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CITY OF CAMBRIDGE

Community Development Department

To: Louis A. DePasquale, City Manager

From: Iram Faroog, Assistant City Manager for Community Development

Re: Awaiting Report 19-59 dated 5/13/19 on Exploring a pilot for Level 1 (110V) EV and Micromobility charging stations on street light poles

throughout the city

Date: July 24, 2019

In response to the above-mentioned Awaiting Report 19-59, we submit the following. The City has made a commitment to support the transition to electric vehicle technology as one of the strategies for reducing greenhouse gas emissions in transportation. The majority of residents in Cambridge do not have dedicated off-street parking and the limited availability of electric vehicle supply equipment (EVSE) in the public right of way remains a key barrier to further adoption of EVs in Cambridge. This is supported by a 2015 study commissioned by Eversource that Cambridge participated in, "Accommodating Garage Orphans".

The City has been working for several years to expand publicly available EVSE, since we first received a state grant in 2012 to install publicly available charging stations. Since FY19 funding has been allocated for EVSE through the city's capital budget, including \$100,000 in the FY20 budget. These funds are being augmented by new electrical infrastructure provided by Eversource through its Make Ready program.

In early 2019, seven City-owned dual-head EVSE charging stations, capable of charging two vehicles at a time, were approved for installation. Three of these stations (Warren St/ Macarelli Way, 375 Green St and 420 Green St) were installed in May 2019 and four more installations are planned for summer 2019. This will bring the total number of City-owned public charging stations to 11.

A list of current and forthcoming City-owned charging stations is available at: https://www.cambridgema.gov/CDD/Transportation/programs/currentprograms/ electricvehicles.

There are also privately-owned EV charging stations available for public use throughout Cambridge. A map of all charging stations is available here: https://afdc.energy.gov/stations#/find/nearest.

In addition to the currently planned EVSE installations in public lots, planning is underway to lay out a strategy for further expanding charging infrastructure as well as to address other "new" mobility challenges. The Community Development Department earlier this year engaged a consultant team to develop a New Mobility Blueprint. The Blueprint is intended to address a wide variety of cross-

344 Broadway Cambridge, MA 02139 Voice: 617 349-4600 Fax: 617 349-4669

TTY: 617 349-4621 www.cambridgema.gov cutting transportation issues including shared and personally owned micromobility, autonomous vehicles, and electrification of transportation. A key element of the Blueprint is the development of an overall EV charging strategy and design of a residential charging pilot that will focus on providing charging options for residents without access to off-street parking. The EV strategy and pilot design are expected to be completed by the end of 2019.

The EV charging pilot design will evaluate and make recommendations related to the following elements and will be specific to the City's residential/neighborhood charging use case.

- 1. EVSE siting
- 2. Software and hardware products, including charging speed
- 3. Parking policies and regulations
- 4. Use fees
- 5. Ownership/partnership models
- 6. Synergies with electrification of other transportation sectors, and other City goals

There are multiple technology solutions beyond the type that is currently being installed in public lots (Level 2) that could address the lack of EV charging options for residents, including EV charging stations that use excess streetlight electricity supply, concierge style EV charging or battery exchange services, and expanded Level 3 fast charging in commercial settings. These will all be considered as part of the pilot design.

The development of the New Mobility Blueprint, including the EV charging strategy, will be informed by input from a technical advisory group (AG) newly appointed by the City Manager, as well as by input received from the general public. The AG consists of 18 members that come from a diverse set of backgrounds, experiences, and views, from researchers of automated vehicles and senior mobility needs to micro-mobility companies to local business owners to electric vehicle experts to complete streets professionals. Many members of the AG are also Cambridge residents. They will participate in meetings and discussions, review written material, and advise the City on trend analysis and forecasting, implementation blueprint development, electric vehicle charging pilot development, policy and regulatory strategy, and plans for future public engagement. All meetings are open to the general public.