City of Coachella

Final Report
AB 2766 / Contract No. ML18176

Installation of New Electric Vehicle Charging Stations Project

Prepared for the Mobile Source Air Pollution

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

Clean Transportation Funding from the MSRC

Mobile Source Air Pollution Reduction Review Committee

Acknowledgements

City of Coachella City Council
City of Coachella City Manager
City of Coachella Engineering
City of Coachella Grants Manager
Voltaic Video Voice Data Communications
ChargePoint

This report was submitted in fulfillment of Contract No. ML 18176 and the Installation of New Electric Vehicle Charging Stations Project by City of Coachella under the partial sponsorship of the Mobile Source Air Pollution Reduction Review Committee (MSRC). Work was completed as of September 25, 2019.

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 (SCAQMD). The mention of commercial products, their sources or their uses in connection with material reported herein is not to be construed as either an actual or implied endorsement of such products.

Executive Summary

The Mobile Source Air Pollution Reduction Review Committee (MSRC) and the City of Chino have executed a Contract No. ML 18176 to install two (2) publicly accessible Electric Vehicle Charging Stations (EVCS). One station is a dual port Level II charging station located along Orchard Street near the old City Hall building and the other is a DC fast charging station located at the City of Coachella Public Library parking lot.

On June 13, 2018, the City Council authorized staff to make an application to the Mobile Source Air Pollution Reduction Review Committee's Local Government Partnership Program (Program) for the installation of two (2) electric vehicle charging stations for public use. The Program co-funds clean air projects that utilize AB 2766 Motor Vehicle Registration Fee Subvention Funds. The City's application was approved on October 23, 2018.

Due to the publicly bid Cooperative Purchase Agreement through Sourcewell, the City of Coachella was able to purchase the EV Charging equipment through Charge Point, Inc. at a pre-determined discounted cost. After final approval of the electrical and accessibility improvements plans, on March 27, 2019, City Council authorized and awarded the installation contract to Video Voice Data Communications utilizing the Mobile Source Air Pollution Reduction Review Committee's Local Government Match Program funds.

The Electric Vehicle Charging Stations are located at two separate parking lots adjacent to the City of Coachella's old City Hall facility located at 1515 Sixth Street, Coachella, CA 92236 and a parking lot adjacent to the City of Coachella Public Library located at 1500 Sixth Street, Coachella, CA 92236. The two (2) charging stations will provide a total of three (3) ports that are publicly accessible 24 hours a day, 7 days a week. The City's Electric Vehicle Charging Stations were installed without any issues and were completed on September 25, 2019.

Project Description and Scope of Work

The 2016 Air Quality Management Plan (AQMP) was designed as the regional blueprint for establishing the federal air quality standards for healthful air. As a result, the 2016 AQMP recognized how important it was to work with other agencies to develop funding and incentives that would encourage the accelerated transition to cleaner vehicles and mobility strategies. To "jumpstart" the awareness of the measures outlined in the 2016 AQMP the Mobile Source Air Pollution Reduction Review Committee (MSRC) offered to directly partner with cities and counties within the SCAQMD on a new program "Local Government Partnership Program".

The program concentrated on an accelerated transition to zero and near-zero vehicles, including the essential supporting infrastructure. The Local Government Partnership Program offers to partner with cities and counties that already participate in the AB 2766 Subvention Fund and the City of Coachella met that requirement and submitted an application for approval to install two (2) public electric vehicle charging stations. The MSRC notified the City of Coachella that the project was approved.

The project to install two (2) publicly accessible electric vehicle charging stations will be the first effort by the City to provide these charging stations for the City of Coachella's residents and its visitors. The location for the EV Charging Stations are:

EV Charger Type	# of Charging Stalls	# of Charging Ports	Location
Level II Charger (CT 4000)	2	2	1515 Sixth Street, Coachella, CA 92236
Fast Charging (CPE250 50kW)	1	1	1500 Sixth Street, Coachella, CA 92236

Procurement Process

Staff researched potential vendors, in acquiring the EVCS, by looking into features such as equipment costs, network outreach, including any incentive-based programs that could possibly be beneficial to the City.

Under the publicly bid cooperative purchase agreement through Sourcewell, the City was able to purchase the required equipment and maintenance plan from ChargePoint for this project. ChargePoint is an industry leader offering a customizable turnkey solution that also offers multiple annual maintenance plan options for purchase to up to five (5) years. Any year of a purchased prepaid Commercial Cloud Plan handles all network and software applications. Additionally, a prepaid ChargePoint Assure Plan covers the maintenance and management portion of the stations which helps to ensure a "worry free" atmosphere and provides the City with certainty it will meet the obligations of the operational availability requirements.

At this time, the City of Coachella opted to purchase the three (3) year Assure Plan to cover the purchased equipment with the option to renew for additional years, with an additional 2 years on the Level II charger. ChargePoint's offer of a mobile app and real-time data, makes it easy for the general public to find any one of their 25,000+ stations. ChargePoint provides world-class service products and support to keep stations online, provides 24/7 driver support, along with assistance in energy management to help keep energy costs down. The National Joint Powers Alliance (NJPA) awarded a contract to ChargePoint Inc. (contract #051017-CPI), for procurement and installation of Electric Vehicle charging stations as a result of open competitive bidding on behalf of its members, which includes government entities. The awarded contract is valid through 2021 and meets the City's purchasing requirements. Due to the complexity of the specifications, the use of a Cooperative Purchasing Agreement such as NJPA provides for a timely and cost effective purchase. Staff worked closely with ChargePoint to verify the best locations to install and connect these EV units.

Accessibility

Within the last few years, accessibility has become a major concern at the forefront of most municipalities. Despite continuous updates with the building code, accessibility compliance is critical to any new project utilizing pubic funding. As part of this project, accessibility from the newly installed EVCS to the nearest public entrance at both City Hall and the Public Library had to be reviewed for compliance. An accessibility survey was performed, and further inspection of the existing walkways were completed to confirm that additional work to the accessible route was required as part of the project. Staff worked closely with engineers from Video Voice Data Communications to verify and correct all areas of noncompliance as it related to the path of travel including slopes, cross slopes, ramps, landings, and transitions.

Emissions Benefits

ChargePoint uses Environmental Protection Agency (EPA) estimates in a formula that derives the greenhouse gas (GHG) emissions the EV motorist has prevented, based on how much EV motorists have charged their EV, which is a measure of how many miles they've driven on electricity instead of gasoline. Here are the estimates used in their calculation:

- ✓ Driving an internal combustion engine (ICE) vehicle emits 8.8 kg CO2 per gallon.
- ✓ The United States passenger car average fuel efficiency for ICE vehicles is 23.9 mi/gal (mpg).
- ✓ An electric vehicle has an average efficiency of 3.0 mi/kWh.
  [Note: This is ChargePoint's estimate based on data for several types of electric vehicles.]
- ✓ The United States average for emissions from generating electricity to fuel electric vehicles, is 1.55548 lbs CO2/kWh.
- ✓ CO2 is 95% of GHG emissions.

Combining these numbers, we get (19.4 × 3.0 / 23.9 – 1.55548) ÷ 95% = 0.9260 lbs/kWh = 0.42 kg/kWh of GHG Savings.

Photographs and Outreach

DC Fast Charger
Location:
City of Coachella Library
1500 Sixth Street
Coachella, CA 92236

Level II Charger
Location:
City Hall
1515 Sixth Street
Coachella, CA 92236

CITY OF COACHELLA
53990 ENTERPRISE WAY, COACHELLA, CA 92236
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PRESS RELEASE

FOR IMMEDIATE RELEASE:
October 1, 2019

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Administration Department

City of Coachella Installs New EV Charging Stations in its Downtown

COACHELLA, CA – To promote the use of clean air vehicles, the City of Coachella has installed two (2) electric vehicle charging stations (EVCS) for public use. The new chargers are located at the City Hall parking lot and the City of Coachella Public Library parking lot.

Thanks to more than $58,000 in Clean Transportation Grant Funding from the Mobile Source Air Pollution Reduction Review Committee (MSRC), the City installed two public access chargers. The MSRC grants funding from a $4 surcharge on vehicle license fees, specifically to be used for local projects designed to reduce air pollution from motor vehicles. Over its nearly 30-year history, the MSRC has distributed more than $440 million in funding to innovative clean air projects - like these EV chargers - throughout LA, Orange, Riverside and San Bernardino Counties that have helped to remove as much as 13,000 tons of air pollution from the skies of Southern California. The City will pay the remainder of the project through its General Fund.

The City of Coachella is committed to reducing greenhouse gas emissions by doing its part to improve regional air quality by installing electric vehicle charging stations for public use. The public can operate the chargers by setting up a free ChargePoint account. Reducing the level of nitrogen oxides in the air produced by gasoline and diesel engines is key to cleaning up the air and helping the community transition to electric vehicles will improve air quality for all. The City has four (4) electric vehicles in its fleet and will likely add more EVs as funding becomes available given the availability of these new chargers.

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@CityofCoachella
@YourCoachella

COACHELLA AT WORK

The City of Coachella is Charging Ahead with Electric Vehicle Charging Stations

DC Fast Charger
Location:
City of Coachella Library
1500 Sixth Street
Coachella, CA 92236

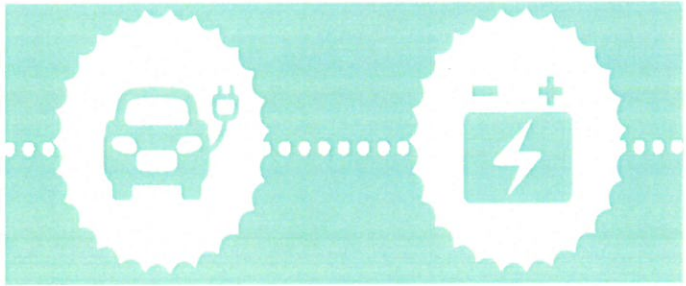
Level II Charger
Location:
City Hall
1515 Sixth Street
Coachella, CA 92236

COME ALONG FOR OUR ELECTRIC VEHICLE STATION LAUNCH AND LEARN ABOUT THE EXCITING FUTURE OF ELECTRIC TRANSPORTATION!

SUNDAY
10-06-2019
9AM - 12PM

GAZEBO AREA IN BACK OF LIBRARY

Clean Transportation Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee



Summary and Conclusions

The growth of the electrical vehicle industry is increasing. These charging stations provide a useful service to the public and demonstrates to the community the City of Coachella's commitment towards reducing air pollution-producing tailpipe emissions. This installation project consisted of two (2) EVCS at City Hall and the Coachella Public Library which are the first ones to be installed at a city owned facility that are available for public access 24/7. All EVCS are fully accessible to individuals who may need accessibility accommodations. A total of $84,809, not including City staff time, was expended on the completion of this project; a breakdown of the project costs is listed below.

	Level II Dual Station (City Hall)	**DC Fast Charger (Library)**	**Total**
ChargePoint Equipment	$ 6,747.00	$ 37,691.00	$ 44,438
ChargePoint Services	$ 4,705.00	$ 10,759.00	$ 15,464
Installation	$ 8,699.00	$ 16,208.00	$ 24,907
Total Upfront Costs	$20,151.00	$ 64,658.00	$ 84,809