

Report Title:	Update on Pool Cars and Electric Vehicle Charging Points
Contains Confidential or Exempt Information?	NO - Part I
Member reporting:	Cllr Coppinger, Lead Member for Adult Services, Health and Sustainability and Cllr Bicknell, Deputy Leader of the Council and Lead Member for Highways and Transport
Meeting and Date:	Cabinet - 28 September 2017
Responsible Officer(s):	Andy Jeffs, Executive Director
Wards affected:	All

1. DETAILS OF RECOMMENDATION(S)

REPORT SUMMARY

1. This report provides an update and makes recommendations on the pool cars leased by the Royal Borough and Electric Vehicle Charging points.
2. The financial implications of delivering the recommendations are £7,000 revenue, and £10,000 capital budget.

RECOMMENDATION: That Cabinet notes the report and:

- i) **Delegates authority to the Executive Director in conjunction with the Lead Member for Adult Services, Health and Sustainability, and the Deputy Leader of the Council and the Lead Member for Highways and Transport to:**
 - a. **procure a new electric / hybrid pool car fleet of up to 10 cars**
 - b. **recommend to Employment Panel that new travel policies seeking to increase pool car use are adopted and embedded**
 - c. **identify a partner and develop a 'pilot' car club scheme**
 - d. **develop an on-street electric vehicle charging programme; consult with Ward Members; seek grant funding; procure a supplier and install**

2. REASON(S) FOR RECOMMENDATION(S) AND OPTIONS CONSIDERED

- 2.1 Cabinet considered a report on 27 April 2017 entitled '**Pool and Mayoral Cars and the introduction of Electric Vehicle Points**'. Cabinet resolved to:
 - i) *Delegate authority to the Interim Executive Director in conjunction with the Lead Member for Adult Services, Health and Sustainability, and the Deputy Leader of the Council and the Lead Member for Highways and Transport to:*

- a. *Terminate the existing pool car fleet at the end of the second year of the three year lease.*
 - b. *Carry out a review of the current mileage policy.*
 - c. *Procure a new electric/hybrid Mayoral car during 2018/19.*
 - d. *Assess the demand, identify suitable locations and install 10 on-street electric vehicle charging points.*
 - e. *Report to Cabinet in six months on a progress of work and future electric/hybrid pool cars.*
- 2.2 This report offers an update and recommends a way forward for pool cars and electric vehicle charging points.

Pool Cars

- 2.3 The Royal Borough currently has a fleet of 13-petrol powered Mini pool cars.
- 2.4 The original business case was based on:
- Each vehicle undertaking 10,000 miles a year. This level of usage offered efficiencies over existing mileage costs incurred by the council through the travel policy in relation to the use of Officers own cars for business mileage.
 - The pool car scheme being developed into a 'Car Club' allowing registered members of the public use at weekends, subject to establishing a successful scheme internally.
- 2.5 Following Cabinet resolution, the operator has been advised that existing vehicle leases will be terminated on the lease anniversary in January 2018 while options are considered to convert to an electric / hybrid pool car fleet and review the position on the 'Car Club' aspiration.
- 2.6 In parallel, the Royal Borough's Senior Leadership Team recommended a series of measures seeking to maximise the use of pool cars, thereby maximising value. Due recognition was given to the new operating models across the authority and the reduction in directly employed staff.
- 2.7 A review of the pool car scheme has been undertaken and it is recommended that:
- A new pool car scheme utilising the existing management and booking system with a reduced fleet of up to 10 vehicles* be introduced from January 2018
 - New electric / hybrid vehicles be leased with effect from January 2018 (the exact mix of these two options still to be finalised)
 - New staff travel policies and practices be adopted, to include:
 - Simplified registration process.
 - Relaunch the pool car scheme to existing mileage claimants
 - Require all existing mileage claimants to register as a pool car user
 - Send all new employees pool car information as part of their welcome pack
 - Require all mileage claimants to declare when they submit a mileage claim that a pool car was not available for all the journeys claimed
 - Every quarter require managers to review the mileage claimed by their team to confirm best use of pool cars.
 - For high mileage claimants (>1200 per month) set a 20% target to reduce their business mileage claims through the use of pool cars.
 - A 'Car Club' partner be identified and a 'pilot' scheme be established

(*the exact number of vehicles will be established taking into account the impact of the recommended new travel policies and seeking a cost neutral position)

2.8 The benefits of the recommended approach are:

- The Authority will become an exemplar employer encouraging and promoting the use of electric and hybrid vehicles – leading by example
- Increased use of the pool car scheme will maximise financial and environmental benefits
- A reduced fleet reflects a smaller directly employed staff base whilst retaining the opportunity to introduce a ‘car club’ scheme.
- An innovative ‘car club’ approach would make the pool cars available to residents in the evenings and at weekends. Not only would this help to improve the utilisation of the vehicles, but it would also help to reduce the need for car ownership amongst residents living in the town centre where the cars are based. It is recommended that a development partner be identified to launch a ‘pilot’ scheme as part of new build residential development linked to the regenerations programme

Electric vehicle charging points

2.9 Electric vehicle charging points are currently available in Hines Meadow car park and a project is in progress to install new points in the car parks at Windsor Leisure Centre; Braywick and Stafferton Way. New developments, including the new leisure centre at Braywick Park will also include electric charging points and will be future-proofed for further future expansion.

2.10 Government grant funding is available for residents to install electric charging points at their home subject to having dedicated off-street parking or a garage.

2.11 In January 2017 the On-Street Residential Grant Scheme was launched, with £2.5 million of funding available to local authorities to enable them to provide charge points for residential properties that do not have access to off-street parking.

2.12 Requests to date have been received for on-street points in Frances Road, Elm Road, Wood Close, Clarence Crescent, Windsor; Tangier Lane, Eton and Lynton Green, Maidenhead.

2.13 It is recommended that:

- Consultation be undertaken with Ward Members on each on the requested locations to consider the principle and final details for installing charging point in these locations
- Launch a public consultation to understand what level of demand and where this demand is located
- Develop and submit a bid for grant funding
- Install on-street charging points

2.14 The benefits of the recommended approach are:

- Responding to resident requests
- Assisting and encouraging the use of electric vehicles
- Demonstrating a commitment to electric vehicles in the longer-term through an ongoing programme of new on-street locations following consultation in a

manner that will not create complaints about private car parking spaces in on street locations when the number of electric vehicles is still relatively low.

2.15 Section 10 of this report (Background Information) offers further detail on pool cars and electric vehicle charging points.

Table 1: Option summary

Option	Comments
Pool Cars	
1. Retain existing vehicle fleet and do not convert to electric vehicles. Not the recommended option	This option is not recommended as it delivers no sustainability benefits.
2. Terminate the pool car scheme and offer no replacement Not the recommended option	This option is not recommended as it delivers no sustainability benefits and removes the option to introduce a car club scheme
3. Reduce the pool car fleet; convert to electric / hybrid vehicles; introduce new staff travel policies and develop a 'car club' scheme The recommended option	This option is recommended as it delivers sustainability benefits; improves the business case for pool cars and enables the authority to lead by example
Electric Vehicle Charging Points	
4. Assess each requested location; consult with Ward Members; seek grant funding and install on-street charging points. Launch a public consultation to develop a longer-term programme The recommended option	This option is recommended as it promotes and supports the use of electric vehicles delivering sustainability benefits and is responsive to residents.
5. Install no electric vehicle charging points and allow the market to develop through domestic and commercial installations. Not the recommended option	This option is not recommended as the promotion and support for electric vehicles may be reduced.

3. KEY IMPLICATIONS

3.1 Key Implications of the recommendations are set out in Table 2.

Table 2: Key implications

Outcome	Unmet	Met	Exceeded	Significantly Exceeded	Date of delivery
Pool Cars					
Vehicle mileage increases.	Mileage decreases	0 – 30%	31 – 40%	➤ 40%	30/09/18
Electric Vehicle Charging Points					
Implement 10 on-street charging points.	No points implemented	10	11 – 20	➤ 20	31/03/17

4. FINANCIAL DETAILS / VALUE FOR MONEY

Pool cars

4.1 Financial implications are detailed in table 3 and summarised in table 4.

Table 3: Financial details

Description	Costs	Costs
REVENUE		
Early termination of existing leases		£4,000
Removal of current vehicle lease costs (£4k X 13)	£(52,000)	
New electric vehicle lease costs (£6k X 10)	£60,000	
Fuel cost reduction	£(5,000)	
Net increased cost for electric vehicles		£3,000
		£7,000
CAPITAL		
Installation of 6 fast-charge charging points		£10,000

Revenue cost in 2017/18 expected to be £5,000 (lease termination plus part year effect of change of vehicle fleet)

Table 4: Financial impact of report's recommendations

REVENUE	2017/18	2018/19	2019/20
Addition	£5,000	£2,000	£0
Reduction	£0	£0	£0
Net impact	£5,000	£2,000	£0

CAPITAL	2017/18	2018/19	2019/20
Addition	£10,000	£0	£0
Reduction	£0	£0	£0
Net impact	£10,000	£0	£0

On-street electric vehicle charging points

- 4.3 There is zero cost to the Royal Borough to install and operate the on-street electric vehicle charging point programme as grant funding of 75% may be secured and suppliers have offered to fund the residual installation costs in return for the ongoing revenue stream.
- 4.4 If grant funding is unsuccessful, a bid for capital funding will be submitted to Members for consideration.

Indicative installation costs for each charging point are £5,000 for each location. The revenue income from the electricity used needs to be confirmed.

5. LEGAL IMPLICATIONS

- 5.1 Procurement of any new pool vehicles and electric charging points will be fully compliant and secured in accordance with legal requirements.
- 5.2 'Alphacity' currently deliver the pool car scheme which includes vehicles and the booking system. An electric vehicle option is available which will be explored. In parallel market testing will be undertaken to ensure value for money and legal compliance.
- 5.3 To secure grant funding for Charge Points, the bid must demonstrate that value for money has been achieved. Therefore, quotations or an open tender will be secured to ensure that the most cost effective solution is procured.

6. RISK MANAGEMENT

Table 4: Key Risks associated with recommendations

Risks	Uncontrolled Risk	Controls	Controlled Risk
Increased use of pool cars not achieved	High	New policies and practices introduced and embedded	Medium
Car Club scheme is not deliverable	Medium	Business case; consultation and securing a development will be completed prior to introduction	Low
Usage of electric vehicle charging points is low impacting on financial	High	Business case and consultation to be developed	Medium

Risks	Uncontrolled Risk	Controls	Controlled Risk
viability		prior to installation	
Creating dedicated on-street bays which are under or unused will remove valuable on street parking provision.	High	Identify suitable locations and use policies to minimise non use	Medium

7. POTENTIAL IMPACTS

- 7.1 Installation of electric / hybrid pool cars and on-street electric vehicle charging points will promote use of electric vehicles delivering for sustainability benefits and improvements in choice for residents.

8. CONSULTATION

- 8.1 This report will be considered by:
- The Highways & Transport and Corporate Overview and Scrutiny Panels on 21 September with comments reported to Cabinet for consideration.
 - Members of the Sustainability Panel will be invited to comment on the report which will be reported to Cabinet for consideration.
- 8.2 Consultation will be undertaken with Ward Members with respect to the location and final details of on-street charging points.

9. TIMETABLE FOR IMPLEMENTATION

- 9.1 Table 5 shows the stages and deadlines for implementation.

Table 5: Timetable for implementation

Date	Details
27 April 2017	Cabinet report - complete
28 September 2017	Cabinet Report
31 January 2018	New electric / hybrid pool car fleet to replace existing pool car fleet
1 April 2018	On-Street charging points operational
1 July 2018	'Car Club' launched

- 9.2 Implementation date if not called in: Immediately

10. APPENDICES

- 10.1 Appendix A – Pool Cars (Technical Note)

- 10.2 Appendix B – Electric Vehicles Charging Points (Technical Note)

11. **BACKGROUND DOCUMENTS:** None

12. CONSULTATION (MANDATORY)

Name of consultee	Post held	Date sent	Commented & returned
Cllr Coppinger	Lead Member for Adult Services, Health and Sustainability	25/08/17	29/08/17 – Report approved. Additional point regarding licensed taxis being explored
Cllr Bicknell	Deputy Leader of the Council and Lead Member for Highways and Transport	25/08/17	07/08/17
Alison Alexander	Managing Director	25/08/17	07/08/17
Russell O’Keefe	Executive Director	25/08/17	07/08/17
Rob Stubbs	Deputy Director Finance	25/08/17	07/08/17
Terry Baldwin	Head of HR	25/08/17	30/08/17
Andy Jeffs	Executive Director	25/08/17	04/09/17
David Scott	Head of Highways & Communities	25/08/17	25/08/17

Decision type: Non-key decision	Urgency item? No
Report Author: Ben Smith, Highways, Parks & Countryside Manager	

Appendix A

Technical Note

AlphaCity Electric Car Options

The current pool car scheme is operated by AlphaCity. As a subsidiary of BMW Group, the only vehicles it offers are made by BMW and MINI. These have the proprietary software used by the AlphaCity scheme built into the vehicles.

The only electric car currently available through the AlphaCity scheme is the BMW i3. There are two options – one pure electric and a range extender version, which is fitted with a petrol powered generator that charges the battery. An electric version of the MINI is planned, but it is not yet available.

AlphaCity is looking to develop a new service where they can utilise other manufacturers' vehicles (including vans) as part of their pool car schemes. Vehicles would have to be retro-fitted with the necessary equipment to permit keyless access and vehicle tracking as well as allowing remote communication and control. This functionality should be available from mid-2018. They have indicated that RBWM could take part in trials of the new system if this would be of interest.

Electric Car Capabilities

Range anxiety is a significant factor for electric car drivers. Table 1 below provides an analysis of the claimed and real world ranges for some of the most popular electric cars on the market. This shows that most electric cars are capable of making a 100 mile trip on a full charge.

Table 1: Electric Car Range

Car	Claimed Range	Real World Range
BMW i3 (electric)	195 miles	124 miles
BMW i3 (hybrid)	288 miles	217 miles
Hyundai Ioniq	174 miles	124 miles
Nissan Leaf (24 kWh)	124 miles	80 miles

Nissan Leaf (30 kWh)	155 miles	120 miles
Renault Zoe (22 kWh)	149 miles	106 miles
Renault Zoe (40 kWh)	250 miles	186 miles

RBWM Pool Car Fleet Analysis

Table 2 provides an analysis of the monthly mileage statistics for the RBWM pool car fleet. This shows that the average trip length is around 32.5 miles. Even two or three trips of this length per day would be within the capabilities of most electric cars. Also, AlphaCity has indicated that short recharge times can be built into the pool car schedule by leaving up to 1 hour between bookings, which provides added range and peace of mind for users, although it will result in a small reduction in utilisation.

Table 2: Analysis of RBWM Pool Car Mileage

Month	Total Mileage	No of Trips	Core Hour Utilisation	Ave Trip Length	Max Trip Length	No of 100+ Mile Trips	% of 100+ Mile Trips
Apr	6,012	195	N//A	30.8	222	5	2.6%
May	6,295	176	N//A	35.8	358	8	4.5%
Jun	7,082	179	N//A	39.6	295	13	7.3%
Jul	6,567	206	N//A	31.8	195	5	2.4%
Aug	6,894	245	N//A	28.0	202	3	1.2%
Sep	7,761	287	N//A	27.0	420	6	2.1%
Oct	8,111	277	N//A	29.3	487	9	3.2%
Nov	7,593	244	N//A	31.1	701	8	3.3%
Dec	5,026	183	23%	27.5	191	3	1.6%
Jan	6,857	249	30%	27.5	262	5	2.0%
Feb	8,924	277	35%	32.2	581	10	3.6%
Mar	11,172	307	30%	36.4	1,122	18	5.9%
Apr	7,116	211	27%	33.7	457	11	5.2%
May	8,611	238	26%	36.2	576	18	7.6%
Jun	8,714	233	31%	37.4	565	17	7.3%
Jul	7,390	209	23%	35.4	532	13	6.2%

Average	7508	232	28%	32.5	10	4.1%
Target*	10,833		40%			

* Based on an annual mileage of 10,000 miles per year for 13 vehicles

The current contract is based on an assumed mileage of 10,000 miles per annum per vehicle. Based on current trip lengths, a utilisation rate of around 40% is needed to reach the required annual mileage. However, the average utilisation rate is only 28%.

The analysis shows that typically, around 4% of trips are longer than 100 miles, and therefore may exceed the maximum range achievable on a single charge.

Refuelling is an option on longer trips. There is a growing network of publicly accessible charge points, with over 4,700 currently available across the UK. However, these are operated by over 20 different providers, each with their own access protocols, cost models and charge point types.

While some are free to use, others operate on a pay-as-you-charge basis or require a membership subscription. Physical access to the charge point is usually controlled via a smartphone app or RFID card.

The charge points themselves vary significantly in terms of their capabilities and connectivity. The most common types are:

- 3kW slow chargers that take around 8-12 hours for a full charge;
- 7kW fast chargers that take 3-5 hours to deliver a full charge; and
- 50kW rapid chargers that deliver an 80% charge in around 30 minutes.

The above factors coupled with uncertainties about individual charge point availability can make longer journeys more difficult and stressful, particularly for people who do not use electric cars on a regular basis.

Also, staff may occasionally take a pool car home overnight (e.g. after they have been to an evening meeting or if they are starting a journey from home the next day). They may not have the option to charge the vehicle from their property, particularly if they have no off-street parking.

For these reasons, it is recommended that RBWM does not go for a 100% EV pool car fleet and that some alternative provision be made by:

- retaining some petrol powered vehicles on the pool car fleet,
- providing dedicated vehicles for teams that regularly make long trips;
or
- utilising spot hire as and when required.

Car Club

The AlphaCity pool car scheme has the functionality to make the pool car vehicles available to residents in the evenings and at weekends, effectively acting as a car club. Not only would this help to improve the utilisation of the vehicles, but it would also help to reduce the need for car ownership amongst residents living in the town centre where the cars are based.

AlphaCity has indicated that credit card payment functionality can easily be added to the RBWM pool car scheme, which would allow third parties (including residents) to use the vehicles.

The council's insurance and risk manager has been consulted on the implications of insuring the pool cars for use in a car club. He has referred the matter to the council's insurers, who indicated that they would not be prepared to extend cover for usage of the vehicles in a car club under the existing policies, since this usage would not constitute council business.

The insurance companies raised a number of other points, which are summarised below:

- If the car club is used for income generation, then specialist "hire and reward" cover would be required.
- Insurers would want to see procedures in place for licence checks

- Some form of enhanced service/ maintenance regime may be required with more frequent checks and cleaning.

The insurance and risk manager will liaise with the council's insurance broker to see if there is any interest in insuring the car club separately to the existing fleet.

If the scheme were to be opened up for residents to use in the evenings and at weekends, and the vehicles were electric, then they would need to be parked in publicly accessible locations, such as public car parks. Locations such as North Yard behind the town hall would not be suitable.

Appendix B

Project:	RBWM Framework - Professional Services (Lot 3)	Job No:	100003635
Subject:	Electric Vehicle Charge Points		
Prepared by:	Gordon Oliver	Date:	20 July 2017
Approved by:	Paul Chandler	Date:	25 July 2017

1.0 Introduction

At their meeting on 27 April 2017, the Royal Borough's Cabinet resolved to: *'assess the demand, identify suitable locations and install 10 on-street electric vehicle charging points'*.

This note provides advice on the policy, technical and financial aspects and makes a recommendation for how to deliver the resolution.

2.0 Government policy and funding

The UK is among 13 international members of the Zero Emissions Vehicle Alliance to sign a commitment to promote cleaner motoring and slash transport emissions. By signing the agreement, the Government will work to ensure all new passenger cars and vans sold in the UK are zero emission, achieving this as quickly as possible, but no later than 2050.

In order to achieve this ambition, they are committed to investing £600 million to support ultra-low emission vehicles in the period 2016/17 to 2020/21. In addition to offering grants that help reduce the purchase price of new plug-in vehicles, the Office for Low Emission Vehicles (OLEV) is offering grants for home, workplace and on-street charge points in residential areas.

3.0 Rationale for providing on-street charge points

Department for Transport (DfT) research shows that recharging is the most important factor in putting people off buying an electric vehicle¹. Concerns include:

- The availability of charge points
- The lack of charge points in their area
- A lack of knowledge about where charge points are located

Evidence suggests that the majority of plug-in vehicle owners want to do most of their vehicle charging at home. The availability of affordable and

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551446/electric-vehicles-survey-2016.pdf

accessible domestic charging options is therefore key to increasing the uptake of plug in vehicle in the UK.

The Electric Vehicle Homecharge scheme allows residents to receive a grant towards the cost of installing a domestic charge points at their homes. In order to be eligible for the grant, they must have dedicated off-street parking in the form of a garage or driveway.

However, many areas of the UK have residential streets where properties have no off-street parking and residents must park on-street. In such cases, charging from home is not an option, since even if residents were able to park outside their own property, they would have to trail cables across the footway.

Provision of on-street charge points will help to address this issue and allow residents without off-road parking to consider plug-in vehicles.

4.0 Funding

The On-Street Residential Grant Scheme was launched in January 2017, with £2.5 million of funding available to local authorities to enable them to provide charge points for residential properties that do not have access to off-street parking. The funding is available on a first-come-first-served basis.

The grant pays for up to 75% of the capital costs of procuring and installing each charge point (up to a maximum of £7,500).

Capital items that can be funded include:

- The purchase cost of the charging unit
- The purchase cost of electrical components
- The cost of civil engineering works related to the installation
- Labour costs of the installation
- Hardware costs of the installation
- Capital costs of a parking bay and traffic orders (where applicable)

Local authorities can apply for grants to cover the capital costs of multiple charge points up to a maximum value of £100k.

The remaining 25% of the capital cost must be funded through other sources. Initial discussions suggest that suppliers may be willing to cover this, resulting in no net cost to the council.

5.0 Charge point types

The following charge point types are eligible for funding through the scheme:

- Slow AC (less than 3.5 kW):

- Currently, this is the most common way of charging an electric vehicle, with some on-street charge points being of this specification, as well as most domestic charge points.
- A full charge of an electric vehicle typically takes 6 to 8 hours, so it is generally only suitable for overnight charging.
- Standard AC (up to 7 kW):
 - 7kW charge points cut charge times in half compared to a slow charger by doubling the available current to 32A.
 - A full charge of an electric vehicle typically takes 3 to 4 hours.
 - Most public and on-street charge points are this type.
- Fast AC (up to 23kW) / Fast DC (up to 22kW):
 - These are less common than the standard charge points.
 - They typically use a three phase power supply to deliver 22kW.
 - A full charge of an electric car typically takes 1 to 1.5 hours.
 - These are useful for charging electric vehicles with larger batteries.

Rapid chargers that are capable of charging vehicles in 30-60 minutes are ineligible for funding through this scheme. These are mostly used at motorway service stations or other locations where drivers would want to stop-off on a longer journey and recharge in the shortest possible time.

It should be noted that quoted charge times will increase as car batteries get more powerful in response to consumer demand for increased vehicle range. While batteries of 24 – 30 kWh were standard a few years ago, batteries of 60 kWh or more are starting to become more commonplace. This means that slow chargers will become less useful and relevant in the medium to long-term and so standard or fast chargers should be considered.

Charge points are usually of a free-standing bollard design (although wall-mounted units are also available). They can have a single outlet or twin outlets that allow two cars to be charged simultaneously. OLEV indicates that twin outlet charge points should be provided wherever possible in order to maximise value for money.

Some local authorities have converted street lights to charge points, which have a 3 – 3.5kW output. This has the advantage of minimising street clutter, but these require users to purchase a special cable that provides the metering and communications functionality that are integrated into a standard charge point.

Also, this requires the street light to be located at the front of the footway. Within the Royal Borough, street lights tend to be installed at the rear of the

footway, since this maximises the available footway width, so this option may not be viable.

6.0 Assessing demand

Grants are intended to support local authorities in meeting the current and anticipated charging needs of residents. Therefore local authorities should establish that needs already exist or are anticipated, and could be met through the proposed charging infrastructure.

This could be demonstrated by having received multiple requests for charging infrastructure from local residents wishing to purchase plug-in vehicles, or strategic plans to promote EV ownership in a particular area.

It is for applicant authorities to confirm to OLEV their rationale and that they are content they have sufficient rationale to warrant the proposed infrastructure.

Once an OLEV grant award has been accepted by the applicant authority, the sites of the proposed charge points must not change without permission from OLEV.

To date, the Royal Borough has only received a handful of requests, with most of these relating to central areas of Windsor and Eton. There may be other people who are considering buying / leasing a plug-in vehicle who have not yet contacted the council.

Some form of public consultation may therefore be appropriate to gauge the level of interest amongst residents and to identify where they live. In the event that the council receives more requests than can be satisfied with the funding available, some form of prioritisation/ ballot may be required.

7.0 Parking restrictions

The Traffic Signs Regulations and General Directions 2016 makes provision for local authorities to designate a parking place for the recharging of electric vehicles. This ensures that other vehicles cannot park there and block access to the charge point. The OLEV guidance indicates that it is not essential for local authorities to designate electric vehicle only bays, but they do recommend it.

However, demand for on-street charge points is likely to be from terraced residential streets where there is often little / no spare parking capacity. In such circumstances, effectively allocating dedicated parking bays to a household with an electric vehicle could be seen as iniquitous, particularly if installed directly outside their property.

It should be noted that although a charge point may be requested by an individual, it is available for use by any vehicle that complies with the traffic regulation order that applies to the parking space.

The OLEV scheme is intended to provide reliable access to charging for local residents near their home. Whilst not required to secure funding, resident parking schemes or permits can help to prevent other people from using charge points when residents need access.

The various options and their implications are summarised below.

- Unallocated parking - Without designating a bay as an 'electric vehicle charging point only', other vehicles may legally park adjacent to the charge point and block access to it. However, some local authorities that have converted street lights to charge points have installed three units for each request received, giving residents a reasonable chance of accessing a charge point.
- EV charging only bay – This ensures that only electric vehicles may use the parking space when charging. This helps to avoid other vehicles blocking access to the charge point. However, it would be available to all EV owners, including non-residents.
- EV charging only bay for resident permit holders only – This limits charge point access to residents only. However, the charge points may be under-utilised during weekdays when residents are at work. Vehicles must be plugged in when using the bay and since most vehicles will not need to charge every day, this will add to the overall pressure on parking in the vicinity of the charge point.
- EV charging only bay for resident permit holders at night with access for all EV drivers in the day – This ensures that residents have access when they most want to charge their cars, but others can use the charge point when residents' demand is lower. This makes best use of the charge point.
- EV charging only bay plus limited max stay – Limited waiting (3 or 4 hours maximum) may help to reduce issues of EVs being parked longer than necessary in the bay, but it would potentially add to the overall parking pressure in the area. More powerful vehicles may not be able to fully charge in the time allowed. Also, residents may need to move their vehicles at inconvenient times in order to avoid a parking ticket. (Additional variants could include resident permit holder only restrictions at all / certain times.)

There is no 'correct' answer to the parking issue and the choice will need to be agreed with members and by taking account of responses received when the traffic orders are advertised.

It should be noted that the more complicated the restriction, the larger the sign and the more difficult it will be for members of the public to understand the restriction.

8.0 Operational issues

If charge points are to be made available to the wider public as well as residents, then the OLEV scheme guidance states that charge points must have 'Pay As You Go' functionality in addition to / instead of a subscription model.

It is important to minimise council input and ongoing involvement with the charge points, so it is recommended that any contracts be worded to ensure that the provider takes responsibility for all aspects of:

- Supply
- Installation
- Power
- Operation
- Customer communication
- Billing
- Maintenance and repair
- Decommissioning / replacement of the charge points at the end of their life

There should be clear instructions on the charge points for usage and fault reporting, and providers should have a 24 hour helpdesk, so the council does not receive unnecessary calls or emails from the public relating to the charge points.

9.0 Electrical supply issues

It is possible that clusters of charge points could cause problems for the power supply network if used simultaneously, particularly if they take a feed from the same sub-station. It is therefore recommended that SSE (as the local power distribution company) be consulted to understand what capacity issues currently exist.

9.1 Other issues

Prior to being approved, all sites where charge points have been requested will need to be inspected to ensure that:

- there is no off-road parking at the property
- there is sufficient clearance around the proposed charge point location to permit access along footway (street furniture should be installed 450mm back from the kerb edge)
- there is no conflict with existing utilities or highway drainage schemes
- installation will not cause damage to adjacent trees or property

The Town & Country Planning (General Permitted Development) (England) Order 2015, Schedule 2, Part 12 prescribes that Local authorities can install on-street electric vehicle charge points as permitted development.

However, the Planning Management Manager has indicated that the installation of vehicle charging points by a local authority would only be permitted if they are 'required in any public service administered by them' (i.e. only if the service is provided by the Council). As such, she has suggested that planning permission be secured prior to installation of the charge points. The Council may wish to take legal advice on this matter.

It is likely that at least some requests will come from residents living in

Conservation Areas. The Conservation Officer should be consulted on any design to be used in these areas. Charge point designs should be chosen so as to complement existing street furniture designs and colour schemes.

10.0 Procurement

In procuring the Charge Points, the council must demonstrate to OLEV that value for money has been achieved. The Council's Procurement Team has advised that procurement rules still apply to grant funded schemes where there is zero net cost to the council. Given the likely value of the scheme, they have confirmed that procurement could be by means of obtaining three quotes or via open tender.

11.0 Recommendations

It is recommended that the Royal Borough:

1. Undertake a public consultation to understand what level of demand there is for EV charge points and where this demand is located (a draft questionnaire is included in Appendix A).
2. Assess all sites where a request has been submitted from someone who has either already bought an electric vehicle or who is definitely considering replacing their car with an electric vehicle in the next 12 months. This should consider:
 - Availability of off-road parking
 - Footway width
 - Implications for services / drainage / street trees
3. Draw up a shortlist of sites through prioritisation / ballot to form the basis of an initial bid to secure OLEV grant funding.
4. Seek legal advice as to whether or not the installation of on-street charge points would be permitted development.
5. Agree the charge point specification in consultation with members and the Conservation Officer.

Consult with SSE to seek their views on any electricity supply issues associated with