

Final Report

Prepared for the Mobile Source Air Pollution Review Committee (MSRC) Under the AB 2766 Discretionary Fund Work Program

City of ALHAMBRA Level 2 EV Charging Stations

Contract No. ML18169A

Acknowledgements

The work upon which this project is undertaken was funded in part through a grant awarded by the South Coast Air Quality Management District (AQMD) Mobile Source Air Pollution Review Committee (MSRC)

> The initiative of the Alhambra past and present City Council: David Mejia, Mayor Katherine Lee, Vice Mayor Adele Andrade Stadler (former Mayor), Councilmember Ross Maza, Councilmember Jeffrey Maloney, Councilmember

> > And the contribution of: EV Charging Solutions EV Connect

This report is submitted in fulfillment of Contract ML18169A and to install a total of eighteen Electric Charging ports at three public parking structures in and by the City of Alhambra under the partial sponsorship of the Mobile Source Air Pollution Reduction Review Committee (MSRC).

Work was completed on December 1, 2020.

Disclaimer

The statement and conclusions in this report are those of the contractor and not necessarily those of the Mobile Source Air Pollution Reduction Review Committee (MSRC) or the South Coast Air Quality Management District (South Coast AQMD). The mention of commercial products, their sources or their uses in connection with material reported is not to be construed as either an actual or implied endorsement of such products.

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1. Project Description

The City of Alhambra is to install a total of eighteen Level 2 Electric Vehicle (EV) charging ports within the City downtown area. The charging ports shall be accessible to the public 24 hours per day, 7 days per week. Installation includes signage with information of whom to contact in the event that users encounter malfunctions. All stations meet current Society of Automotive Engineer J1772 standards. EV charging equipment and locations are as follows:

- 80 South First Street (4 regular ports + 2 handicap ports = 6 charging ports total)
- 26 North First Street (4 regular ports + 2 handicap ports = 6 charging ports total)
- 103 North Chapel Avenue (4 regular ports + 2 handicap ports = 6 charging ports total)

2. <u>Executive Summary</u>

Following the MSRC grant award, the City issued a Request for Proposals seeking to identify a qualified contractor to undertake the installation of the EV charging stations. EV Charging Solution was selected and construction documents were submitted to the City for Plan Check. Construction permits were issued in May 2020.

While the early stages of the permitting process and mobilization were impacted by the COVID-19 restrictions, construction progressed at a slower pace but uninterrupted from May through October and Final Certification was obtained in early November 2020.

On November 9, the Alhambra City Council approved a fee charge for the utilization of the charging ports and software installation and testing immediately followed allowing all stations to become operational and available to the public as of December 1, 2020.

3. <u>Problems Encountered</u>

Implementation of the grant contract was, by all means, successful and completed on schedule without any issues other than unexpected slowdown in the early stages due to the COVID-19 restrictions.

However, because of the pandemic requiring non-essential businesses to close operations to the public, the three parking structures where the construction took place were generally vacant. Therefore, the installation of electrical conduits and charging ports equipment was completed without disruption of parking availability or traffic circulation in a shorter period of time.

4. Project Description, Work Performed & Timeline

• On September 9, 2019, during a public hearing, the Alhambra City Council approved the issuance of a Request For Proposals (RFP) to identify a qualified contractor for the deployment of an EV charging station infrastructure. The RFP was issued on the following day, September 10 with the following timeline:

Activity	Dates
Release of request for proposals	09/10/19
Deadlines for question & comments period	09/20/19
Response to questions posted on City website	09/26/18
Mandatory Site Tour	09/27/19 – 9:00 AM
Proposal Due Date	Friday 10/18/19 – 4:00 PM
City review of proposals	Week of 10/21/19
Final Decision – City Council action	11/12/19

- On October 18, 2019, the City received a total of six proposals and evaluated all submissions, including reference checks, in the following weeks.
- On November 12, 2019, the City Council awarded a contract to EV Charging Solutions for the construction and networking of the charging stations.
- In January 2020, EV Solutions met with City staff tour the facilities, assess the electric power necessary for the project and prepare all required documents for approvals.
- On February 6, 2020, EV Solutions submitted construction documents for plan check.
- On May 21, 2020, EV Solutions obtained construction permits form Planning, Public Works, Fire and Building Departments for all 18 EV charging ports at all three locations. Construction commences.
- On November 3 and 12, 2020, construction is complete and a Certificate of Completion is granted.
- On November 9, 2020, Staff made a presentation to the City Council as part of a public hearing on the status update of the EV charging station construction and discussed a fee recovery study to sustain the power, maintenance and other related

cost to the on-going operations. During the public hearing of the items, several members of the community commented on the advantages of being able to charge in Alhambra and how it would contribute to clean air and positively stimulate the downtown commercial activity.

At the conclusion of the hearing, the City Council concurred with a staff recommendation of adopting a fee structure of \$0.28KWh power consumption and a \$3.00 idle time charge. Consumer will receive a text message alert at the conclusion of the vehicle charge allowing a 15 min. grace period to unplug the vehicle before the idle parking charge takes effect.

The software system is powered by EVConnect, which is a prevalent system in the region amongst charging equipment. The connection app is available free of charge in both IOS and Android platforms and allows payments with multiple credit cards.

- During the week of November 16, 2020, all charging equipment were powered and tested by the software company. Each of the 18 charging ports were individually identified with an ID number and QR code on each device. Either the ID number or QR code will enable a customer to start the charging process. Each port was also fitted with the system provider information and a 24hr. call center to resolve any issue there may be encountered with the equipment.
- Following the Thanksgiving holiday, by the end of the week of November 23, the testing process was successfully concluded and the charging ports were made available to the public on December 1, 2020.

5. <u>EV Chargers Benefits:</u>

The general public is becoming more and more accustomed to plug-in hybrid and allelectric vehicles as they gain more and more visibility in auto showrooms. Just like a smartphone, an EV can be connected to a charging port and be ready to use again in just a few hours without having to go to a gas station.

This project provides greater charging options to individuals on their way to downtown Alhambra shopping, working or simply enjoying the many dining opportunities in the area. The charging is simple, quick and easy to use.

However, EV's charging opportunities provide more than individual benefits. They contribute to providing a greater diversity of fuel choice available for transportation and thereby reduce our reliance on traditional petroleum. EV charging also reduce the emission that contributes to climate change and smog, improving public health and reducing ecological damage.

6. <u>Public Outreach:</u>

A public outreach plan was developed to advertise the charging station locations and availability as well as to promote their benefits to both owners of electric vehicles and the environment. The outreach will take place over the course of several weeks as it involves press releases, social media and web posting as well as partnership with local and regional organizations.

The intent is to "spread the word" to a vast area for an extended period of time in conjunction many partners during the Holiday season starting the week of December 14 and running through January 2021.

A detailed Public outreach Plan is submitted under separate cover.

7. <u>Summary and Conclusion</u>

This project represents the first set of EV charging opportunities available to the general public in the City of Alhambra. While eighteen EV charging ports may not seem a significant number, they are the first step toward a broader EV infrastructure. Its visibility and ease of use is also intended to change the mindset about hybrid vehicles and their reliance on few charging locations. This project will extend their driving range and reliability of locating an alternate fuel source.

Overall, this project went smoothly. EV Solutions, the contractors, was very experienced and managed the construction crew effectively for a timely completion. EV Connect, the software provider, is a prevalent software system in the region and is already well distributed amongst EV drivers.

The implementation of this project was very important for the City of Alhambra in order to respond to an increasing demand for EV support infrastructure and providing the latest technological advancement as possible in clean fuel alternatives.

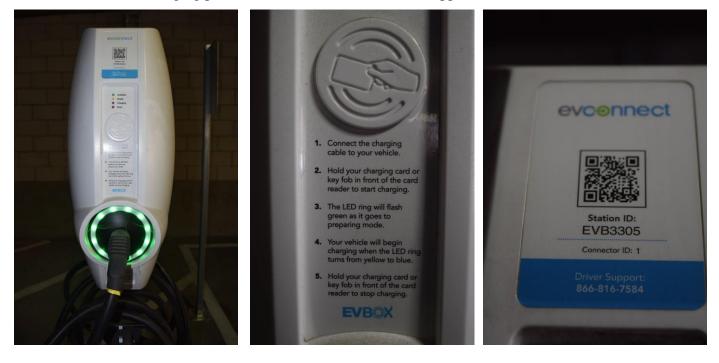
For additional information or questions, please contact:

CITY OF ALHAMBRA

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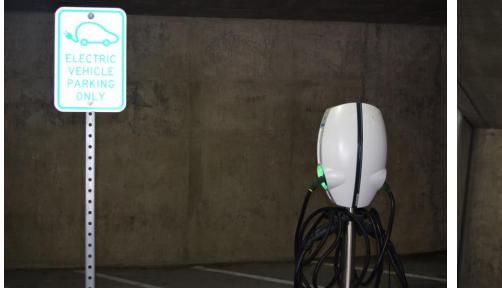
Attachments: Project Photos

Project Photos



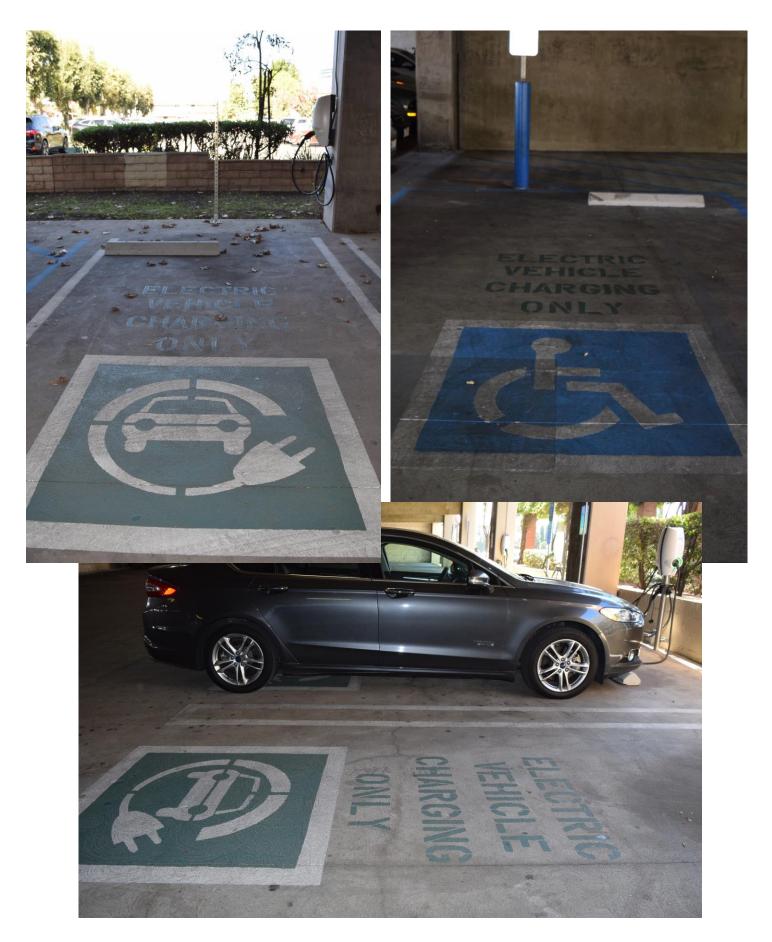
Standard charging port with utilization and customer support service information

Standard signage





Standard ground marking



80 S. First Street Parking Structure

