

# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** David Sykes

**SUBJECT: SMARTPOLE PILOT  
PROJECT AND INNOVATIVE  
LED RFP UPDATE**

**DATE:** December 16, 2015

Approved



Date

12/17/15

## INFORMATION

This memo provides an update of the progress made to date on the Philips SmartPole Pilot Project and the Innovative LED RFP currently underway. The SmartPole pilot was approved by the City Council in February 2015, and the implementation efforts have been underway. The LED RFP which seeks to find creative private partnerships to convert the remaining 40,000 non-LED streetlights citywide was issued in August 2015.

## STATUS OF SMARTPOLE INSTALLATIONS

The pilot project includes the installation of 50 SmartPoles located in various areas of the City. Installation of the SmartPoles is being broken into three phases, or "clusters," to allow for the most efficient permitting and installation process. An update on each of the three phases follows below.

### **Phase I**

A total of 14 SmartPole locations were identified for this phase with nine poles in North San Jose on North First Street, three in the Downtown on S. Market Street, and two near Santana Row. Public outreach was conducted for each area to discuss and answer any questions about the details of the pilot project, including selected SmartPole locations, construction schedules, and the LED streetlight conversions. Attendance was light at the meetings and generally supportive of the pilot project. The first pole was installed on October 19, 2015 with cellular service beginning November 4. Installation of the final SmartPole in this phase was completed on December 1, 2015. A press conference was held on December 7, 2015 highlighting the pilot project.

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## **Phase II**

The second phase, consisting of 23 SmartPoles, is focused in Downtown (18 poles) and on The Alameda (5 poles). Community meetings for the Downtown and The Alameda installations were held on November 20, 2015 and November 24, 2015, respectively. Again, there was limited attendance with most participants expressing support for the project. However, there were several questions and comments during the November 24 meeting regarding possible public health and safety concerns with the SmartPoles. Philips and City staff explained that the SmartPole installations are in compliance with the FCC regulations, which are established to ensure that the public's health and safety are protected. Some members of the public suggested that the City Council and staff work to further understand any health and safety risks associated with telecom radio frequency emissions, and provide more opportunity for public discussion, as part of any future SmartPole or similar telecom projects. Locations have been identified for all of the planned 23 SmartPoles in Phase II, and Philips has begun the permitting process. Installation is expected to begin in mid-December and be completed in February 2016.

## **Phase III**

The third and final phase consisting of the remaining 13 SmartPoles was originally targeted for the The Alameda, Rose Garden and San Carlos Street areas. However, Philips is experiencing difficulty in identifying a sufficient number of locations for all 13 pole in those areas due to a variety of issues. As a result, Philips is now considering additional sites in North San Jose and exploring new locations in southeast San Jose. Staff is supporting Philips in this change because it is consistent with the original direction provided by the City Council for geographical and social equity. Like Phases I and II, community meetings will be held in each area where SmartPoles would be installed as part of this phase. Installation is expected to begin in February and be completed by the end of March 2016.

As mentioned above, Philips is having some difficulty in identifying a sufficient number of suitable locations within the originally identified project areas. Finding locations that meet the needs of the Philips' subtenant, Verizon Wireless, and that don't have other site constraints, like utility conflicts, development impacts, or sidewalk space limitations has been more challenging than anticipated. More than 40% of the sites proposed by Philips for SmartPoles are being removed from consideration after comprehensive engineering and field analysis by Philips and City staff. This is resulting in additional demands on staff time that was not contemplated in the original agreement, and it is slowing down the progress and overall completion of the project. Nonetheless, Philips and City staff are continuing to identify and analyze locations to reach the goal of installing 50 SmartPoles.

## **STATUS OF SMART POWER CONSUMPTION METER**

As a key part of the SmartPole Pilot Project, Philips agreed to work with PG&E to develop and install a wireless power consumption meter that would be completely concealed within the SmartPole structure. This “internal smart meter” would provide a tremendous opportunity for the City and others looking to access PG&E electrical service without needing to install costly and bulky service meters in the public right-of-way. As an interim step while the internal smart meter is being worked on, Philips and PG&E developed a smart meter that externally mounts on the top of the SmartPole structure. This first generation smart meter has been approved for use by PG&E as part of this pilot project, and it represents promising progress in smart meter technology. The agreement between the City and Philips requires that the next generation of internal smart meters be developed, approved by PG&E, and installed on the 50 SmartPoles by January 15, 2017.

One of the ongoing challenges is that PG&E’s current tariff structure does not allow for widespread adoption of these Smart Meters. Staff is recommending a new legislative priority as part of the December 15<sup>th</sup> discussion at Council that would focus on a legislative and regulatory change to allow immediate adoption of this technology. Changing the tariff structure and adopting Smart Meters will enable the City to allow additional “Smart City” technologies to emerge utilizing City streetlights and right-of-way.

## **LED STREETLIGHT CONVERSIONS**

A total of 750 streetlights are to be converted to LED streetlights by Philips as part of the SmartPole Pilot Project. Thus far, over 200 lights have converted as part of the Phase I SmartPole locations. The remaining lights associated with Phase I will be converted by the end of December. Staff is currently finalizing the streetlights that will be converted as part of Phase II and will begin identifying locations for Phase III once final SmartPole locations are decided. All 750 LED streetlight conversions are expected to be completed by April 2016.

## **INNOVATIVE LED RFP**

Between the SmartPole pilot, the ESCO project, and general DOT upgrades, approximately 23,000 standard light heads have been converted to LED. These lights are not only more energy efficient, they are also programmable which allows for additional management of the lights. In August 2015, the City issued a call for proposals entitled the “Innovative LED Streetlight Replacement RFP”. The goal of the RFP is to solicit private sector concepts for converting the remaining 40,000 streetlights to LED with little or no City cost.

At the request of the businesses that attended the Pre-Proposal conference, an interim step was added to the original process. The step allowed businesses to submit a 2 page concept description so that the City could provide feedback if a concept was feasible or not based on site constraints,

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bond funding issues, existing Council policy, state or local law, regulations and other conditions. Eleven proposals were received ranging from a broad range of industries including telecommunications, advertising, and solar. Staff is currently vetting these proposals and will be extending the response date on Phase I to January 8, 2016 (previously December 15, 2015) to better craft individualized responses. The full submittal date will also be pushed out to allow businesses sufficient time to incorporate City feedback in to their proposals. The new due date will be Friday, February 12, 2016 (previously, January 29, 2015). An amendment is being sent to all businesses registered on the bid management system alerting them to this schedule change.

A handwritten signature in black ink, appearing to read "D. Sykes", with a long horizontal line extending to the right.

DAVID SYKES

Assistant City Manager

For questions, please contact Teri Killgore, Assistant to the City Manager, at (408) 535-8102 or Kevin O'Connor, Interim Assistant Director of Transportation at (408) 535-3563.