

Memorandum

Rock Island Green Team



To: City Manager
Subject: Electric Vehicle (EV) Charging Infrastructure
Date: August 19, 2011
Number: 2011-243

The Green Team has reviewed possible locations in city-owned parking lots for electric vehicle (EV) charging infrastructure. The areas identified will serve as the initial demonstration locations of this pilot program and highlight the city's commitment to sustainability. The provision of such infrastructure for individuals using our parking facilities supports the city's goal to "provide examples and practices for private businesses and individuals to follow in having a more favorable impact on our environment" (Green Team Guide, July 2008).

The first of the two locations identified for demo EV charging infrastructure/parking is the city's downtown parking ramp located at 16th Street and 3rd Avenue. The other location is parking lot "C" located at 19th Street and 2nd Avenue. The parking spaces identified in each location shall be reserved for electric vehicle (EV) parking only.



Parking Ramp: 16th Street & 3rd Avenue



Parking Ramp: 16th Street & 3rd Avenue



Parking Lot "C": 19th Street & 2nd Avenue



Parking Lot "C": 19th Street & 2nd Avenue

The proposed parking ramp site is the first two metered parking spots from the northeast corner of the north building elevation. The second site is the first two metered parking spots from the southwest corner of parking lot "C" on 2nd Avenue. The electrical

costs to charge a typical electric vehicle (EV) battery will be approximately \$0.10. The two metered parking spaces in each location charge \$0.25/hr for parking. In the parking garage the electric vehicle supply equipment (EVSE) costs will total \$3,000; at parking lot "C" the EVSE costs will total \$4,400.



Several Illinois communities currently have charging infrastructure. Chicago, of course, has the most facilities of any Illinois city. However, the most comparable non-Chicago land communities with charging infrastructure are the town of Normal and the city of Champaign. Normal has two Level 2 charging stations available for public usage (as of 4/30/11) at its city hall location and three Level 2 charging stations at a university parking deck location. Champaign has four AVCON conductor charging stations located in a city owned parking deck location as well (as of 11/30/10).

Recommendation

The Green Team recommends that the City Council approve construction of electric vehicle (EV) charging infrastructure at four metered parking locations; two locations at the city parking ramp: 16th Street & 3rd Avenue, and two locations at parking lot "C": 19th Street & 2nd Avenue. The costs for the electric vehicle supply equipment will total approximately \$7,400. An approved City of Rock Island and National Association of Electrical Contractors (NECA) certified electrical contractor will donate the installation labor. The funding source will be the downtown TIF fund administered by the Community and Economic Development (CED) Department.

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Approved by: John C. Phillips, City Manager