Regeneration, Culture and Environment Overview and Scrutiny Committee

BRIEFING NOTE – No.07/21

Date: 2 November 2021

Briefing paper to: All Members of the Regeneration, Culture and Environment Overview & Scrutiny Committee

**Purpose:** To provide additional information in response to a request at RCE O&S Committee on street lighting

# Background:

At the meeting of the Regeneration, Community and Environment Overview and Scrutiny Committee on 12 August 2021 it was noted that further information, regarding street lighting would be circulated.

Information was requested as to whether the new lanterns, currently being installed, under the LED & Column replacement scheme, were in line with the 5G network and Electric Vehicle (EV) charging.

# Response:

5G and Central Management System

In respect of 5G, the lanterns are not 5G in themselves, in that they do not provide broadband technology.

The Central Management System (CMS), installed as part of the LED scheme, has several purposes, in relation to street lighting. Nodes on the lanterns talk to the back-office software and report faults with lighting units, energy use can be calculated and the back office software system programmed to adapt lighting on site, creating bespoke lighting (either increased or decreased) to suit an area, for example night time culture.

As part of Medway Council’s future “Smart City” aspirations, the CMS system was required to be open, with a platform beyond the lantern management, so that it could be used to support any future smart city aspirations.

In addition, we have installed an additional plug which allows for other devices, for example an air pollution monitor or a Wi-Fi unit for free hot spot internet, to be plugged in, thus allowing other providers the potential to use them.

Electric Vehicle (EV) Charging

The Council recognises the importance of implementing an infrastructure for on and off-street charging points for Electric Vehicles, a project that our Transformation Team were investigating, at the time the contract was procured.

In respect of the LED and Column replacement scheme, EV charging points were not specifically included because:

* It was not economically advantageous for the LED and Column Replacement Scheme to be delayed.
* Street lighting is one of several options for EV charging points and has a number of issues, which have to be considered, including:
  + the low level of energy trickle that a standard lantern can provide, which is not sufficient to recharge an electric vehicle
  + the impact to on street parking as it would require dedicated bays which would permanently reduce the amount of parking available on and already challenged network.

As such all options needed to be explored to ensure the “best fit” for Medway was realised. This included linking in with Regeneration ambitions, for example Future High Street bid, HIF to ensure a consistent and holistic approach.

* It would have taken a long time to work with partners, such as UK Power Networks and the Energy Savings Trust to ensure that there is capacity in the networks to support an EV charging infrastructure.
* Research was required to determine number and type of vehicles owned locally, that would benefit from EV charging points and the most appropriate place for these to be located to ensure it is viable for vehicle owners to be able to access and use them, as well as complementing any privately provided charging points, rather than to compete with them.
* There were other projects which needed to link into EV charging points, for example a smart agenda around parking.

Proceeding with the LED and Column Replacement programme ensured there were no delays to the deliverables and outcomes of the scheme, which includes:

* Energy avoided costs of £20,240,212 over the next 20 years.
* Carbon savings of 28188 tons over the next 20 years.
* Add significantly to our Climate Change Agenda because of those energy and carbons savings.
* A Central Management System that can adapt to “Smart City” functions for

the future.

* The cost of energy saved will servicing the entire debt repayment, including the replacement columns, over the 20-year life span of the lanterns.

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