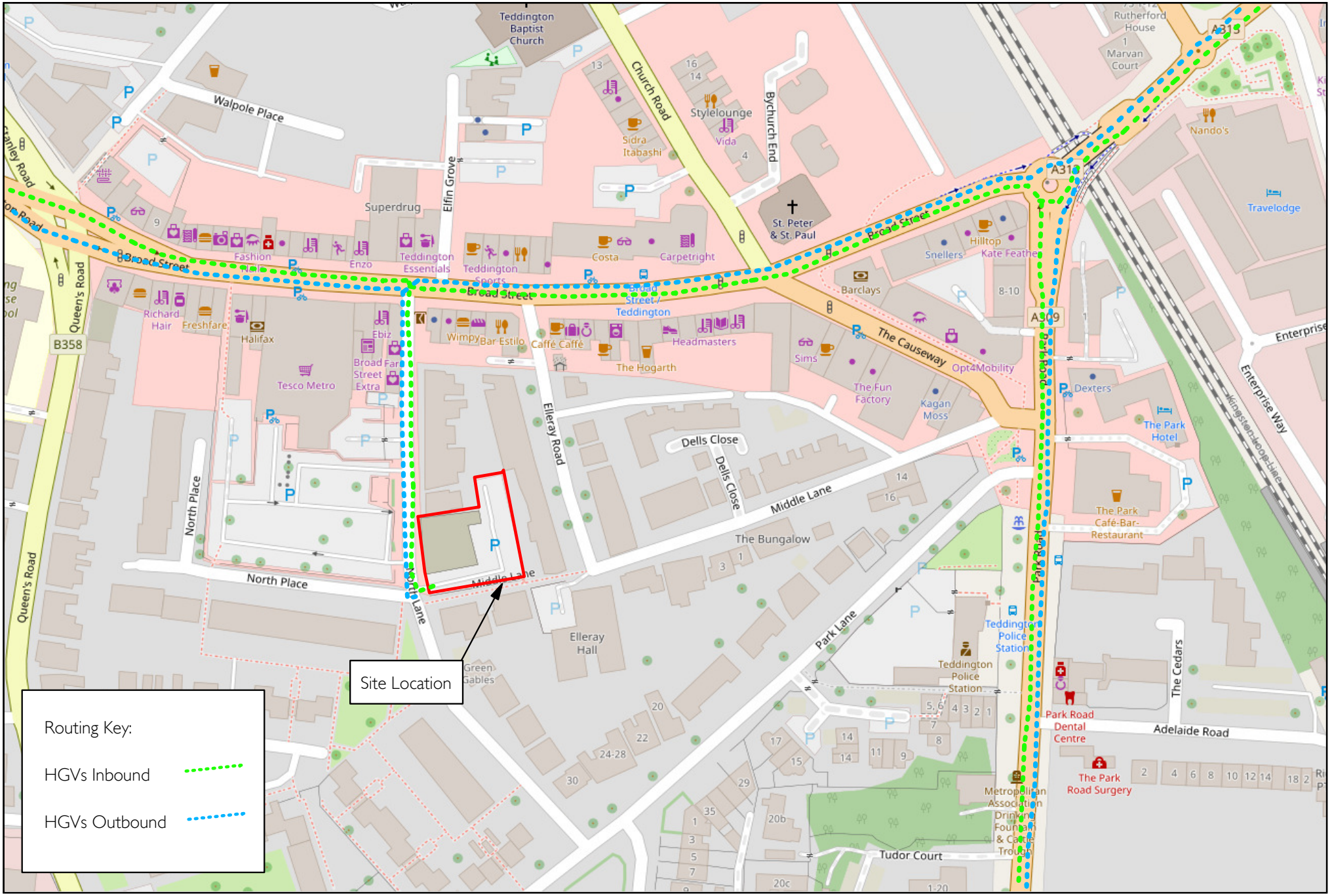
Date: 19 May 2021
Scale: 1:250@A3
Source: CCA / OS
Drawing No. P2379/CMS/03

N

P2379: North Lane East Car Park, North Lane, Teddington, TW11

Figure 3.
Site Set-Up Plan

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS
Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
Tel: 020 8780 0426
E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk



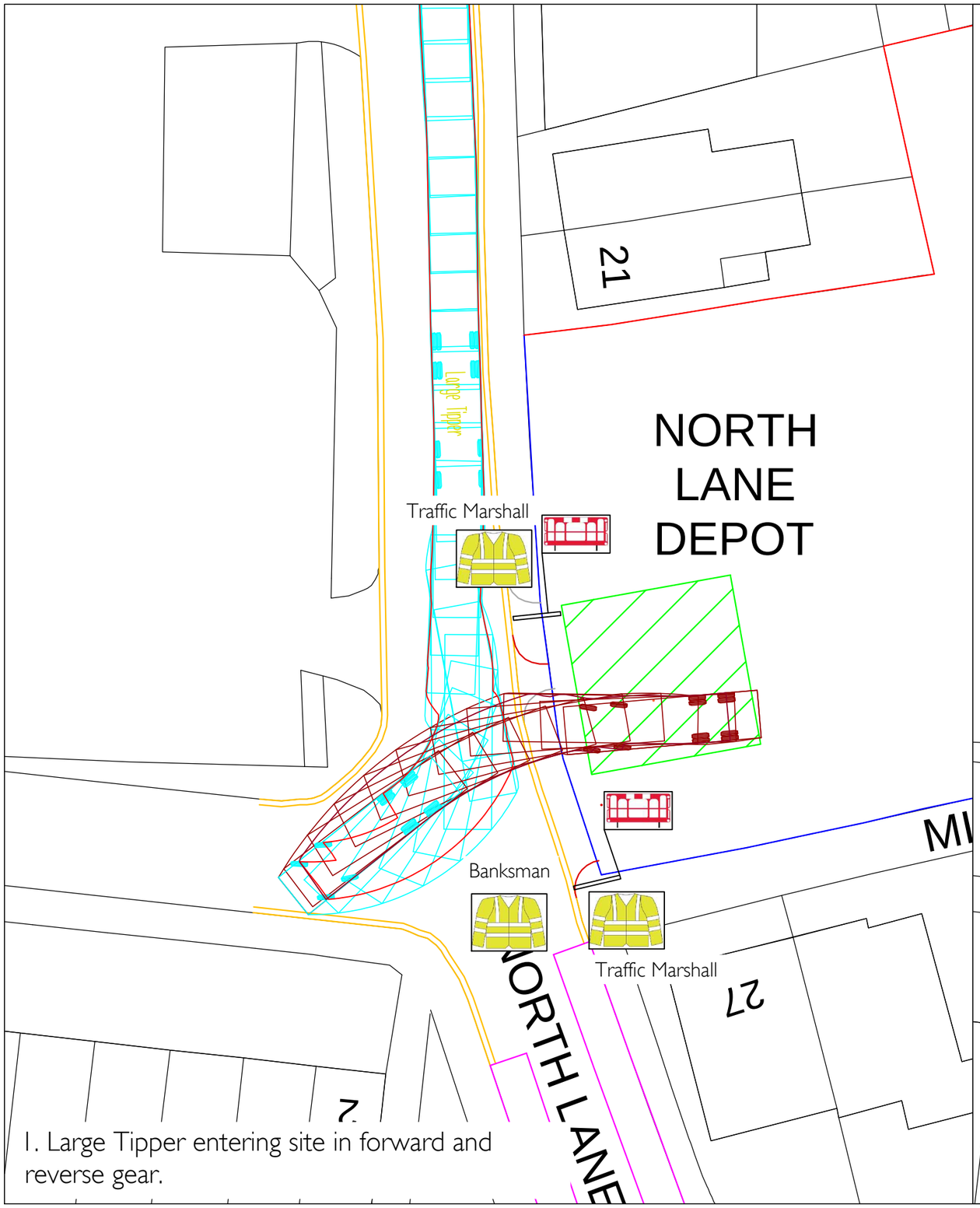
Date: 17 May 2021
Scale: NTS
Source: OpenStreetMap
Drawing No: P2379/CMS/04

P2379: North Lane East Car Park/Depot, North Lane, Teddington, TW11

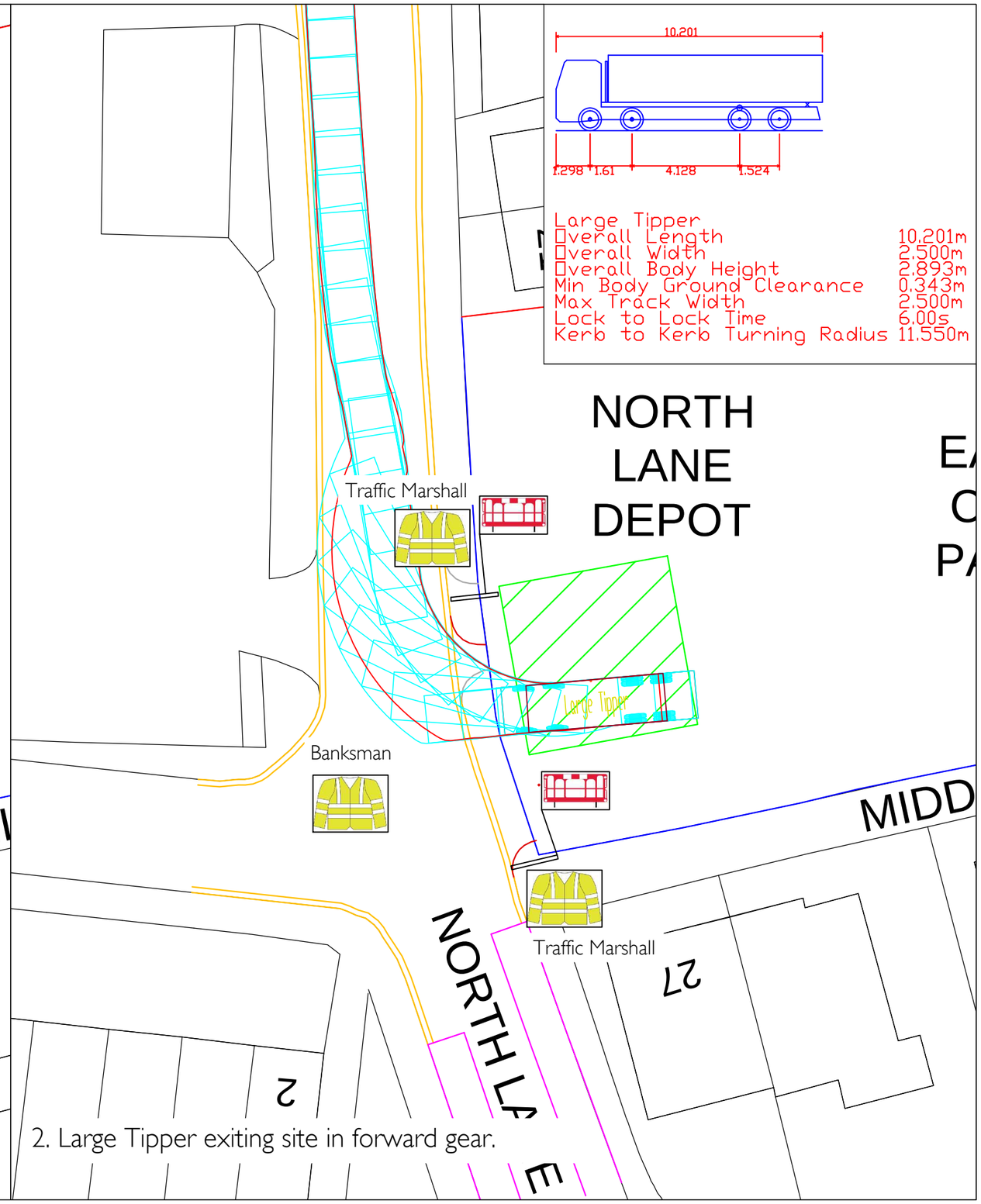
Figure 4.

Construction Vehicle Routing Plan

PAUL MEW ASSOCIATES
TRAFFIC CONSULTANTS



1. Large Tipper entering site in forward and reverse gear.



2. Large Tipper exiting site in forward gear.

Date: 19 May 2021
Scale: 1:250@A3
Source: CCA / OS
Drawing No. P2379/CMS/05

N

P2379: North Lane East Car Park, North Lane, Teddington, TW11

Figure 5.
Swept-Path Analysis - Large Tipper Truck

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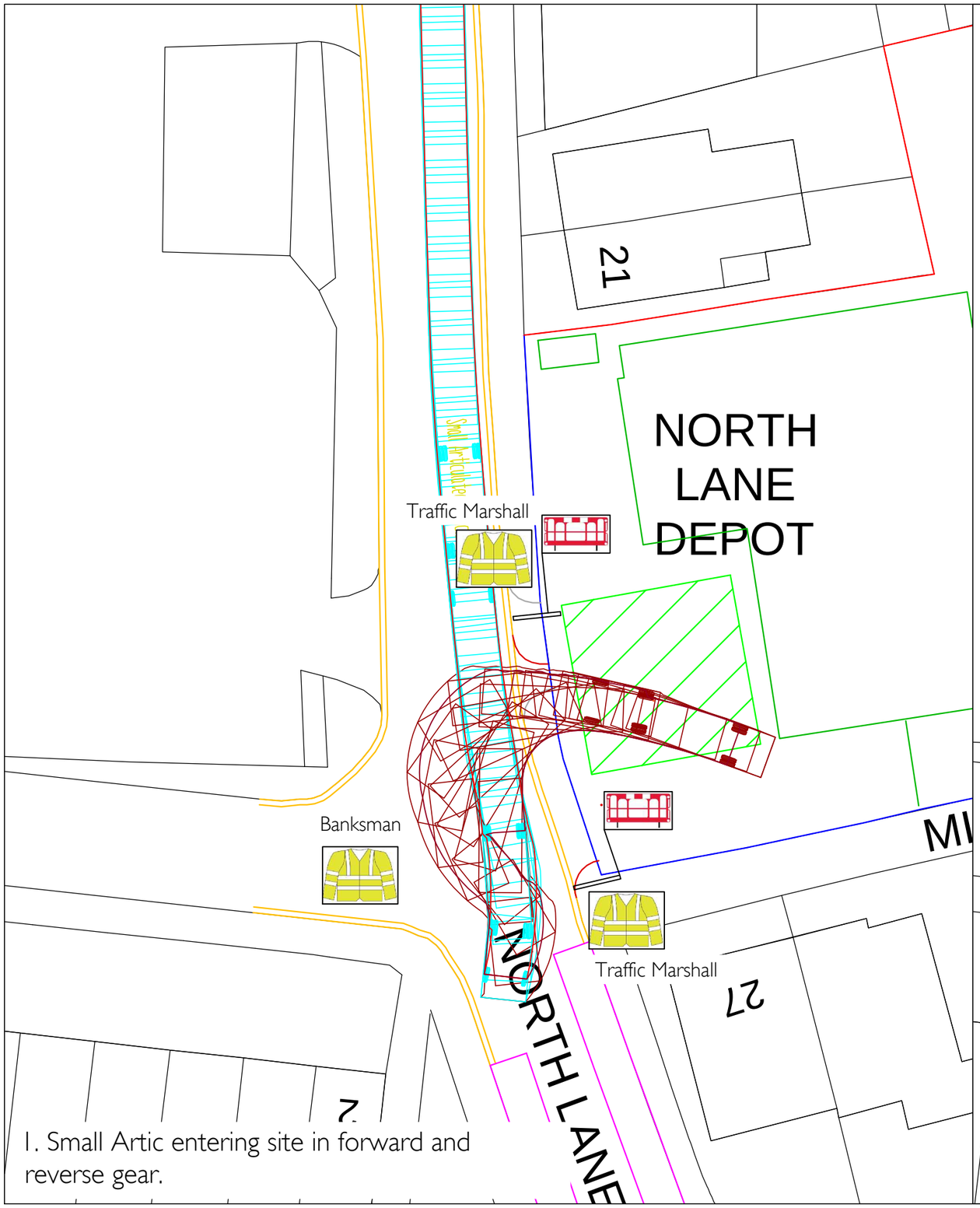
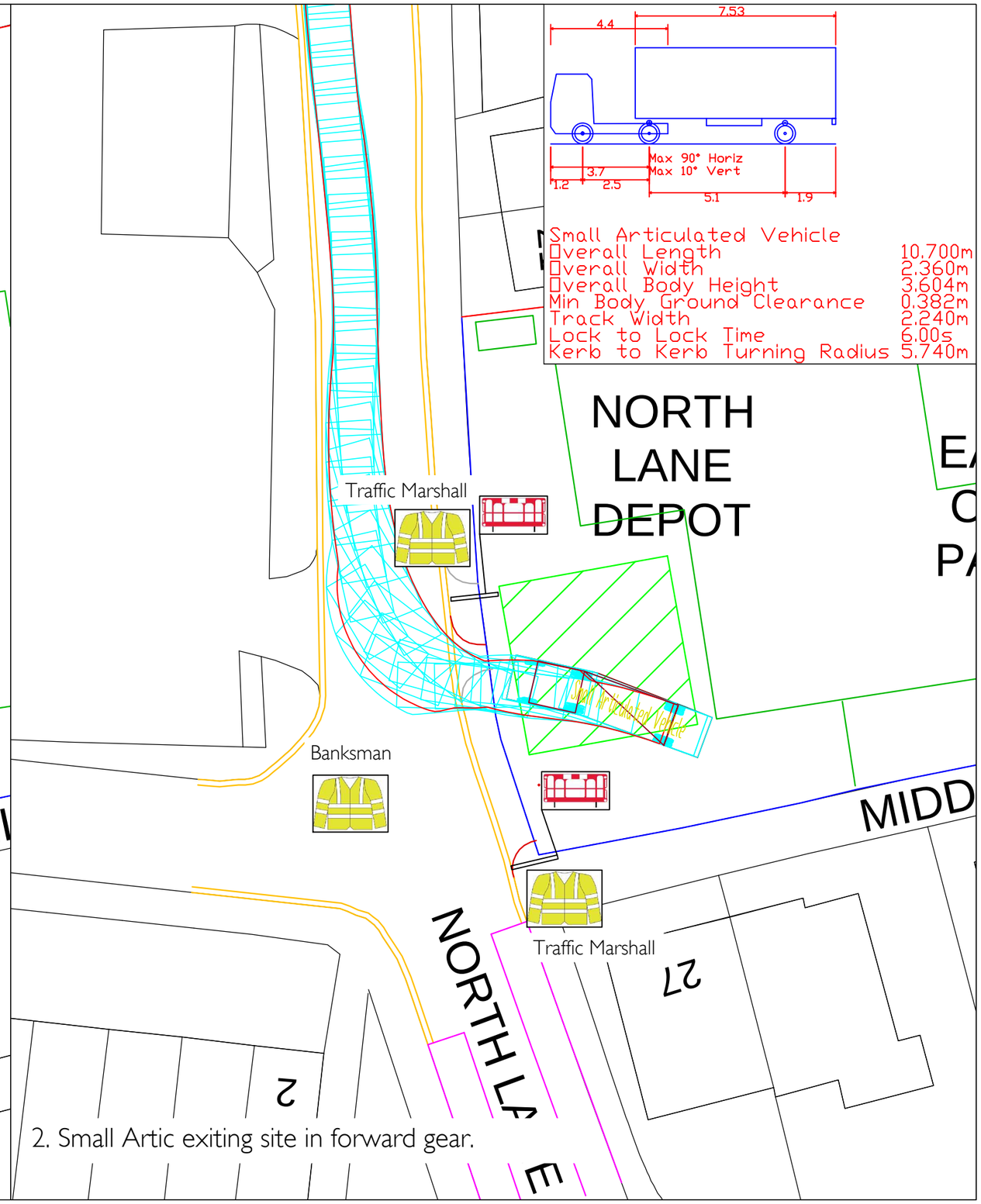
Unit 1, Plym House, 21 Enterprise Way, London, SW18 1FZ
Tel: 020 8780 0426
E-mail: paul.mew@pma-traffic.co.uk Website: www.pma-traffic.co.uk



1. Small Artic entering site in forward and reverse gear.



2. Small Artic exiting site in forward gear.

Date: 19 May 2021
Scale: 1:250@A3
Source: CCA / OS
Drawing No. P2379/CMS/06

N

P2379: North Lane East Car Park, North Lane, Teddington, TW11

Figure 6.

Swept-Path Analysis - Small Articulated Vehicle

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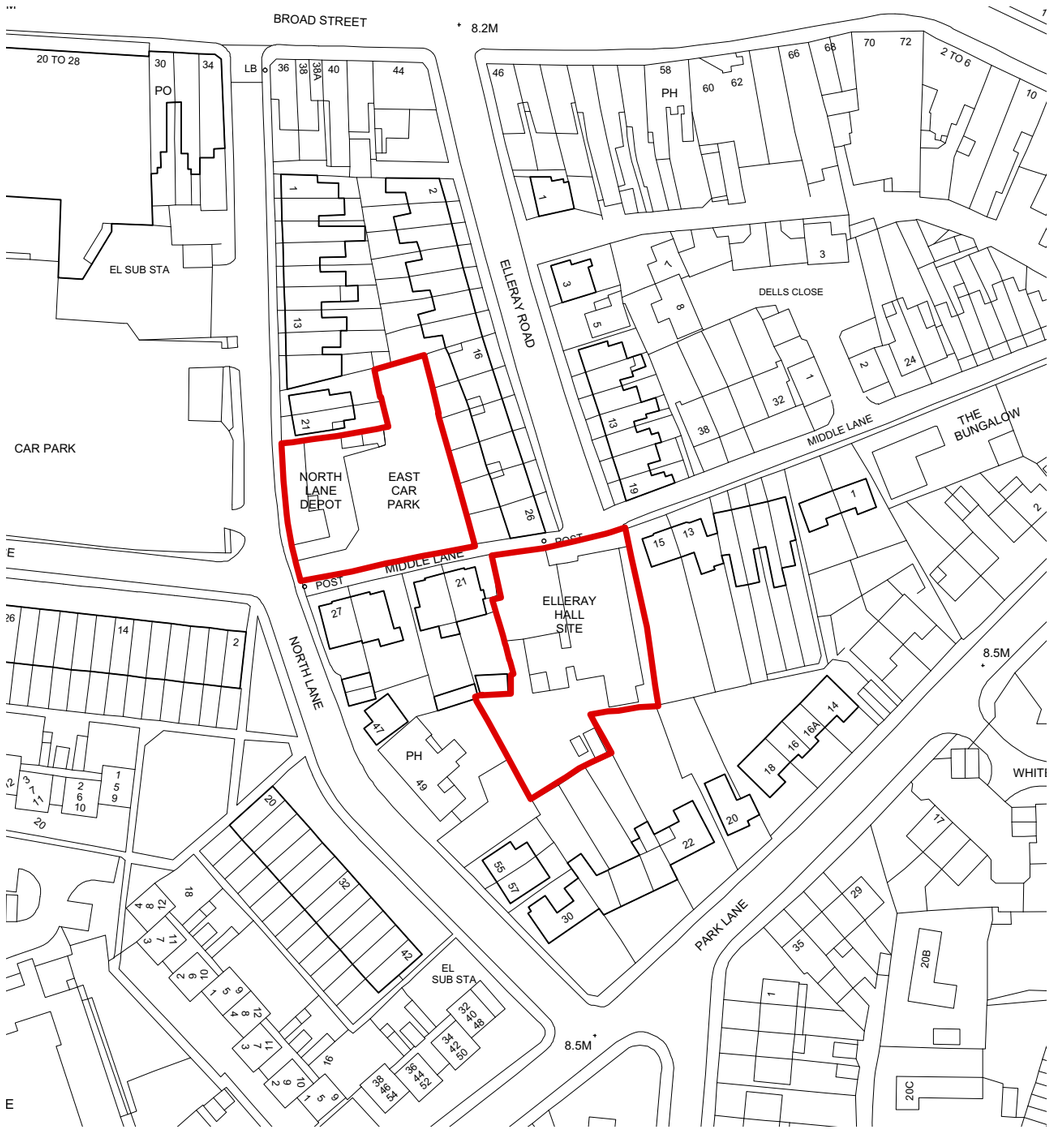
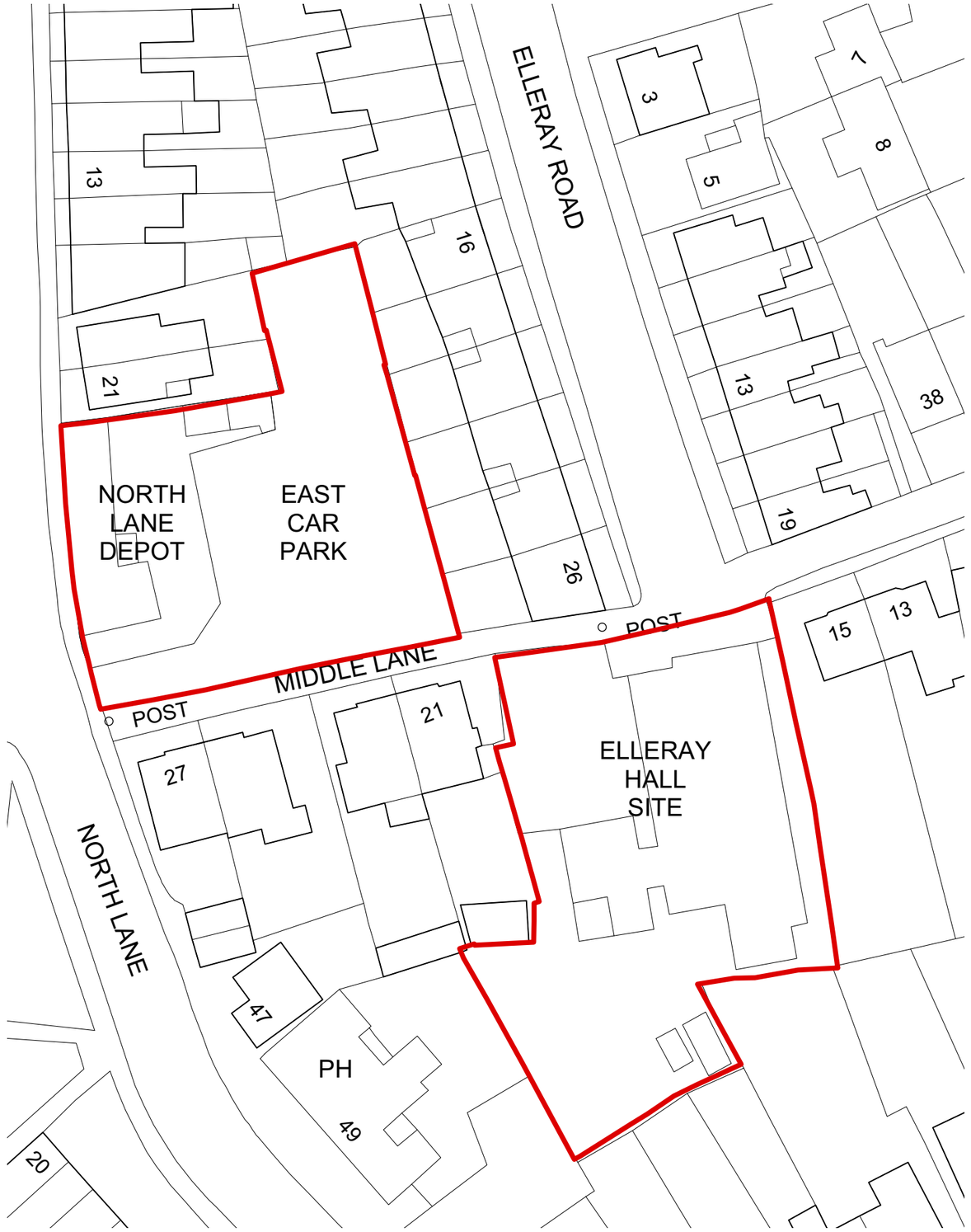
APPENDIX A
Site Boundary Plan





N

1:1250 SCALE BAR

0 20 40 60 80M

N

1:500 SCALE BAR

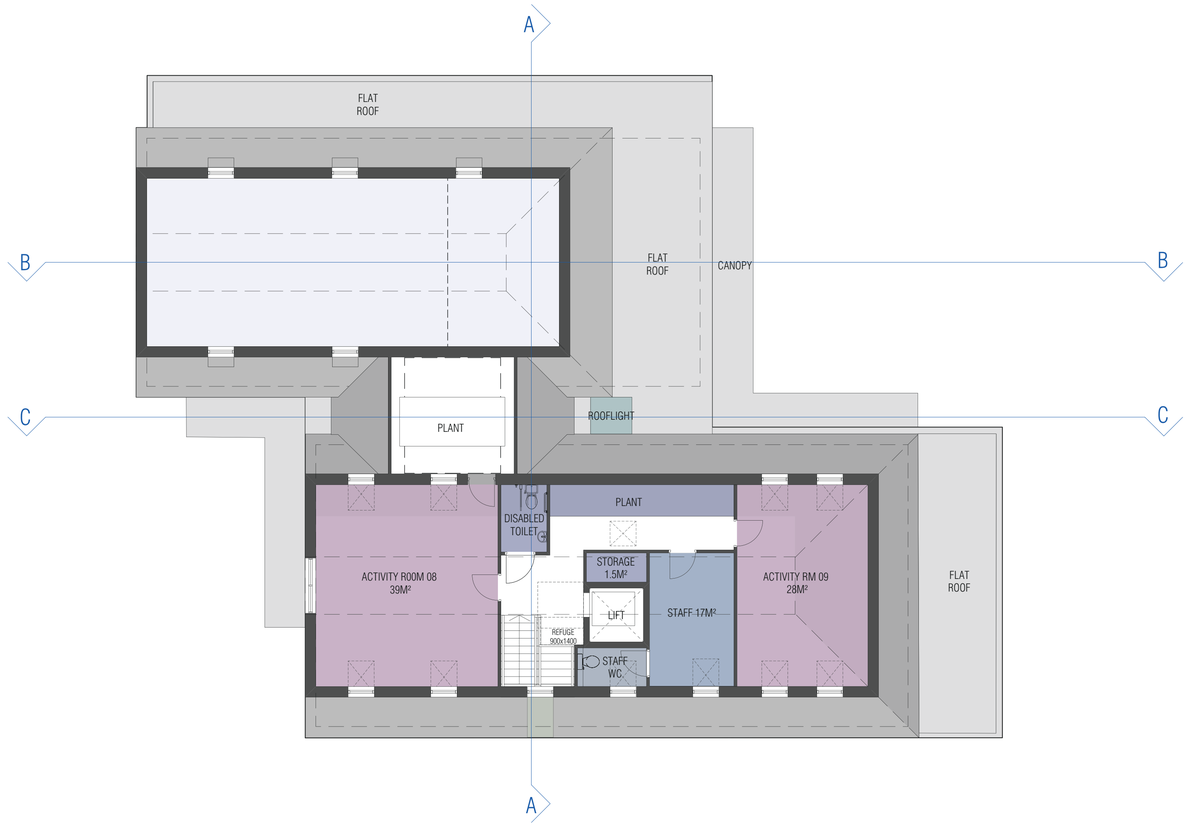
0 10 20 30M

PRE-APPLICATION

Project	ELLERAY HALL & NORTH LANE DEPOT/EAST CAR PARK, TEDDINGTON TW11
Drawing	LOCATION PLAN
Drawing No.	EHT-01
Scale	1:1250/500 @ A3
Date	07.08.20

APPENDIX B
Proposed Site Plan

COMMUNITY HALL GROUND FLOOR PLAN



COMMUNITY HALL FIRST FLOOR PLAN

KEY:

- PLANNING APPLICATION BOUNDARY
- GARDEN FENCE
- EXISTING NEIGHBOURING BUILDINGS
- PROPOSED HEDGES & EDGE PLANTING
- PROPOSED HARD LANDSCAPING
- EXISTING TREES
- PROPOSED TREES
- B CATEGORY RPA
- C CATEGORY RPA
- U CATEGORY TREE
- CURRENT CROWN SPREADS
- TREES TO BE REMOVED

NOTE:
PLEASE SEE LANDSCAPE PROPOSAL
(DRAWING B21028.101) FOR MORE DETAIL.

N

BAR SCALE
0 1 2 3 4 5m

PLANNING

Project
ELLERAY HALL SITE, TEDDINGTON
Drawing
PROPOSED GROUND AND FIRST FLOOR PLANS

Drawing No.	Scale	Date
EHT-03	1:100 @ A1	16.04.2021

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ARCHITECTS
SUSTAINABILITY CONSULTANTS
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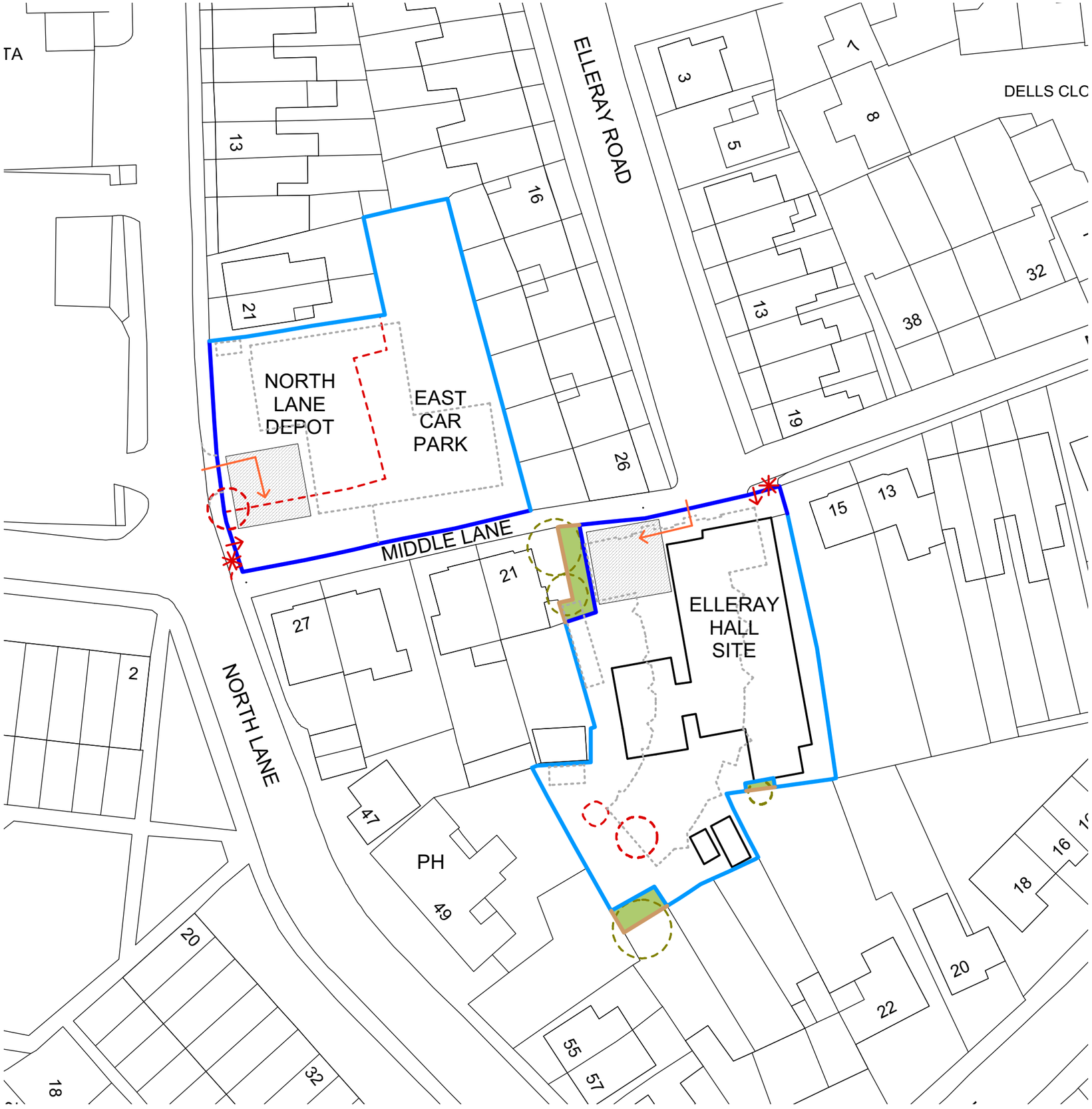
TW1 3DY
TELEPHONE 020 8891 4837
EMAIL INFO@CCAR.CO.UK
WEBSITE WWW.CCAR.CO.UK

APPENDIX C
Construction Management Statement Plan



KEY:

- HOARDING FENCE (HERRIS) SECURE BOUNDARY
- WIRE FENCE TO PROTECT RETAINED EXISTING BOUNDARY FENCES WHERE NECESSARY
- EXISTING BOUNDARY ADJACENT TO RPA
- EXISTING BUILDINGS TO BE DEMOLISHED
- PROPOSED BUILDINGS TO BE ERECTED
- EXISTING TREES / FENCES REMOVED
- RETAINED EXISTING TREE ROOT PROTECTION AREAS (RPA)
- RETAINED ROOT PROTECTION AREAS (RPA)
- VEHICLE WHEEL WASHING AREAS WITH WATER RUN-OFF COLLECTION
- RESTRICTED CONSTRUCTION VEHICLE ACCESS POINT
- RESTRICTED PEDESTRIAN ACCESS POINT
- CONSTRUCTION HEALTH & SAFETY SIGNAGE POINT

N

1:500 SCALE BAR

0 10 20 30M

PLANNING

Project: ELLERAY HALL, ELLERAY ROAD, TEDDINGTON, TW11 0HG		
Drawing: CONSTRUCTION MANAGEMENT STATEMENT - PLAN		
Drawing No.: EHT-10	Scale: 1:500 @ A3	Date: 21.04.2021