

Committee(s): Markets Committee – For decision	Date(s): 08.05.2019
Subject: Rapid Electric Vehicle Charge Point Installation at Billingsgate Market	Public
Report of: Director of Markets and Consumer Protection	For Decision
Report author: Stefanie Hughes, Air Quality Officer & Rebecca Kleinknecht, Billingsgate Market Financial Admin Officer; Markets and Consumer Protection Department	

Summary

Electric Vehicle charge points are essential to enable the transition to zero emissions and zero emissions capable vehicles. Billingsgate Market has a heavy traffic flow with customers, deliveries and traders from which there has been demand for EV charging to be made available. The proposal is to install a Rapid EV charge point in the car park at Billingsgate for public use.

The proposal would support customer demand, the Mayor of London's Transport and Environment Strategies and the City of London's Responsible Business Strategy. It would enable the transition to zero emissions freight and taxis and could reduce air pollution levels in the area.

The charge point would not incur any costs for the City Corporation as installation and maintenance would be paid for by the supplier who will generate income through the usage of the charge point. The Corporation would receive a share of the profit from the charge point usage and a rental fee for the parking spaces, amount to be negotiated.

Recommendation(s)

Members are asked to:

Approve the installation of one Rapid EV charge point at Billingsgate Market car park and designating two parking spaces to its use, at no cost to the corporation and to rent the parking spaces to the supplier.

Main Report

Background

1. Rapid EV Charge points are needed to enable the transition to zero emission capable vehicles. The City of London's Draft Transport Strategy includes provisions for installing rapid EV Charge points within the square mile; however remote City Corporation sites such as Billingsgate Market, are not covered.
2. Billingsgate Market has received numerous requests from season permit holders for the installation of EV charge points for public use. All other local car park

providers have EV charging points.

3. The installation would support the Mayor of London's Transport Strategy and London Environment Strategy aims including the aim for London's entire transport system to be zero emissions by 2050. Furthermore, it supports the City of London's Responsible Business Strategy.
4. The transition to zero emissions vehicles is essential for improving air quality in London, which exceeds the legal limits in many areas, including the area around Billingsgate Market.
5. The uncertainty regarding the future of the current Billingsgate Market site has meant that many providers are not interested in quoting for the installation of a Rapid EV site. Most providers operate on a minimum 15-year lease which we are not able to accommodate. Neither are we proposing to pay for the infrastructure. This has meant that our negotiating position is compromised. The recommendation will be at zero cost to the City Corporation but is not a scheme that will provide any significant financial return.
6. Discussions have taken place with Spitalfields Market to establish if economies of scale could be applied to this project. However, the requirements at this site are for 'fast' charge points as part of a workplace scheme. The recommendation for Billingsgate is for rapid charge points that can be used as part of a commercial endeavour. Smithfield Market already has some EV charge points.

Current Position

7. Demand for the charge point has been regularly cited by the market's season permit holders who are keen to have one installed as soon as possible.
8. The proposals below have been agreed with the supplier.
9. The location of the bays has been determined and agreed with the supplier. A contract has been provided by the supplier to the Corporation and is being examined by the Comptroller and City Solicitor.
10. The City Surveyor's department have been consulted on the proposals and are reviewing the contract documents.
11. The limited duration of the lease we can offer compromises our negotiating position in terms of financial outcomes. The exact rental income and profit share is to be negotiated.

Options

12. Five TfL approved suppliers were approached regarding the potential installation of a rapid EV charge point at Billingsgate Market, two of which expressed interest in bidding for the contract. In keeping with standard practice of City of London Procurement, the three suppliers who did quote have not been asked for feedback on their lack of tender but it is assumed that the duration of the lease will have been a significant disincentive.

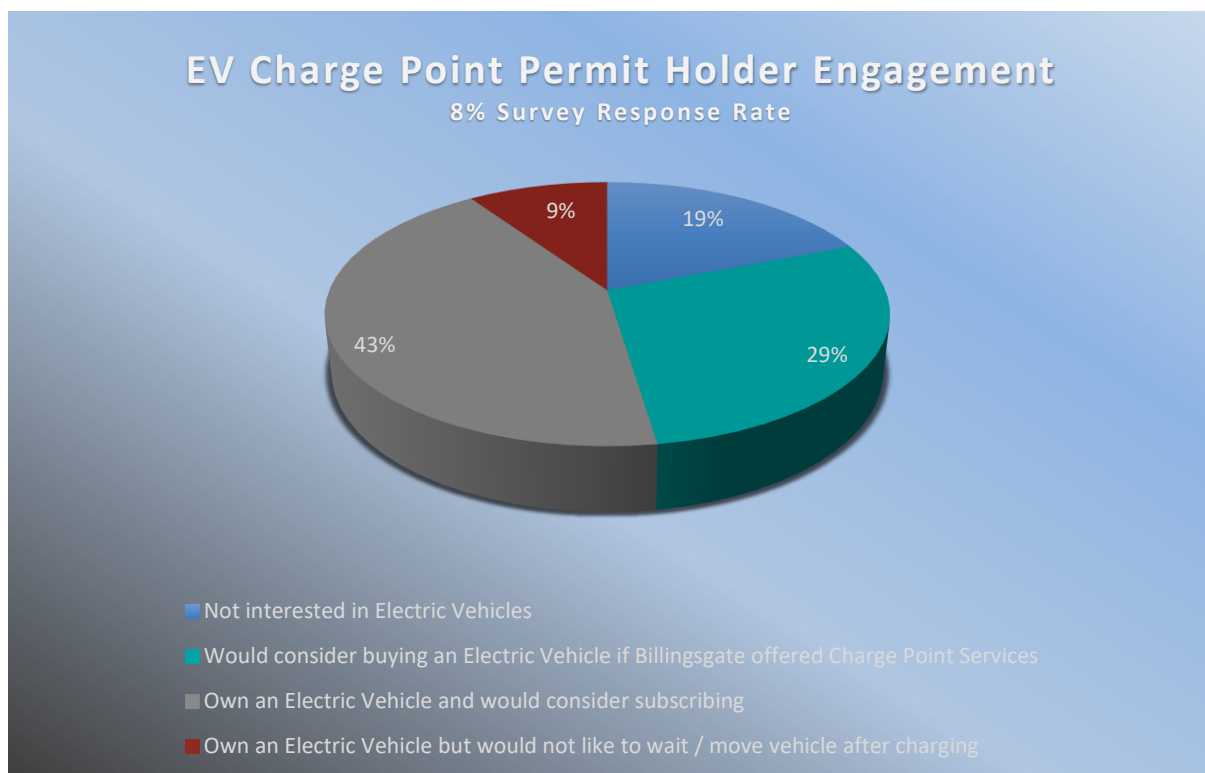
Supplier	Costs to CoL	Income to CoL	Comments
Supplier 1: Installation of 2 RAPID chargers	>£160k	Nil	Supplier required a location where a new electrical infrastructure would be required hence the high cost
Supplier 2- option 1: Installation of one FAST charger	>£22k	Nil	Installation of a FAST charger (not RAPID) for our own usage. Ongoing maintenance, management and electricity costs also to be paid by CoL. This solution could only service 4-6 vehicles per day if used very efficiently and is not an income generating scheme. Fast chargers require 3-4 hours to charge a vehicle and are therefore not an attractive option for permit holders
Supplier 2 – option 2: Installation of one RAPID charger that would service 2 vehicles simultaneously	Nil	% profit share scheme and rental fee for the parking spaces (amount to be negotiated dependent on duration of contract)	Customers to subscribe to supplier's scheme and pay a fee to supplier for usage. Ongoing maintenance, management and electricity costs paid for and arranged by the supplier

13. Supplier 2 option 2 is the supplier/option that has been progressed and we wish to proceed with. We have approached all five suppliers endorsed by TfL and this is the only feasible offer we have received that will satisfy all requirements. Although this project can easily be expanded if it proves to be successful, the supplier would like to start with two bays as installing another charger would cost an additional £20k.

14. The two allocated bays will be designated exclusively for EV charging. Any subscriber who remains in the bay longer than necessary will receive a penalty charge directly from the supplier. Any non EV vehicle found to be parked in these bays will receive a penalty charge from Billingsgate Security Enforcement.

Proposals

15. The proposal is to install one self-service Rapid EV charge point in the car park at Billingsgate Market (see appendix 1 for Map of location of installation). One charge point unit would serve two parking bays for two vehicles to be charged simultaneously.
16. This service provision is being pursued to satisfy requests from our permit holder customer base. Permit numbers are falling which has a significant impact on revenue from the parking business. (See appendix 3). Competition for parking business in Canary Wharf is fierce and our major competitors already provide EV charging, which puts us behind the curve. (See appendix 4.) A decision not to install EV charge points is a decision to divest in the parking business.
17. A survey of the permit holder database was undertaken to establish interest in EV charge points and willingness to use the service being proposed, the results of which are as follows:



18. Under normal circumstances, the supplier would pay Billingsgate a rental fee for the space, along with a percentage of profit. However, because we are unable to guarantee a longer rental period due to the markets move, the rent portion of the contract is under negotiation (see appendix 2 for the supplier's standard revenue projections).
19. The chosen supplier would install the charge point and cover maintenance costs of the charge point throughout the duration of the contract, therefore there are no costs to the Corporation.

20. Customers will pay a fee to the supplier to use the charge point. The supplier will pay the Corporation a share of the profit from the usage of the unit along with a flat fee for the rental of the bays. This is therefore an income generating scheme. However, the income is nominal compared to the value of the customers that we will retain and new customers we can attract by providing them with an option our competitors already do. Failure to do so will potentially cost us more in the long run.

Corporate & Strategic Implications

21. The proposal supports the following outcomes of the Corporate Plan 2018-2023:

- 11. We have clean air, land and water and a thriving sustainable natural environment
- 5. Businesses are trusted and are sustainable and environmentally responsible.

22. The proposal also supports the City's Responsible Business Strategy (RBS) 18-23, Outcome 2: the planet is healthier. Air Quality is one of the 8 priority areas in the Responsible Business Plan. Action 2.1.4 of the RBS action plan is to increase the number of electric vehicle charge points across our sites.

23. Failure to offer EV charge points to our permit holders will result in permit numbers and revenue potentially falling further. It is unlikely that we can remain competitive if we are unable to offer modern solutions that our competitors provide.

Implications

24. There would be no costs to the Corporation from the installation and maintenance and a small revenue will be received from the usage of the charge point (share of profit) and from the rental of the parking bays (amount to be negotiated).

25. We would enter into a legal agreement with the supplier to rent the two parking bays to them for usage of the charge point for a fixed duration. The risk is that we cannot commit to a long contract due to the uncertainty surrounding the relocation of the markets, therefore the number of years of the contract is still to be negotiated.

26. Due to the uncertainty around the future relocation of the market, and therefore our ability to commit to a standard lease term, our negotiating position is compromised. However, because the supplier is responsible for all associated costs, the business risk is entirely theirs with little or no risk to the City of London. The potential gains to be had from the permit holder business and the positive publicity far outweigh any cost, given that there is no negative financial impact.

27. Because of our proposed relocation, this endeavour is risky for the supplier and becomes less attractive as time progresses. This proposal is time sensitive and failure to respond in a timely fashion could mean that we miss the opportunity.

28. The charge point will be accessible for use by all so will have no equality impacts.

Conclusion

29. There is a need for the installation of Rapid EV charge points to support the transition to zero emission vehicles, to reduce air pollution in London and to support the Mayor of London's Transport and Environment Strategies.
30. There is demand from the Markets customer base and traders for a unit to be installed on site.
31. A suitable location and supplier have been selected and the installation would be of no cost to the Corporation. A small income can be made from the use of the charge point.
32. It is recommended to approve the plans for the installation of the charge point unit.

Appendices

- Appendix 1 – Billingsgate EV Charge Point Site Map
- Appendix 2 – Billingsgate EV Charge Point Revenue Projections
- Appendix 3 – Billingsgate Season Permit Growth Chart 2013-2018
- Appendix 4 - Canary Wharf Car Park Competitor Information

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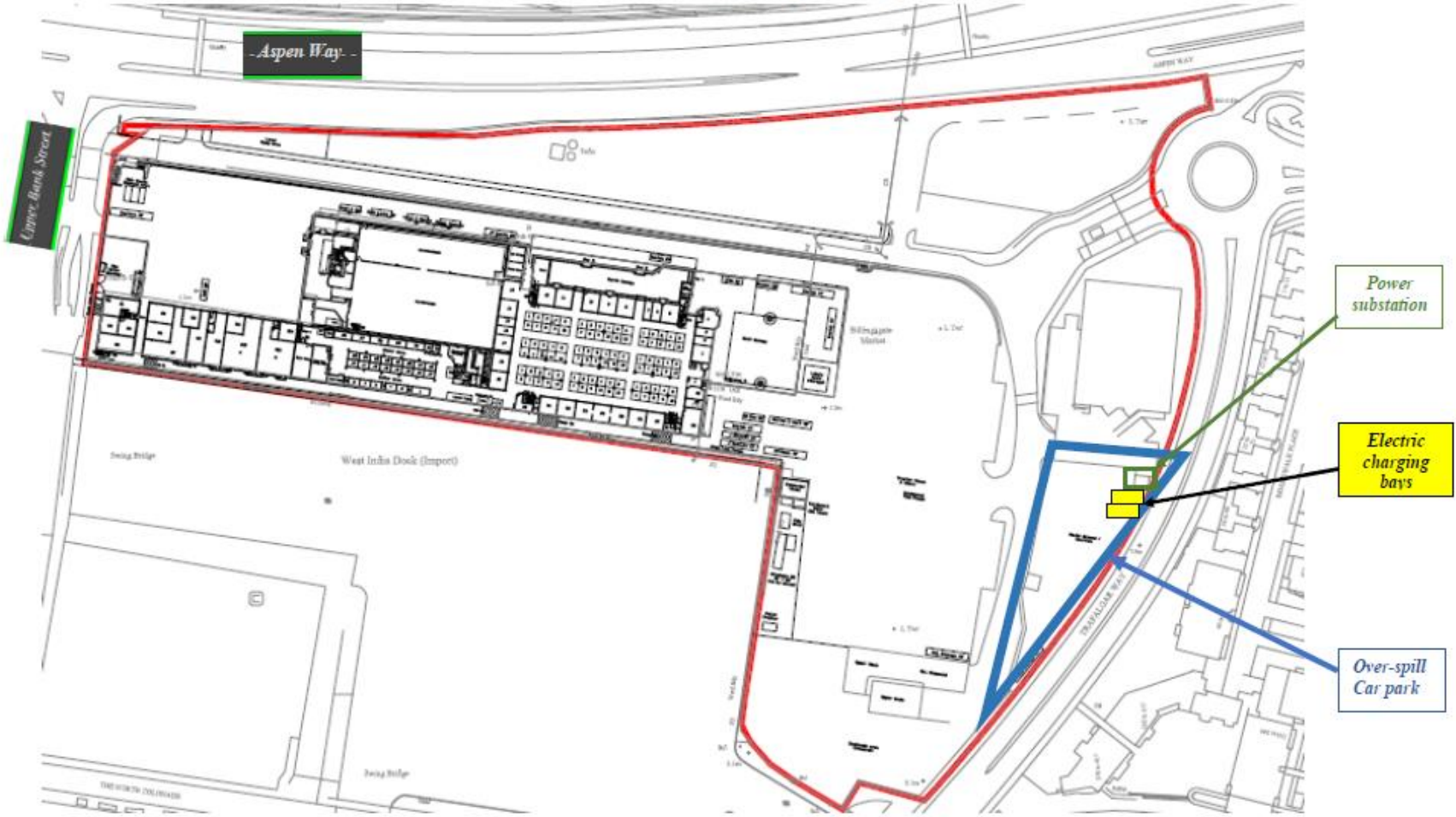
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APPENDIX 1

BILLINGSGATE MARKET SITE PLAN EV Charging Bays



APPENDIX 2

EV Charge Point Revenue Projections

			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14
1 Key assumptions and revenue drivers																
Inflation			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Charging Metrics																
Number of Rapid Chargers			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Charging events per day per CP	12.0	Max	2.00	3.00	4.20	5.67	7.65	10.33	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	Uptime															
Charging events	38.6%		720	1,080	1,512	2,041	2,756	3,720	4,320	4,320	4,320	4,320	4,320	4,320	4,320	4,320
kWh per charging event			12.0	14.5	16.0	18.0	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Electricity usage (kWh)			8,640	15,660	24,192	36,742	52,357	74,402	86,400	86,400	86,400	86,400	86,400	86,400	86,400	86,400
Tariffs (excl. VAT)																
Set up charge per charging event (£)	Rural		0.83	0.83	0.83	0.85	0.87	0.88	0.30	0.32	0.34	0.36	0.36	1.00	1.02	1.04
Charge per kWh (£)			0.25	0.25	0.25	0.26	0.26	0.27	0.28	0.28	0.28	0.29	0.29	0.30	0.30	0.31
Gross charging revenues per charging event (£)			3.83	4.46	4.83	5.44	5.81	6.19	6.31	6.44	6.57	6.70	6.83	6.97	7.11	7.25
Revenue from charging - Gross (£)			2,760	4,815	7,308	11,104	16,007	23,029	27,277	27,823	28,379	28,947	29,526	30,116	30,719	31,333
2 Costs																
Third party costs																
Host Revenue share (% of direct profit)	Rapid		10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Host - lease cost (£ per annum per charger)	10.0%		700	700	700	714	728	743	758	773	788	804	820	837	853	870
Electricity cost (£ per kWh)	0.120		0.120	0.120	0.120	0.120	0.120	0.122	0.125	0.127	0.130	0.132	0.135	0.138	0.141	0.143
Electricity standing cost (£)	20	per qtr	80	82	83	85	87	88	90	92	94	96	98	99	101	103
Insurance (£ per annum)	500		500	510	520	531	541	552	563	574	586	598	609	622	634	647
Maintenance (£ per CP per annum)	300		300	306	312	318	325	331	338	345	351	359	366	373	380	388
Maintenance (£ per CP per annum)																
3 Profit & Loss																
Charge event Revenue (gross) (£)																
Host Profit share (£)			2,760.0	4,815.0	7,308.0	11,104.1	16,007.1	23,028.8	27,277.3	27,822.8	28,379.3	28,946.9	29,525.8	30,116.3	30,718.7	31,333.0
Host - lease cost (£)			(34.3)	(214.4)	(360.2)	(587.6)	(888.8)	(1,306.9)	(1,562.1)	(1,593.3)	(1,625.2)	(1,657.7)	(1,690.8)	(1,724.7)	(1,759.2)	(1,794.3)
Electricity cost (£)			(700.0)	(700.0)	(700.0)	(714.0)	(728.3)	(742.8)	(757.7)	(772.3)	(788.3)	(804.1)	(820.2)	(836.6)	(853.3)	(870.4)
Electricity cost (£)			(1,116.8)	(1,360.8)	(2,386.3)	(4,433.9)	(6,369.4)	(9,195.1)	(10,877.0)	(11,094.5)	(11,316.4)	(11,542.7)	(11,773.6)	(12,009.0)	(12,249.2)	(12,494.2)
Refurb Maintenance (£)	4,000.0							(4,000.0)								
Exit costs Maintenance (£)																
Insurance (£)			(500.0)	(510.0)	(520.2)	(530.6)	(541.2)	(552.0)	(563.1)	(574.3)	(585.8)	(597.5)	(609.5)	(621.7)	(634.1)	(646.8)
Maintenance (£)			(300.0)	(306.0)	(312.1)	(318.4)	(324.7)	(331.2)	(337.8)	(344.6)	(351.5)	(358.5)	(365.7)	(373.0)	(380.5)	(388.1)
			(2,711.1)	(3,691.2)	(4,878.7)	(6,644.4)	(8,852.5)	(16,128.1)	(14,097.7)	(14,379.6)	(14,667.2)	(14,960.6)	(15,259.8)	(15,565.0)	(15,876.3)	(16,193.6)
Earnings before Interest, Tax, Depreciation and Amortisation (EBITDA) - before overheads			48.9	1,123.8	2,429.3	4,459.7	7,154.6	6,300.6	13,179.6	13,443.2	13,712.1	13,986.3	14,266.0	14,551.4	14,842.4	15,139.2
<i>EBITDA margin (%)</i>			<i>1.8%</i>	<i>23.3%</i>	<i>33.2%</i>	<i>40.2%</i>	<i>44.2%</i>	<i>38.8%</i>	<i>48.2%</i>	<i>48.2%</i>	<i>48.2%</i>	<i>48.2%</i>	<i>48.2%</i>	<i>48.2%</i>	<i>48.2%</i>	<i>48.2%</i>
4 Project Capex																
Project Costs (£)																
	Use	Source														
Up front - Site survey etc.	1,000	OLEV														
Hardware	20,000	Other														
Signage	500	Third Party														
Civil works	13,500	CPS														
Total	35,000	Total														
5 Cash flow and returns analysis																
EBITDA (excl CPS charges) (£)																
Capex			(35,000.0)													
Operating cash			(34,351.1)	1,123.8	2,429.3	4,459.7	7,154.6	6,300.6	13,179.6	13,443.2	13,712.1	13,986.3	14,266.0	14,551.4	14,842.4	15,139.2
Cumulative operating cash			(34,351.1)	(33,827.3)	(31,398.1)	(26,938.4)	(19,783.7)	(12,883.1)	296.5	13,739.7	27,451.8	41,438.1	55,704.2	70,255.5	85,097.9	100,237.2
Lease period (years)	10	Years	(34,351.1)	1,123.8	2,429.3	4,459.7	7,154.6	6,300.6	13,179.6	13,443.2	13,712.1	13,986.3				
Pre-tax IRR (10 Yr)	13.6%															
6 Host profit share calculation																
Charge event Revenue (gross) (£)																
Less: Direct costs			2,760.0	4,815.0	7,308.0	11,104.1	16,007.1	23,028.8	27,277.3	27,822.8	28,379.3	28,946.9	29,525.8	30,116.3	30,718.7	31,333.0
Electricity cost (£)			(1,116.8)	(1,360.8)	(2,386.3)	(4,433.9)	(6,369.4)	(9,195.1)	(10,877.0)	(11,094.5)	(11,316.4)	(11,542.7)	(11,773.6)	(12,009.0)	(12,249.2)	(12,494.2)
Data costs (£)	200		(200.0)	(200.0)	(200.0)	(204.0)	(208.1)	(212.2)	(216.5)	(220.8)	(225.2)	(229.7)	(234.3)	(239.0)	(243.8)	(248.7)
Excl Maintenance costs (£)	-	Exc														
Insurance (£)			(500.0)	(510.0)	(520.2)	(530.6)	(541.2)	(552.0)	(563.1)	(574.3)	(585.8)	(597.5)	(609.5)	(621.7)	(634.1)	(646.8)
Profit - basis for Host share calculation			343.2	2,144.2	3,601.5	5,875.6	8,888.4	13,069.4	15,620.8	15,933.2	16,251.8	16,576.9	16,908.4	17,246.6	17,591.5	17,943.3
Profit share			34.3	214.4	360.2	587.6	888.8	1,306.3	1,562.1	1,593.3	1,625.2	1,657.7	1,690.8	1,724.7	1,759.2	1,794.3

APPENDIX 3

BILLINGSGATE SEASON PARKING PERMITS GROWTH 2013 - 2018

		Q3 2013		Q4 2014		Q4 2015		Q4 2016		Q4 2017		Q4 2018	
	No of Days per Week	No of Permits	Net Value	No of Permits	Net Value	No of Permits	Net Value	No of Permits	Net Value	No of Permits	Net Value	No of Permits	Net Value
Annual	1	0	£0.00	1	£252.90	1	£252.90	1	£289.32	1	£295.11	2	£590.22
	2	2	£569.21	5	£2,529.04	3	£1,557.89	3	£1,704.38	5	£2,897.46	4	£2,317.97
	3	5	£3,733.32	6	£4,560.58	7	£5,493.06	5	£4,182.00	6	£4,828.43	7	£5,971.93
	4	4	£4,046.43	13	£13,150.91	12	£12,503.50	14	£15,318.22	18	£20,039.77	19	£21,213.13
	5	34	£39,199.76	44	£54,373.63	47	£60,342.47	55	£73,776.54	50	£66,090.58	41	£53,360.78
	TOTALS	45	£47,548.72	69	£74,867.07	70	£80,149.82	78	£95,270.45	80	£94,151.33	73	£83,454.02
Quarterly	1	3	£206.05	3	£175.14	2	£146.43	2	£161.08	0	£0.00	1	£82.15
	2	7	£935.28	6	£844.80	6	£805.38	7	£1,107.05	4	£645.23	3	£483.93
	3	14	£2,763.16	14	£2,965.13	13	£2,855.45	10	£2,328.25	14	£3,324.77	18	£4,890.35
	4	17	£4,064.64	23	£6,476.80	19	£6,312.41	18	£5,482.50	19	£5,977.21	23	£7,153.86
	5	77	£31,113.86	92	£38,241.18	108	£46,326.33	89	£39,573.90	92	£41,576.84	85	£38,556.69
	7	4	£1,200.00	5	£1,800.00	8	£2,980.51	8	£2,721.89	5	£1,616.68	2	£649.22
	WKEND	Trinity	£1,107.60	Trinity	£1,107.60	Trinity	£1,180.40	Trinity	£1,203.80	Trinity	£1,227.20		£1,227.20
TOTALS	122	£41,390.59	143	£51,610.66	156	£60,606.91	134	£52,578.48	134	£54,367.93	132	£53,043.39	
Monthly	1		£0.00	1	£26.33	1	£27.38	0	£0.00	1	£31.72	1	£31.72
	2		£0.00	3	£157.98	5	£273.83	1	£60.79	1	£62.31	1	£62.31
	3	2	£137.37	4	£315.93	3	£246.43	4	£358.13	1	£91.78	5	£458.88
	4	1	£91.58	9	£947.85	8	£876.20	15	£1,757.88	19	£2,290.71	21	£2,530.96
	5	3	£332.75	21	£2,678.73	45	£5,978.33	60	£8,246.57	57	£8,167.20	39	£5,642.86
	7		£0.00	1	£300.00	0	£0.00	0	£0.00	0	£0.00	0	£0.00
	TOTALS	6	£561.69	39	£4,426.81	62	£7,402.18	80	£10,423.37	79	£10,643.71	67	£8,726.72
Totals / Annual Income		173	£219,851.36	251	£334,431.43	288	£411,403.55	292	£430,664.75	293	£420,548.64	272	£383,664.96
% Growth From Previous Year				45.09%	52.12%	14.74%	23.02%	1.39%	4.68%	0.34%	-2.35%	-7.17%	-8.77%

APPENDIX 4

Car Park Competitor Information

WEST INDIA QUAY CAR PARK GENERAL INFORMATION

Hertsmere Road, London E14 4AN
020 7517 9388

Type: Underground
Number of spaces: 558
Safer Parking Award
Electric Charge Points
Sheltered Parking
CCTV
Security Lighting
Security Guards
24/7 Access

LONDON LAWN HOUSE CLOSE NCP CAR PARK GENERAL INFORMATION

Lawn House Close, London, E14 9YQ

Type: Multi-story
Number of spaces: 172
Electric Charge Points
Disabled bays
24hr Contact Centre
Security Lighting
Lifts
Card Accepted