Planning, Design & Access Statement

In support of a planning application for the installation of an Electric Vehicle Charging Point on:

the footway adjacent to:

354-356 Upper Richmond Road West, London, SW14 7JT

Date: 20 October 2023





Contents

Part I	Background to the Proposal	Part 4	Planning Policy and Guidance
1.1	Introduction	4.1	Introduction
1.2	The Mayor's Clean Air Action Plan	4.2	The Development Plan
1.3	The Ultra Low Emission Zone (ULEZ) and Ultra Low Emission Vehicles (ULEVs)	4.3	Other Relevant Policy Documents
1.4	Low Emission Taxis		
1.5	The Rapid Charging Points Scheme	Part 5	Key Planning Considerations
1.6	Summary of Scheme Benefits	5.1	Principle of Sustainable Development
1.7	Criteria for Site Selection	5.2	Traffic, Access and Parking
		5.3	Townscape and Heritage
Part 2	The Application Site	5.4	Noise
2.1	The Site	5.5	Trees
2.2	Transport Links and Access	5.6	Flood Risk Assessment
2.3	Planning and Environmental Designations	Part 6	Application Summary
2.4	Site Photos		
Part 3	The Proposal	Appendix A	Construction Methodology
3.1	The Scheme		
3.2	The Design		
3.3	Operation and Maintenance		
3.4	Designing out Crime and Public Safety		
3.5	Justification for Site Selection		



1. Background to the Proposal

1.1 Introduction

This application seeks planning permission under the Town and Country Planning Act 1990 for the installation of one Electric Vehicle (EV) Charging Point and associated works on the footway adjacent to 354-356 Upper Richmond Road West, London, SW14 7JT.

The existing red route parking bays will be repurposed to allow electric vehicles to park for up to sixty minutes at a time to recharge.

The EV charging point will support the Mayor's ULEZ requirement for low-emission taxis, encourage commercial vehicles to use EVs and meet targets for cleaner air in London.

1.2 The Mayor's Clean Air Action Plan

Air pollution is one of the most significant challenges facing London, potentially affecting the health of everyone working, living or visiting the capital.

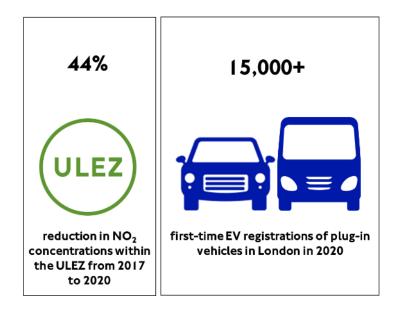
The Mayor's Clean Air Action Plan, announced in July 2016, outlines his commitment to addressing London's poor air quality. This includes the introduction of ULEZ and other measures, including financial assistance to scrap non ULEZ compliant cars and proposals for Low Emission Bus Zones (previously called 'clean bus corridors').

1.3 ULEZ and proposed ULEZ expansion for 2023, and Ultra Low Emission Vehicles (ULEVs)

To help achieve this reduction in the transport sector, the Mayor set a target to introduce ULEZ for central London in 2019. All vehicles in central London are now required to comply with stringent environmental standards or pay a daily charge. This supports TfL's ULEV Delivery Plan, which has an overarching aim to make London the ULEV capital of Europe. ULEVs include battery electric vehicles (BEVs), plug-in hybrid vehicles (PHEVs), range-extended electric vehicles (RE-EVs) and hydrogen fuel cell electric vehicles (FCEVs).

In November 2022, the Mayor announced the expansion of ULEZ to all London Boroughs, coming into effect in August 2023. The London-wide expansion will allow five million more Londoners to breathe cleaner air and contribute towards making London a net-zero carbon City by 2030.

Increasing the uptake of ULEVs will be an important component of TfL's work to bring forward compliance with EU limit values for nitrogen dioxide (NO_2) and to meet targets for carbon dioxide (CO_2) emission reduction.







1.6 Summary of Scheme Benefits

- Unlock ULEV growth in Greater London by maximising zero emission savings from plug-in hybrid vehicles.
- Wider benefits of lower noise pollution introduced by larger uptake of EVs as there is minimal engine and transmission noise.
- Facilitates the uptake of ULEVs by other commercial fleets and private owners.
- Operators can charge their vehicles quickly without having to sacrifice productive working time. RCPs deliver an 80 per cent charge in 20-30 minutes compared with 3-7 hours for standard charging.
- Increased visibility of charge point infrastructure will reduce 'range anxiety', which acts as a barrier to uptake of electric vehicles.
- Convenient sites will mean operators can charge during the day without having to travel out of their way.
- EVs receive a 100% discount on the Congestion Charge worth up to £1,700 a year.
- Enable the switch to the ZEC taxis, helping achieve the calculated NOx emissions savings from the new ZEC taxis.
- Help London grow as a sustainable city.

1.7 Criteria for Site Selection

EV charging points can be installed at the roadside or on appropriate off-street locations. TfL has undertaken a detailed site search to select appropriate sites London.

The criteria for site selection takes into account relevant local planning policies and supplementary design guidance, and TfL's own standards and design guidance. The key criteria include:

- Street furniture: Need to ensure no conflict between street furniture and charging infrastructure.
- Trees: Design to avoid or minimise the impact on root protection zones of nearby trees.
- Footway width: Sufficient footway width must be retained to ensure pedestrian flow is not impeded. TfL streetscape guidance recommends that street furniture should be located 450mm from the kerb edge and leave a minimum 2m footway clearance, although in busy areas increased clearance may be required.
- Use polymer-based bollards and offset at least 120mm from the corners of the charge points adjacent to the kerb edge to protect the charge point from vehicle impacts.
- Pavement build-out: Where footway width is insufficient, consideration will be given to the potential to construct a pavement build-out to accommodate the charge point.
- Carriageway width: This must be sufficient for vehicles to safely manoeuvre into and out of the charging bay and drivers to enter and exit their vehicle to use the charge point.

- Traffic flows: Traffic should be relatively free flowing to allow safe entry and exit to the charging bay.
- Traffic speed: Roads where speeds are low to medium are more suitable as they are easier and safer for drivers to exit and enter their vehicle to use the charge point.
- Parking for charging bays must be free to the user.
- Statutory undertakers' covers: Design to ensure that charging infrastructure and parking spaces do not prevent access to utilities.
- Accessibility: Site to be accessible 24/7 for users and maintenance.
- Location of power supply: This needs to be sufficiently close to allow the feeder pillar to be connected.

The application site has been selected having regard to these criteria.



1.4 Low Emission Taxis

In October 2015 the Mayor of London and TfL confirmed new licensing requirements for taxis and private hire vehicles (PHV) aimed at reducing emissions from these fleets. The measures are designed to complement plans for the ULEZ in central London.

From 1 January 2018, all vehicles licensed for the first time as taxis in London must be Zero Emission Capable (ZEC). This is defined as a vehicle that emits \leq 50g/km of CO₂, with a minimum zero emission range of 30 miles. A ZEC taxi must also be petrol fuelled and meet the Euro 6 standard if it has an internal combustion engine.

To facilitate the transition to ZEC taxis, TfL has established a voluntary decommissioning scheme for taxis over 10 years old. Payments are available to owners who give up their right to re-license their vehicles as taxis in London before they meet the 15-year age limit.

In addition, grants are provided for the purchase of new ZEC taxis. The Office for Low Emission Vehicles (OLEV) provides a grant for the purchase of eligible vehicles which is currently set at a maximum of £4.5k. TfL is proposing a 'top-up' grant of £3k in addition to the OLEV scheme for ZEC taxis, bringing the total assistance available for the purchase of a ZEC taxi to £7.5k.

From I January 2020, a ZEC licensing requirement was also introduced for new vehicles being licensed as PHVs. New vehicles are defined as being up to 18 months old from the date of first registration with the DVLA. From I January 2023, all vehicles licensed for the first time as PHVs must meet the approved ZEC requirement.

1.5 Electric Vehicle Infrastructure Project

TfL has been tasked with expanding the network of EV charging points in London. The scheme allows electric taxis, PHVs and commercial vehicles the possibility to recharge in as little as 20 minutes (as opposed to 3-7 hours with existing charge points), thereby minimising operational downtime and ensuring that vehicles operate in zero emission mode for as long as possible.

As of March 2018, TfL has installed and made operational 300 rapid charging points in and around Greater London, to meet the requirements of the first phase of ZEC taxis. New modelling indicates that in the most likely scenario, where there is increased use of rapid, on-the-go charging, London will need around 40,000 to 60,000 charge points by 2030, of which up to 4,000 will be rapids. The proportion of EVs this infrastructure would support could result a reduction in carbon dioxide emissions of between 1.5 and 2.6 million tonnes per year by 2030.

Each EV charging point facility includes a charging point, an electricity supply feeder pillar and a designated electric car parking bay, all of which are included in the red-lined application boundary. However, the planning application is for the EV charging point only. The feeder pillar benefits from permitted development rights and the EV parking bay would be secured under highways legislation (via a Traffic Regulation Order).

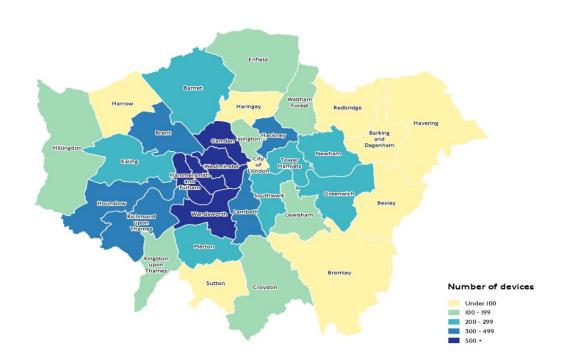


Figure 1: Number of charging devices by London borough November 2021



Examples of installed rapid charging points





2. The Application Site

2.1 The Site

The application site is located on the footpath adjacent to 354-356 Upper Richmond Road West, London, SW14 7JT. The footpath here is approximately 6.75m metres wide and relatively free of street furniture. Immediately east of the site is an existing Rapid Charge Point. The site's location is shown in Figure 1.

The surrounding area is a predominately retail and commercial high street, comprising of mainly three storey buildings with residential units in the upper floors.

The existing parking restrictions are Monday-Saturday, 7am-7pm, no return within I hour. A new electric vehicle parking bay will be marked out to allow solely electric vehicles to park and a road sign will be attached to a new post [replacing the existing one] to be erected to the west of the parking bay. Two steel bollards will be installed in front of the EV charging point to protect it from any vehicle impacts.

Mature tree runs along the footway outside 354-356 Upper Richmond Road West, of which TfL's Green Infrastructure team has been contacted, and it's been addressed in the tree section of the report

2.2 Transport Links and Access

Upper Richmond Road West (A25) forms part of the Transport for London Road Network (TLRN). Outside of the parking bay, stopping in the vicinity is limited to 20 minutes loading time. The A205 connects Upper Richmond Road West to the A305 to the west and the A306 to the east and allows easy access for the users of electric vehicles.

The site is serviced by the 33, 337, 493, 969, N33 bus routes, which stop opposite and approximately 72m east of the site.

Mortlake railway station is located 580 metres to the northeast of the site. North Sheen is also approximately 966m west of the site.

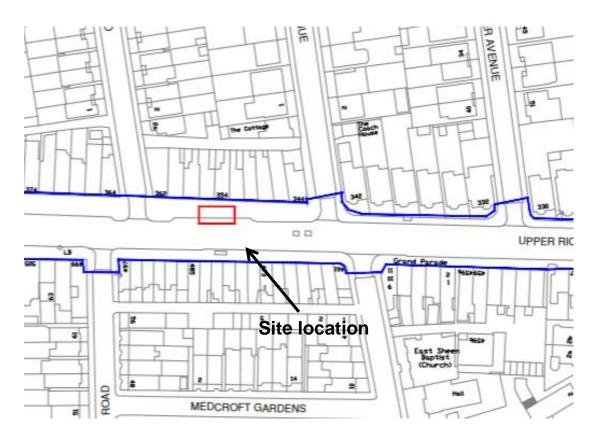


Figure 1: Site location plan.

2.3 Planning and Environmental Designations

The whole of the London Borough of Richmond has been designated an Air Quality Management Area (AQMA) for Nitrogen Dioxide (NO₂) and Particulate Matter (PM_{10}).

Sheen Lane (East Sheen), Holmesdale Avenue and Model Cottages and Richmond Upon Thames Conservation Areas can be found in the surrounding Area.

350 Upper Richmond Road West and 352 Upper Richmond Road West are both Buildings of Townscape Merit. There are also clusters of Buildings of Townscape Merit in the vicinity of the site.

The site is also within Character Area 1: Upper Richmond Road West (East Sheen). Richmond recognises the areas heritage characteristics and aims to protect it from threatening development.

The site does not encroach on any Archaeological Priority areas.

The site is in flood zone I.



2.4 Site Photos



Figure 2 : Carriageway



Figure 3: Footway adjacent to bay





Figure 4: Trees on footway adjacent to bay



Figures 5 & 6: Existing Rapid Charge Point bay east of site and parking sign



3.3 Operation and Maintenance

The charging point will be straight forward for users to operate, with payment by card. Payment systems are required to be compliant with Payment Card Industry Data Security Standard.

In the event of any problems, all charging points will provide a phone number for drivers to call if there's a problem or to report a fault. The operator call centre will be available 24/7. The operators will be responsible for maintenance of the charge points, but this will be in line with service levels set out by TfL. The charging points will have a CE mark in accordance with EC Directive 768/2008/EC and will comply with all relevant electrical safety standards.

Use of the charging points and allocated parking space will raise no amenity concerns over and above those associated with general onstreet car parking. When in use the charging point will emit less than 65 dBA at a distance of 1 metres for Tritium RTM75 and less than 62 dBA at a distance of 1 metres for Alpitronic.

3.4 Designing Out Crime & Public Safety

Measures to discourage crime and ensure public safety have been built into the design. Charging points are installed on a sturdy concrete cubic base and secured to the ground.

The 50 - 75kW Apitronic model can only be accessed by removing two safety screws on the side access door. This then gives access to four twist hook latches that provide IP rating to the unit. These can also be fitted with a lock.

Anti-graffiti measures

Anti vandal covering will be applied where practical to suit the EVCP. In the event that graffiti affects any stickers on the unit, new stickers will be provided to replace the damaged ones. Light scratch damage to the screen can be polished out. Heavy scratching will require a quick screen cover replacement. These items will be dealt with at regular maintenance.

3.5 Justification for Site Selection

This application site location has been chosen in accordance with the site selection criteria set out in section 1.7.

There are a number of taxi firms based on the Highstreet that would benefit from having an RCP in this location. The proposal will allow electric vehicles to recharge quickly without having to stray far from their intended route.

The conversion of vehicles to electric operation and associated reduction in vehicle emissions will benefit the surrounding area and contribute to the improvement of air quality within the AQMA.



3. The Proposal

3.1 The Scheme

The proposal is to install one EV charging point and feeder pillar. Underground ducting will connect the charging point to a feeder pillar that will be located at the end of the parking bay. A new electric vehicle road sign will be attached to a new post to be erected next to the parking bay on the footpath. Two steel bollards will be installed in front of the RCP to protect it from any vehicle impacts. The parking bay will be marked out to create a dedicated bay for electric vehicles only, also as shown on drawing TfL-0000-03 Rich 44.

The current parking restrictions will be amended through the TRO process to allow for electric vehicles to park in the bay to charge their vehicle for up to 60 minutes at a time, at all times.

The majority of the works will be on the footpath, the charger at some sites will be installed within the parking bays. This work will be undertaken during daytime between the hours of 07:00 and 18:30 and will be completed within a 10 working day road open notice period . Traffic management on the footway will remain on site outside working hours. The bay marking works will be undertaken within the 10-working day road open notice period when this is not possible a night shift between the hours of 22:00 and 05:00 will be planned.

3.2 The Design

Electric Vehicle Charge Points

The design of the EV charging points has evolved to meet the scheme requirements and be compact enough to sit on the street or within a parking space.

The charge points will measure:

Alpitonic 50-75kW -Dimensions -1998mm Hx900mmWx450mmD - Foundation- NAL RS168 Retention socket with standard foundation - 1200x1200x350mmD (with Alpitronic adaptor)

The charging points allow a recharge in as little as 20 minutes. Due to the high-power electrical circuits contained within them, cooling fans are required, which means the units are larger than conventional chargers and need to be located where air circulation will not be disrupted.

The incoming mains cable will be ducted to enter the charging point through an aperture in the base plate of the unit.

Feeder Pillar

A feeder pillar is required to connect and regulate the charge point to a source of power. Feeder pillars and associated electrical infrastructure are covered under permitted development rights, however, their location is provided for information to ensure all aspects of the scheme are considered. The feeder pillar dimensions are provided in the submitted drawing, for information.

Locational Constraints

For technical and safety reasons, following the latest IET Code of Practice 2020 (4th Edition), a 2.5metre separation must be maintained between any existing street furniture that carries an electrical current (for example lamp column -shop front shutters) including, EV charging point and EV when being charged. This is applicable for rapid charging above 50kW.





4. Planning Policy and Guidance

4.1 Introduction

In making a decision on whether to grant planning permission, Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that a decision accords with policy within the Development Plan, unless material considerations indicate otherwise.

In this case, the Development Plan comprises the London Plan 2021 and the Richmond upon Thames Local Plan 2018. Other relevant policy guidance includes the National Planning Policy Framework (NPPF) 2021 and Mayor's Transport Strategy 2018.

4.2 The Development Plan

The London Plan 2021

The London Plan 2021 is the Spatial Development Strategy for Greater London and sets out a framework for how London will develop over the next 20-25 years and the Mayor's vision for Good Growth.

The Plan is part of the statutory development plan for London, meaning that the policies in the Plan should inform decisions on planning applications across the capital. Borough's Local Plans must be in 'general conformity' with the London Plan, ensuring that the planning system for London operates in a joined-up way and reflects the overall strategy for how London can develop sustainably. The following policies are considered relevant to this proposal:

Policy SI 1 – Improving Air Quality promotes the use of zeroemission modes of transport and related supporting infrastructure as a way to improve air quality in London.

Policy SI 2- Minimising greenhouse gas emissions states the GLA Group, London Boroughs and other organisations will contribute to meeting the Mayor's target of London becoming a zero-carbon city by 2050.

Policy D8- Public Realm encourages public realm that is welldesigned, safe, accessible, inclusive, attractive, well-connected, related to the local and historic context, and easy to understand, service and maintain. Street furniture and infrastructure should have high quality design that does not impede public use of the space.

Policy T2 – Healthy Streets Central to the Draft London plan focuses to create vibrant neighbourhoods that are appealing places to walk, cycle and spend time, and providing local people with access to the facilities and services that they need.

Policy T6- Car Parking supports the provision of electric vehicle charging points. Where these are provided on street, physical infrastructure should be designed with pedestrian amenity in mind.

Policy GG3 – Creating a healthy city seeks to improve Londoners' health and reduce health inequalities, including active choices and the Healthy Streets Approach.

Policy GG6- Increasing efficiency and resilience states that to help London become more efficient and resilient, those involved in development must "seek to improve energy efficiency and support the move towards a low carbon circular economy, contributing towards London becoming a zero-carbon city by 2050".

Policy HCI – Heritage Conservation and Growth seeks to demonstrate a clear understanding of London's historic environments, and states evidence should be used for improving access to, and interpretation of, the heritage assets, landscapes and archaeology within their area.



4.3 Other Relevant Policy Documents

Richmond's local planning policies are currently formed of the Local Plan 2018, Interactive policies map and the Strategic Flood Risk Assessment, which replaced the previous policies within the Core Strategy and Development Management Plan. The Plan sets out policies and guidance for the development of the borough until July 2033.

Relevant local plan policies are summarised below:

- Local Plan Policy LP I (Local Character and Design Quality) asserts that the Council will require all development to be of high architectural and urban design quality. The high quality character and heritage of the borough and its villages will need to be maintained and enhanced where opportunities arise. Development proposals will have to demonstrate a thorough understanding of the site and how it relates to its existing context, including character and appearance, and take opportunities to improve the quality and character of buildings, spaces and the local area.
- Local Plan Policy LP 4 (Non-designated Heritage Assets) demonstrates that the Council will seek to preserve, and where possible enhance, the significance, character and setting of non-designated heritage assets, including Buildings of Townscape Merit, memorials, particularly war memorials, and other local historic features.
- Local Plan Policy LP 16 (Trees, Woodland land Landscape) states that the Council will require the protection of existing trees and the provision of new trees, to deliver amenity and biodiversity benefits.

- **Local Plan Policy LP 21 (Flood Risk and Sustainable Drainage)** establishes that all developments should avoid, or minimise, contributing to all sources of flooding, including fluvial, tidal, surface water, groundwater and flooding from sewers, taking account of climate change and without increasing flood risk elsewhere.
- **Local Plan LP 44 (Sustainable Travel Choices)** highlights that the Council will work in partnership to promote safe, sustainable and accessible transport solutions, which minimise the impacts of development including in relation to congestion, air pollution and carbon dioxide emissions, and maximise opportunities including for health benefits and providing access to services, facilities and employment.
- **Richmond's Village Plan for East Sheen** establishes a vision and planning policy aims for, and assist in defining, maintaining and enhancing the character of East Sheen Village.
- **Richmond's Transport SPD** acknowledges the rapid uptake of electric vehicles in the coming years, which required a commensurate supply of charging infrastructure. The SPD actively encourages the provision for electric vehicle charging in order to meet future expectations.
- **Richmond's Electric Vehicle Recharging Strategy (2016-26)** states that to achieve Richmond's strategic objectives and aim to have less polluting traffic on their roads and improved air quality the borough will provide a much demanded network of fast chargers for residential and commercial use.

Emerging Local Plan Policy

Richmond are currently preparing a new Local Plan, which will replace the current Local Plan and the Twickenham Area Action Plan, expected adoption Winter 2024.



National Planning Policy Framework 2023

The current version of the National Planning Policy Framework (NPPF) was published in July 2021 and sets out the Government's planning policies for England. At the heart of the NPPF is a presumption in favour of Sustainable Development. Paragraph 7 states that "At a very high level, the objective of sustainable development can be summarised as meeting the needs of the present without compromising the ability of future generations to meet their own needs". This includes improving the conditions in which people, live, work, travel and take leisure.

Parts 9, 14, 15 and 16 of the NPPF are of particular relevance to the proposal.

Part 9, Promoting Sustainable Transport includes the statement that applications for development should 'be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations'. Local parking standards for development should take into account, 'the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles'.

Part 14, Meeting the challenge of climate change, flooding and coastal change outlines the importance of the planning system in helping to secure radical reductions in greenhouse gas emissions, providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and infrastructure.

Part 15, Conserving the Natural Environment includes policies to improve air quality. Planning policies and decisions should 'sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones'. 'Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement'. Part 16, Conserving and Enhancing the Historic Environment states that planning authorities should have a positive strategy for the conservation and enjoyment of the historic environment. Development proposals should have regard for and seek to minimise any conflict between it and the conservation of any heritage asset. This includes heritage assets with archaeological interest.

The proposal adheres to the sustainability aspirations set out in parts 9, 14 and 15 of the NPPF. The impact of the proposal on any heritage asset is addressed in this statement.

National Planning Policy Framework





Mayor's Transport Strategy

The Mayor's Transport Strategy, published in March 2018, sets out policies to improve transport within Greater London. The strategy sets out the Mayor's vision, which seeks to create a future London that is not only home to more people, but is a better place for all of those people to live in. The overall aim of the strategy is for 80% of all trips in London to be made on foot, by cycle or using public transport by 2041.

Policy 6 (chapter 3C) concerns improving air quality and seeks to reduce vehicle emissions by encouraging behavioural changes, retrofitting vehicles to reduce emissions, promoting electrification, road charging and parking charges.

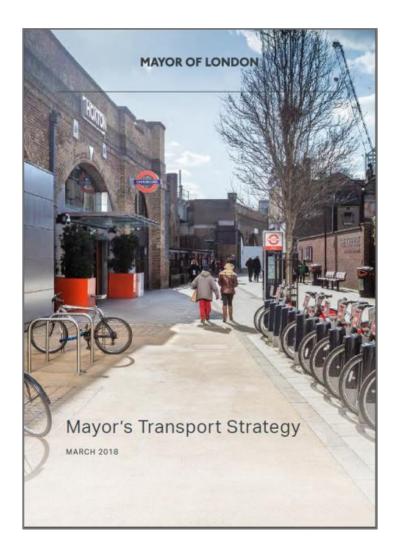
Policy 7 states that the Mayor will "seek to make London's transport network zero emission by 2050, contributing towards the creation of zero carbon city, and also to deliver further improvements in air quality to help meet tighter air quality standards, including achieving a health-based target of 10ug/3 for PM by 2030. London's streets and transport infrastructure will be transformed to enable zero emission operation, and the switch to ultra low and zero emission technologies will be supported and accelerated".

Proposal 20 seeks to ensure "London has a safe, secure, accessible, world-class taxi and private hire service with opportunity for all providers to flourish."

Proposal 24 introduces ULEZ with associated charges and tighter emission standards.

Proposal 30 states that "The Mayor, through TfL, will work with stakeholders to produce and implement a comprehensive plan to encourage and accelerate the transition from diesel-powered taxis to Zero Emission Capable vehicles by providing financial incentives, the necessary infrastructure and regulation (including maintaining a taxi age limit, currently set at 15 years) with the objective of achieving a minimum of 9,000 such vehicles in the fleet by 2020."

Proposal 34 seeks to ensure that "sufficient and appropriate charging and refuelling infrastructure is put in place to support the transition from diesel- and petrolpowered vehicles to Ultra Low Emission Vehicles, including ensuring that London's energy-generating and supply system can accommodate and manage the increased demand associated with this transition."





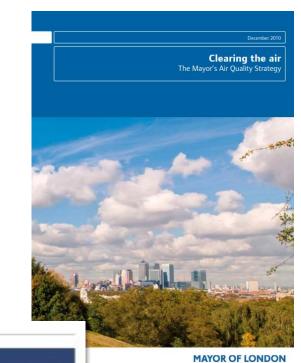
Mayor's Air Quality Strategy

'Clearing the Air' was published in December 2010 following public consultation. This sets out the Mayor's plans to improve air quality in the capital, including the reduction of air pollution from London's transport.

The uptake of ULEVs is included in the strategy as one way to reduce carbon dioxide emissions in the city (Policy 2: promoting technological change and cleaner vehicles). The strategy also notes that the Mayor is aware that the mass-market uptake of electric vehicles is dependent on the delivery of a network of publicly accessible charging points. The Mayor's aim is for no Londoner to be, on average, more than one mile from a publicly accessible charge point.

Mayor's Climate change mitigation and energy strategy

'Delivering London's Energy Future' was adopted in October 2011. The strategy sets out a strategic approach to reduce carbon emissions from a range of sources, including London's transport. Action 12.2 under Policy 12 (Minimising CO_2 emissions from transport through the use of low carbon vehicles, technologies and fuels) promotes the delivery of a network of publicly accessible charge points for electric vehicles as part of a shift to more carbon efficient transport.





ENERGY FUTURE: EXECUTIVE SUMMARY THE MAYOR'S CLIMATE CHANGE MITIGATION AND EMERICY STRATEGY OCTOBER 2011

MAYOR OF LONDON



Electric Vehicle Infrastructure Delivery Plan

Published in June 2019, this document sets out a strategic delivery plan to provide the correct type and amount of electric vehicle charging infrastructure to serve London's needs. This document recognises that by 2025, with EV uptake in line with the Mayor's Transport Strategy and London's 1.5 degree plan, the demand for EV charging points could rise to between 2,300 and 4,100 rapid charge points and 33,700 and 47,500 slow to fast charge points.

Mayor's Ultra Low Emission Vehicle Delivery Plan

'Cleaner Vehicles for Cleaner Streets' was published in July 2015 following significant progress made since the 2009 Electric Vehicle Delivery Plan. The strategy sets out the steps to be taken to realise the Mayor's vision of making London a city where ULEVs are the preferred option for all vehicle travel. This includes specific reference to the need for implementation of rapid charging points in London. Action 6 of the Plan (Deploy a rapid charge point network) seeks to work with suppliers to deliver a network of 150 rapid charge points by 2018.

London's 2030 Electric Vehicle Infrastructure Strategy, Executive summary December 2021

This forecasts that London will need approximately 40,000 to 60,000 charge points by 2030, of which up to 4,000 will be rapids. The proportion of EVs this infrastructure would support, could result in a reduction in carbon dioxide emissions of between 1.5 and 2.6 million tonnes per year by 2030. The provision of EV infrastructure is essential in meeting climate change and air quality objectives and the ambition for the Capital to be a net zero-carbon city by 2030.

Healthy Streets For London Strategy

The Healthy Streets Approach was published in February 2017, and is a system of policies and strategies to help Londoners use cars less and walk, cycle and use public transport more. The overall aim of the strategy is to increase the number of people walking and cycling.

The Healthy Streets Approach is a long-term plan for improving Londoners' and visitors' experiences of our streets, helping everyone to be more active and enjoy the health benefits of being on our streets. To deliver this strategy, change is required at three levels; street level, network level planning and managing London's transport networks and strategic level policy and planning. At a street level, the strategy focuses on walking, cycling and public transport infrastructure.

The strategy identifies ten healthy street indicators of which one is clean air, which makes reference to how improving air quality delivers benefits for everyone and reduces unfair health inequalities.



London electric vehicle infrastructure delivery plan



Healthy Streets for London Prioritising walking, cycling and public transport to create a healthy city

MAYOR OF LONDO





5. Key Planning Considerations

5.1 Principle of Sustainable Development

The proposal to install an EV charging point and associated works on the footway adjacent to 354-356 Upper Richmond Road West supports national and local policy to encourage sustainable modes of transport and address climate change. The scheme will help reduce pollution by encouraging the use of electric and hybrid vehicles.

The proposal is in accordance with the NPPF and the principles of sustainable development in the London Plan such as Policy SI I (Improving air quality) and Policy SI 2 (Minimising greenhouse gas emissions).

The proposal also accords with Richmond's Local Plan Policies 2018.

5.2 Traffic, Access and Parking

The proposal will result in the alteration of one space to accommodate a dedicated electric vehicle bay. The current parking restrictions will be amended through the TRO process to allow for electric vehicles to park in the bay to charge their vehicle for up to 60 minutes at a time, at all times.

The charging point and feeder pillar will be placed in a position that will not disrupt existing pedestrian flow. The charging point will be located close to the road edge on the footway. This arrangement will allow a minimum 2m footway width, which is sufficient for the navigation of people, pushchairs, wheelchairs etc.

The charging point will be set back from the kerb by approximately 0.45m to ensure it does not impede vehicle sightlines. Signage will be attached to a new sign-post located within the application site which will ensure vehicle sightlines are not impeded by the location of the post.

Overall, this is an ideal site within the immediate area to provide an EV charging point whilst maintaining clear traffic paths and avoiding areas of pedestrian congestion.

5.3 Townscape and Heritage

When selecting the site, consideration has been given to the existing function of the footway and the setting of the surrounding buildings. Where possible, the least sensitive location has been chosen. The proposed charging point will be viewed in the setting of the footway and will strengthen the transport and public function of this space.

Sheen Lane (East Sheen) Conservation Area (designated in 2002) can be found southeast of the proposed site. The area mainly consists of detached and semi-detached residential properties dating from 1900-1935 and is characterised by distinct groups of similar properties.

Holmesdale Avenue Conservation Area (designated in 2003) can be found northwest of the proposed site. The conservation area has an exceptional and attractive group of houses from the period between the 1890s and the early 20th century.

Model Cottages Conservation Area (designated in 1982) can be found northeast of the proposed site. It consists of quaint mid 19th century, two storey villas. The character of this group derives partly from the layout, the path access and long gardens, and

partly from the distinctive design of the houses.

350 Upper Richmond Road West and 352 Upper Richmond Road West are both Buildings of Townscape Merit. There are also clusters of Buildings of Townscape Merit in the vicinity of the site.

When assessing the RCP in the context of the conservation area and Buildings of Townscape Merit, it is considered that it has a neutral impact.

When considering the impact of the EV charging point, the public benefit derived from its installation is to be taken into account in line with paragraph 107 of the NPPF. The installation of this RCP is part of a wider network of charge points which seek to encourage people to convert to EVs, contributing to improving London's air quality and the health and well-being of those living in the capital city. It is therefore considered that this substantial public benefit outweighs any perceived impact that the EV charging point may be considered to have on the surrounding townscape.

Given the size, scale and location of the charging point, it is considered that it will integrate satisfactorily with the buildings in the immediate vicinity and not detract from the openness of the streetscape, as demonstrated by the existing rapid charger immediately east of the proposed site. As such, the charging point is considered to be compatible with the character and appearance of the surrounding area. The proposal therefore accords with Richmond's Local Plan Policies 2018.



5.4 Noise

The RCPs have 50kw of power so that they can charge cars quickly (20 minutes to achieve an 80% charge). As a consequence of the high power being carried by the electrical circuit a series of fans are required to dissipate the heat and provide air flow around the circuits.

The ESB / Chargemaster RCP proposed for installation at SITE is in our experience quieter than most other rapid chargers.

The Chargemaster unit does not generate any noise when not in use. Whilst it is charging the maximum noise level generated is less than 50dB at 1 metre (but it is controlled to reduce noise to a minimum). OR

The noise generated from the proposed ESB unit does not exceed 55dB when measured 1 metre from the charger.

(The unit is located XXm from the nearest residential property. Due to the distance from the RCP, the low noise level emitted from the unit and taking background noise levels into account there will be no impact on residential amenity).

Due to the low noise levels emitted and the background noise levels generated by passing traffic, the unit is unlikely to be heard above background noise levels in this area so there will be no impact on local amenity.

5.5 Trees

Trees are present in close proximity to the proposed docking station. TfL's Green Infrastructure team have assessed the site and have said that although the trees are present in close proximity to the proposed charger, they are stepped back from the edge of the footway and as long as consideration is given when fitting terminal, there will be limited impact. The proposed docking station will be located within the Root Protection Area (RPA) of [insert details] situated [insert details]. The trees are of [insert] age and are in [insert] physiological condition. A tree survey has been carried out and forms part of this application (BS5837:2012 Tree Survey Report, Incorporating Arboriculture Implications Assessment and Method Statement). Assuming that the measures outlined in the

Arboriculture Method Statement are adopted, it is considered that the proposed charging point would not detrimentally impact on trees within the vicinity of the development.

5.6 Flood Risk Assessment

The site is situated in Flood Zone 1 of the River Thames and is therefore considered to have a low risk of flooding. As a result, a Flood Risk Assessment (FRA) will not be needed. It is of note the small area of land the RCP will cover.



6. Application Summary

The proposal for an EV charging point on the footway outside 354-356 Upper Richmond Road West will contribute to the transformation of London into an exemplar sustainable city with a large uptake of ULEVs and public transport increasingly replacing the use of private vehicles.

The proposal will fully support national and local planning policies. It will contribute to the delivery of the infrastructure required to implement the Mayor's new licensing requirements for taxis and PHVs. Without this infrastructure, the uptake of ULEVs on London roads will be limited, delaying the UK's compliance with EU limit values for nitrogen dioxide (NO_2) and the UK's compliance with targets for carbon dioxide (CO_2) emission reduction.

The proposal will enable electric vehicles to recharge in as little as 20 minutes as opposed to 3-7 hours with the existing charge points, thereby minimising operational downtime and ensuring that vehicles operate in zero emission mode for as long as possible.

The proposal is in an easily accessible and convenient location for electric vehicles utilising this part of the Transport for London Road Network.

Use of the charging point and allocated parking space will raise no amenity concerns over and above those associated with general on-street car parking.

Sheen Lane (East Sheen), Holmesdale Avenue and Model Cottages Conservation Areas can be found in the surrounding Area. 350 Upper Richmond Road West and 352 Upper Richmond Road West are both Buildings of Townscape Merit. There are also clusters of Buildings of Townscape Merit in the vicinity of the site. The site is also within Character Area I: Upper Richmond Road West (East Sheen). Trees are located on the footway to the north of the site. TfL's Green Infrastructure team has assessed the site and consider that whilst the trees are in close proximity to the proposed charger, they are stepped back from the edge of the footway and as such, consider there will be limited impact from the installation of the infrastructure.

As part of the wider EVID project the proposal accords with the overarching government objective of promoting sustainable development through:

- Improving the air quality of London through a reduction in vehicle emissions which is one of the Government's key concerns at present;
- Meeting the challenges of climate change through the aforementioned reduction in vehicle emissions;
- Promoting and facilitating the use of more sustainable modes of transport;
- Providing a design that preserves the amenity and value of the existing street scene;
- Providing a design that is compatible with the surrounding area and preserves residential amenity;
- Providing a design which ensures that the development is compatible with the function of the street and which will not affect the safety of highway users or affect the flow of pedestrian or vehicular traffic in the area. The design will incorporate anti-graffiti and anti-crime measures; and
- Ensuring there are no adverse effects on the environment.



Appendix A: Construction Methodology

Duration and timing of works

The majority of the works (all works on footway & within bays) will be undertaken between the hours of 07:00 and 18:30 and will be completed within a 10-working day road open notice period.

Day I & 2: Site preparation and excavation/trenching works. All excavations will be undertaken by hand digging to minimise the risk of conflicts with buried utilities.

Day 3: Lay duct prep feeder pillar base

Day 4: Prep charger base

Day 5: Pour concrete reinstate

Day 6: New electrical connection work underway time scale TBC dependant on point of connection location.

Day 7: Feeder pillar install & charger cabling

Day 8: Charger installation/signage

Day 9: Bay marking

Day 10: Clear site & close notice

10 days after day 10 for the meter installation and charger commissioning.

The proposed site is adjacent to a busy TLRN road, with high levels of traffic noise at peak times. The impact of the construction works on surrounding receptors will therefore be low.

Impact on traffic and pedestrians

The works will be assessed on a site-by-site basis, impact to traffic lanes will be communicated. We will minimise where possible not to impact traffic lanes.

The existing parking bay will be utilised for material drop off/pick-ups. The parking bay will require suspension for the duration of the works between the hours of 07:00 and 18:30.

The existing footway is sufficiently wide for works to be undertaken with a partial footway closure only, whilst maintaining a minimum width of 1.2m minimum for pedestrians at all times. All works will be fenced off to prevent pedestrian access to the site with clear signage present on site to direct pedestrians around the works.

If at any time outside of peak traffic hours (i.e. 10.00 - 15.30 & 20.00 - 05.00) a temporary walkway of 1.2m cannot be achieved, a walkway will be provided in the carriageway through the use of barriers. A minimum walkway width of 1.2m will be maintained at all times during peak times .

Road marking works (subject to a separate Traffic Regulation Order application) will be undertaken at night to reduce disruption to the traveling public. These works will be undertaken under a temporary lane closure.