

REQUEST FOR PROPOSALS

Item Description: ELECTRIC VEHICLE CHARGING INFRASTRUCTURE DESIGN & CONSTRUCTION – PARKS DEPARTMENT

Procurement/MinuteTraq #: 47432

Date to be opened: 12/16/2024

Issuing Department: Sustainability Department

QUESTIONS

- Please direct questions related to the bidding process, how to fill out forms, and how to submit a bid (Pages 1-10) to the Purchasing Department.
 - Email: <u>purchasing@providenceri.gov</u>
 - Please use the subject line "Solicitation Question"
- Please direct questions relative to the Minority and Women's Business Enterprise Program and the corresponding forms (Pages 11-12) to the MBE/WBE Outreach Director for the City of Providence, Grace Diaz
 - o Email: gdiaz@providenceri.gov
 - Please use subject line "MBE WBE Forms"
- Please direct questions relative to the specifications outlined (beginning on page 13) to the issuing department's subject matter expert:
 - o Name: Kevin Proft
 - o Title: Deputy Director of Sustainability
 - Email Address: kproft@providenceri.gov

Pre-bid Conference

There will be a Non-Mandatory Pre-Bid Conference. The pre-bid conference will be on-site at Roger Williams Park in Providence, RI. The pre-bid conference will be on November 18, 2024 at 9:00 a.m.

Deadline for questions submissions:

Questions about this RFP may be submitted through November 20, 2024. A response to questions will be provided in the form of an addendum by November 27, 2024.



INSTRUCTIONS FOR SUBMISSION

Meeting Date: 12/16/2024

Bids may be submitted up to **2:15 P.M.** on the above meeting date at the **Department of the City Clerk. Room 311, City Hall. 25 Dorrance Street, Providence.** At 2:15 P.M. all bids will be publicly opened and read at the Board of Contract Meeting in Conference Room 305, on the 3rd floor of City Hall.

- Bidders must submit 2 copies of their bid in sealed envelopes or packages labeled with the captioned Item Description and the City Department to which the solicitation and bid are related and must include the company name and address on the envelope as well. (On page 1).
- If required by the Department, please keep the original bid bond and check in only one of the envelopes.
- Communications to the Board of Contract and Supply that are not competitive sealed bids (i.e. product information/samples) should have "**NOT A BID**" written on the envelope or wrapper.
- Only use form versions and templates included in this solicitation. If you have an old version of a form do not recycle it for use in this bid.
- The bid envelope and information relative to the bid must be addressed to:

Board of Contract and Supply Department of the City Clerk – City Hall, Room 311 25 Dorrance Street Providence, RI 02903

******<u>PLEASE NOTE</u>: This bid may include details regarding information that you will need to provide (such as proof of licenses) to the issuing department before the formalization of an award.

This information is <u>NOT</u> requested to be provided in your initial bid by design.

<u>All bids submitted to the City Clerk become public record</u>. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record. The City has made a conscious effort to avoid the posting of sensitive information on the City's Open Meetings Portal, by requesting that such sensitive information be submitted to the issuing department only at their request.



BID PACKAGE CHECKLIST

Digital forms are available in the City of Providence Purchasing Department Office or online at http://www.providenceri.gov/purchasing/how-to-submit-a-bid/

The bid package **MUST** include the following, in this order:

- Bid Form 1: Bidder's Blank as the cover page/ 1st page (see page 6 of this document)
- Bid Form 2: Certification of Bidder as 2nd page (see page 7 of this document)
- Bid Form 3: Certificate Regarding Public Records (see page 8 of this document)
- Bid Form 4: Affidavit of City Vendor (*see pages 9 and 10 of this document*)
- Forms from the Minority and Women Business Enterprise Program: Based on Bidder Category. See forms and instructions enclosed (pages 11-12) or on: <u>https://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/</u>

Please note: MBE/WBE forms must be completed for EVERY bid submitted and must be inclusive of <u>ALL</u> required signatures. Forms without all required signatures will be considered <u>incomplete</u>. Firms that will not meet the City's goal of 20% M/WBE must obtain a waiver from the City's MBE/WBE Outreach Director. The approved waiver must be submitted with the bid.

- Signed Addenda: All addenda to this RFP must be signed and submitted with the bid.
- Bidder's Proposal/Packet: Formal response to the specifications outlined in this RFP, including pricing information and details related to the good(s) or service(s) being provided. Please be mindful of formatting responses as requested to ensure clarity.
- Financial Assurance, *if requested* (as indicated on page 5 of this document under "Bid Terms")

All of the above listed documents are **REQUIRED**. (With the exception of financial assurances, which are only required if specified on page 5.)

***Failure to meet specified deadlines, follow specific submission instructions, or enclose all required documents with all applicable signatures will result in disqualification, or in an inability to appropriately evaluate bids.



NOTICE TO VENDORS

- 1. The Board of Contract and Supply will make the award to the lowest qualified and responsible bidder.
- 2. In determining the lowest responsible bidder, cash discounts based on preferable payment terms will not be considered.
- 3. Where prices are the same, the Board of Contract and Supply reserves the right to award to one bidder, or to split the award.
- 4. No proposal will be accepted if the bid is made in collusion with any other bidder.
- 5. Bids may be submitted on an "equal in quality" basis. The City reserves the right to decide equality. Bidders must indicate brand or the make being offered and submit detailed specifications if other than brand requested.
- 6. A bidder who is an out-of-state corporation shall qualify or register to transact business in this State, in accordance with the Rhode Island Business Corporation Act, RIGL Sec. 7-1.2-1401, et seq.
- 7. The Board of Contract and Supply reserves the right to reject any and all bids.
- 8. Competing bids may be viewed in person at the Department of the City Clerk, City Hall, Providence, immediately upon the conclusion of the formal Board of Contract and Supply meeting during which the bids were unsealed/opened. Bids may also be accessed electronically on the internet via the City's <u>Open Meetings Portal</u>.
- 9. As the City of Providence is exempt from the payment of Federal Excise Taxes and Rhode Island Sales Tax, prices quoted are not to include these taxes.
- 10. In case of error in the extension of prices quoted, the unit price will govern.
- 11. The contractor will **NOT** be permitted to: a) assign or underlet the contract, or b) assign either legally or equitably any monies or any claim thereto without the previous written consent of the City Purchasing Director.
- 12. Delivery dates must be shown in the bid. If no delivery date is specified, it will be assumed that an immediate delivery from stock will be made.
- 13. A certificate of insurance will normally be required of a successful vendor.
- 14. For many contracts involving construction, alteration and/or repair work, State law provisions concerning payment of prevailing wage rates apply (<u>RIGL Sec. 37-13-1 et seq</u>.)
- 15. No goods should be delivered, or work started without a Purchase Order.
- 16. Submit 2 copies of the bid to the City Clerk, unless the specification section of this document indicates otherwise.
- 17. Bidder must certify that it does not unlawfully discriminate on the basis of race, color, national origin, gender, gender identity or expression, sexual orientation and/or religion in its business and hiring practices and that all of its employees are lawfully employed under all applicable federal, state and local laws, rules and regulations. (See Bid Form 2.)



BID TERMS

- Financial assurances may be required in order to be a successful bidder for Commodity or Construction and Service contracts. <u>If either of the first two checkboxes below is checked, the specified assurance</u> <u>must accompany a bid, or the bid will not be considered by the Board of Contract and Supply</u>. The third checkbox indicates the lowest responsible bidder will be contacted and required to post a bond to be awarded the contract.
 - a) A certified check for **\$____** must be deposited with the City Clerk as a guarantee that the Contract will be signed and delivered by the bidder.
 - b) A bid bond in the amount of _____ per centum (%) of the proposed total price, must be deposited with the City Clerk as a guarantee that the contract will be signed and delivered by the bidder; and the amount of such bid bond shall be retained for the use of the City as liquidated damages in case of default. Any person signing a bid bond as an attorney-in-fact shall include with the bid bond an original, or a photocopy or facsimile of an original, power of attorney.
 - c) \square A performance and payment bond with a satisfactory surety company will be posted by the bidder in a sum equal to one hundred per centum (100%) of the awarded contract.
 - d) No financial assurance is necessary for this item.
- 2. Awards will be made within **nighty (90) days of bid opening**. All bid prices will be considered firm, unless qualified otherwise. Requests for price increases will not be honored.
- 3. Failure to deliver within the time quoted or failure to meet specifications may result in default in accordance with the general specifications. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents, and Acts of God.

The following entry applies only for COMMODITY BID TERMS:

4. Payment for partial delivery will not be allowed except when provided for in blanket or term contracts.

The following entries apply only for CONSTRUCTION AND SERVICE BID TERMS:

- 5. Only one shipping charge will be applied in the event of partial deliveries for blanket or term contracts.
- 6. Prior to commencing performance under the contract, the successful bidder shall attest to compliance with the provisions of the Rhode Island Worker's Compensation Act, <u>RIGL 28-29-1</u>, et seq. If exempt from compliance, the successful bidder shall submit a sworn Affidavit by a corporate officer to that effect, which shall accompany the signed contract.
- 7. Prior to commencing performance under the contract, the successful bidder shall, submit a certificate of insurance, in a form and in an amount satisfactory to the City.



BID FORM 1: Bidders Blank

- 1. Bids must meet the attached specifications. Any exceptions or modifications must be noted and fully explained.
- 2. Bidder's responses must be in ink or typewritten, and all blanks on the bid form should be completed.
- 3. The price or prices proposed should be stated both in **WRITING** and in **FIGURES**, and any proposal not so stated may be rejected. **Contracts exceeding twelve months must specify annual costs for each year.**
- 4. Bids **SHOULD BE TOTALED** so that the final cost is clearly stated (unless submitting a unit price bid), however **each item should be priced individually**. Do not group items. Awards may be made on the basis of *total* bid or by *individual items*.
- 5. All bids MUST BE SIGNED IN INK.

Name of Bidder (Firm or Individual):

Contact Name:
Business Address:
Business Phone #:
Contact Email Address:
Agrees to bid on (Write the "Item Description" here):
If the bidder's company is based in a state other than Rhode
Island, list name and contact information for a local agent
for service of process that is located within Rhode Island
Delivery Date (if applicable):
Name of Surety Company (if applicable):
Total Amount in Writing*:
Total Amount in Figures*:
*If you are submitting a unit price bid, please insert "Unit Price Bid"
Use additional pages if necessary for additional bidding details.

Signature of Representation



BID FORM 2: Certification of Bidder

(Non-Discrimination/Hiring)

Upon behalf of	(Firm or Individual Bidding),
I,	(Name of Person Making Certification),
being its	(Title or "Self"), hereby certify that:

- 1. Bidder does not unlawfully discriminate on the basis of race, color, national origin, gender, sexual orientation and/or religion in its business and hiring practices.
- 2. All of Bidder's employees have been hired in compliance with all applicable federal, state and local laws, rules and regulations.

I affirm by signing below that I am duly authorized on behalf of Bidder, on

this_____day of_____20___.

Signature of Representation

Printed Name



BID FORM 3: Certificate Regarding Public Records

Upon behalf of	(Firm or Individual Bidding),
I,	(Name of Person Making Certification),
being its	(Title or "Self"), hereby certify an

understanding that:

- 1. All bids submitted in response to Requests for Proposals (RFP's) and Requests for Qualification (RFQ's), documents contained within, and the details outlined on those documents become public record upon receipt by the City Clerk's office and opening at the corresponding Board of Contract and Supply (BOCS) meeting.
- 2. The Purchasing Department and the issuing department for this RFP/RFQ have made a conscious effort to request that sensitive/personal information be submitted directly to the issuing department and only at request if verification of specific details is critical the evaluation of a vendor's bid.
- 3. The requested supplemental information may be crucial to evaluating bids. Failure to provide such details may result in disqualification, or an inability to appropriately evaluate bids.
- 4. If sensitive information that has not been requested is enclosed or if a bidder opts to enclose the defined supplemental information prior to the issuing department's request in the bidding packet submitted to the City Clerk, the City of Providence has no obligation to redact those details and bears no liability associated with the information becoming public record.
- 5. The City of Providence observes a public and transparent bidding process. Information required in the bidding packet may not be submitted directly to the issuing department at the discretion of the bidder in order to protect other information, such as pricing terms, from becoming public. Bidders who make such an attempt will be disqualified.

I affirm by signing below that I am duly authorized on behalf of Bidder, on

this ______ day of ______ 20____.

Signature of Representation

Printed Name



BID FORM 4: Affidavit of City Vendor

Per our Code of Ordinances Sec. 21.-28.1 (e), this form applies to a) the business, b) any political action committee whose name includes the name of the business, c) all persons holding ten (10) percent or greater equity interest or five thousand dollars (\$5,000.00) or greater cash value interest in the business at any time during the reporting period, d) all executive officers of the business entity, e) any spouse or dependent child of any individual identified in a) though d) above.

Executive officers who are not residents of the state of Rhode Island are exempted from this requirement.

Per <u>R.I.G.L. § 36-14-2</u>, "Business" means a sole proprietorship, partnership, firm, corporation, holding company, joint stock company, receivership, trust, or any other entity recognized in law through which business for profit or not for profit is conducted.

Name of the person making this affidavit: _______
Position in the "Business" ______
Name of Entity ______
Address: ______
Phone number: ______

The number of persons or entities in your entity that are required to report under Sec. 21.-28.1 (e):

Read the following paragraph and answer one of the options:

Within the 12 month period preceding the date of this bid submission with the City of Providence, or with respect to the contracts that are not in writing within the 12 month period preceding the date of notification that the contract has reached the \$100,000 threshold, have you made campaign contributions within a calendar year to (please list all persons or entities required under <u>Sec. 21.-28.1 (e)</u>).

a. Members of the Providence City Council? \Box Yes \Box No

• If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):

Contribution Amount(s):

b. Candidates for election or reelection to the Providence City Council? \Box Yes \Box No

 If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):
 Contribution Amount(s):



- c. The Mayor of Providence? \Box Yes \Box No
 - If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):

Contribution Amount(s):

d. Candidates for election or reelection to the office of Mayor of Providence? \Box Yes \Box No

• If Yes, please complete the following: Recipient(s) of the Contribution: Contribution Date(s):

Contribution Amount(s):

Signed under the pains and penalties of perjury.

Position



MBE/WBE Participation Plan

Please complete separate forms for each MBE/WBE subcontractor/supplier to be utilized on the solicitation.

Bidder's Name:							
Bidder's Address:							
Point of Contact:							
Telephone:							
Email:							
Procurement #:							
Project Name:							
Which one of the following describes your business' status in terms of Minority and/or Woman Owned Business Enterprise certification with the State of Rhode Island? (Check all that apply). This form is intended to capture commitments between the prime contractor/vendor and MBE/WBE subcontractors and suppliers, including a description of the work to be performed and the percentage of the work as submitted to the prime contractor/vendor. Please note that all MBE/WBE subcontractors/suppliers must be certified by the Office of Diversity, Equity and Opportunity at the time of bid. The MBE/WBE Directory can be found here. Please visit, the City's MBE/WBE page for details of the program (e.g. instructions and requirements). • Nonprofit organizations are not required to complete the rest of this form. • Construction projects unable to identify subcontractors prior to bid submission (e.g. Design Build) are required to market of the MBE/WBE Optime of the MBE/WBE optime of bid.							
Name of Subcontracto	or/Supplier:						
Type of RI Certification	on:	□MBE		WBE		□Neither	
Address:							
Point of Contact:							
Telephone:							
Email:							
Detailed Description of Performed by Subcont to be Supplied by Sup of Work provided in the Total Contract Value (of Work to Be tractor or Materials plier Per the Scope ne RFP (\$):		Subcon Value (tract \$):		Participation Rate (%):	
Anticipated Date of Pe	erformance:		v aruc (Ψ]•	I	Tute (70).	I
I certify under penalty of perjury that the forgoing statements are true and correct.							
Prime Contractor/Ve	endor Signature				Title		Date
Subcontractor/Suppl	ier Signature				Title		Date

*If you did not meet the 20% MBE/WBE combined participation goal, submit a Waiver Request Form.



MBE/WBE Waiver Request Form

Fill out this form only if you did not meet the 20% MBE/WBE participation goal. State-certified MBE or WBE Prime Bidders are NOT REQUIRED to fill out this form.

Submit this form to the City of Providence MBE/WBE Outreach Director, Grace Diaz, at <u>gdiaz@providenceri.govmailto:mbe-wbe@providenceri.gov</u>, for review **prior to bid submission**. This waiver applies only to the current bid which you are submitting to the City of Providence and does not apply to other bids your company may submit in the future. **In case a waiver is needed**, **City Department Directors should not** recommend a bidder for an award if this form is not included, absent or is not signed by the city of Providence MBE/WBE director.

Prime Bidder:	Contact Email and Phone	
Company Name, Address:	Trade	
Project /Item Description (as seen on RFP):		

To receive a waiver, you must list the certified MBE and/or WBE companies you contacted, the name of the primary individual with whom you interacted, and the reason the MBE/WBE company could not participate on this project.

muividual s ivame	Company Name	Why did you choose not to work with this company?

I acknowledge the City of Providence's goal of a combined MBE/WBE participation is 20% of the total bid value. I am requesting a waiver of ______% MBE/WBE (20% minus the value of **Box F** on the Subcontractor Disclosure Form). If an opportunity is identified to subcontract any task associated with the fulfillment of this contract, a good faith effort will be made to select MBE/WBE certified businesses as partners.

Signature of Prime Contractor /
or Duly Authorized Representative

Printed Name

Date Signed

Signature of City of Providence MBE/WBE Outreach Director / or Duly Authorized Representative Printed Name of City of Providence MBE/WBE Outreach Director Date Signed



BID PACKAGE SPECIFICATIONS

Overview

The City of Providence (City) is committed to reducing greenhouse gas emissions and addressing the impacts of climate change. One key strategy for achieving this goal is to support the electrification of transportation, which can significantly reduce emissions from the transportation sector. In 2019, the City's Sustainability Department published the Providence Climate Justice Plan, which set a target of electrifying the City-owned fleet by 2040.

As part of this effort, the City is actively promoting the development and expansion of electric vehicle (EV) charging infrastructure. <u>This project, which includes the installation of six electric vehicle charging stations and site prep to add</u> additional future stations as needed at two Parks Department facilities in Roger Williams Park is part of this effort. This project will help the Parks Department transition its fleet to electric vehicles by providing convenient access to EV charging infrastructure, which, in turn, will reduce greenhouse gas emissions and support the City's decarbonization goals.

Scope of Work

The City of Providence Parks Department shall perform the *italicized* and asterixed (*) portion of the scope of work. The awarded bidder shall coordinate design and construction with the Parks Department. The City will procure the charging stations and pedestals needed for this project separate from the scope of work in this RFP. The scope of work for this project includes, but is not limited to, the following activities:

- 1. Planning, Technical Development & Permitting:
 - a. Develop all drawings, calculations, engineering, schedules, and submittals necessary to obtain all permits, permissions, and preconstruction approvals required for the project.
 - b. Develop a one-line electrical diagram and certified engineering documents for the electric vehicle charging stations installation and permitting at each location. The diagram(s) shall show all electrical components and connections.
 - c. Obtain all necessary electrical and other permits for the installation. This includes any required fees, inspections, and certified engineering documents.
 - d. Confirm that all equipment specified in this solicitation is suitable and appropriate for the designated use.
 - e. Provide all preconstruction documents as designated in Schedule C Supplemental conditions.
- 2. Site Work:
 - a. Site Survey: Conduct a survey to review the site requirements for the designated installation location(s).
 - b. Site Preparation: Prepare the site to ensure that the area is level and free of debris or other obstacles that may interfere with installation. Barriers, fencing, and other necessary equipment will be installed to assure both public and worksite safety for the duration of the project. The Parks Department will prepare the site and provide and set up barriers and fencing.*
 - c. Excavation: Provide all general excavation, pavement, and concrete cutting, trenching, bedding, conduit (including for Cat-6 cable), and encasement (if applicable) required for the project. The Parks Department will provide the labor and equipment necessary for this task, but the contractor will procure and stage the necessary supplies (e.g. conduit, bedding, concrete for encasement).*
 - d. Restoration: Restore all affected roadways, walkways, lawns, irrigation systems, and landscaping to their original condition. The Parks Department will provide the labor and materials for this task.*
 - e. Striping: Add new striping to the EV parking spaces to clearly designate them as EV charging spaces. The Parks Department will provide the labor and materials for this task.*



3. Equipment Installation:

- a. Charging Stations:
 - i. Two single-port Level 2 Siemens Commercial Child VersiCharge 48A Chargers on two VersiCharge Posts including all necessary hardware and software will be installed at the Dalrymple Boathouse. These chargers are intended to charge four electric SUVs on a rotating basis. These vehicles park at the Boathouse overnight.
 - ii. Four single port Level 2 Siemens Commercial Child VersiCharge 48A Chargers on four VersiCharge Posts including all necessary hardware and software will be installed at the Carriage House in Roger Williams Park. These chargers are intended to charge up to four Ford F150 Lightings, or equivalent. These vehicles park at the Carraige House overnight. See Exhibit D for charger locations.
 - iii. Installation shall be in accordance with the manufacturer's instructions as detailed in the provided specification document. See Exhibit A & B.
- b. Additional Conduit to Support Future EV Chargers:
 - i. Complete site prep, including but not limited to laying the necessary electrical and ethernet conduit, for five additional spaces at the Carriage House. The goal is to be able to add wiring and chargers at a future date, if needed, without remobilizing a site-work contractor. The Parks Department will provide the labor and equipment necessary for this task, but the contractor will procure and stage the necessary supplies (e.g. conduit, bedding, concrete for encasement).*
- c. Mounting: The charging stations will be mounted securely to a concrete pad or other suitable foundation according to the manufacturer's specification.
- d. EVSE Protection: Each charging station will be equipped with two protective bollard(s). The Parks Department will install the protective bollards, unless it is more efficient for the contractor to install them when installing the chargers. Regardless, the contractor will procure and stage the protective bollards.*
- e. Signage: Provide and erect signage to identify the charging stations and provide necessary usage instructions. The Parks Department will install the signage, unless it is more efficient for the contractor to install it when installing the chargers. Regardless, the contractor will procure and stage the signage.*

4. <u>Electrical Connection:</u>

- a. Service Panel: Contractor shall determine if a new service panel is necessary to accommodate the new charging stations, and, if necessary, supply and install a new service panel(s) at the Boathouse and Carriage House. If a new service panel is required at the Carraige House, the panel shall be sized to support future charging at this location beyond what is proposed by this project. Future charging plans should be discussed with the Parks Department Dep. Director.
- b. Electrical Wiring: Wiring, including Cat-6 cable to enable EV charging software, will be installed from the charging stations to the electrical panel.
- c. Ethernet: Provide Cat-6 lines, install port patch panel in electric room, run EMT as needed, and pull in lines from the patch panel to the chargers and punch down.

5. <u>Setup, Testing & Closeout:</u>

- a. Setup: The charging stations will be set up and configured according to manufacturer instructions.
- b. Testing: The charging stations will be tested to ensure that they are functioning properly and are safe to use.
- c. Provide all closeout documents as designated in Schedule C Supplemental conditions.
- d. The Contractor shall warrant its work against defective materials and workmanship for a period of three years from the date of acceptance of the completed project.

Instruction to Bidders

1. <u>RFP Schedule</u>



Below is the RFP schedule. The Department may change these dates at its sole discretion, in the form of an addendum. All notifications and amendments to this RFP will be posted via the Rhode Island Municipal Bidder Notification System. More information is available at https://www.providenceri.gov/purchasing/.

RFP Posted	Nov. 4, 2024
Pre-Bid Conference	Nov. 18, 2024 at 9:00 a.m.
Deadline for Bidder Questions	Nov. 20, 2024
Response to Bidder Questions	Nov. 27, 2024
Proposal Due Date	Dec. 16, 2024 at 2:15 p.m.
Estimated Award Date	Jan. 13, 2025

2. <u>Pre-Bid Conference</u>

There will be a <u>non-mandatory</u>, on-site pre-bid conference on the date and time included in the chart above. The conference will begin at the Dalrymple Boathouse in Roger Williams Park and then move to the Carriage House at Roger Williams Park. The conference is an opportunity to learn about this RFP and ask clarifying questions. If absolutely necessary, the City can accommodate a site visit on another day and time for vendors that cannot make the scheduled date, but are interested in bidding on the project.

3. Questions and Addenda

Bidders are advised that once the RFP has been issued, all contact must be handled per the guidance on page 1 of this RFP package. Instructions for participating in this bidding process and information regarding this project will be provided only through this RFP, the pre-bid conference, and written addenda. Questions may be submitted to the appropriate contact by the Deadline for Bidder Questions date included in the chart above. Responses will be posted in the form of an addendum to this RFP on the Response to Bidder Questions date included in the chart above.

Any addenda issued to Bidders prior to the proposal opening date will include an addendum acknowledgement section. Since all addenda shall become a part of the RFP, <u>all addenda must be signed by an authorized Bidder representative</u> and returned with the Bidder's proposal. Failure to sign and return any addendum acknowledgements may be grounds for rejection of the proposal response.

4. Submission Process

Proposals must be submitted to the City on or before 2:15 PM EST on the Proposal Due Date included in the chart above. See page 2 of this RFP for submittal instructions. See page 3 of this RFP for a bid package checklist.

5. <u>M/WBE Forms</u>

<u>All bidders must include the relevant M/WBE forms</u> included on pages 11-12 of this solicitation. <u>If a bidder will not meet</u> the City's goal of 20% M/WBE participation, a waiver must be requested. The approved waiver must be submitted with the Bidder's proposal, so a request should be placed as soon as the bidder knows they will not meet the goal to ensure adequate time for the waiver request to be processed and approved. See waiver instructions on page 12 for more information.

6. Prevailing Wage & Apprenticeship Requirements

In alignment with the City's goals as a Climate Jobs City, labor associated with this project shall be paid prevailing wages and apprentices from registered apprenticeship programs shall be employed.

7. Licenses



In alignment with the City's goals as a Climate Jobs City, bidders are required to certify that they, or their subcontractors, have all licenses necessary to perform the scope of work including a valid Electric Vehicle Infrastructure Training Program (EVITP) License.

8. <u>Withdrawal of Proposal</u>

Proposals may be withdrawn at any time prior to the proposal due date and time. Once the proposal due date has passed all proposals become the property of the City.

Terms

1. Proposal Ownership

All materials submitted in response to the RFP shall become the property of the City upon bid opening and will be considered as part of this RFP.

2. Accept/Reject Proposal

Potential vendors are advised to review all sections of this RFP carefully and to follow instructions completely, as failure to make a complete submission as described elsewhere herein may result in rejection of the proposal. The City reserves the right to fund, in whole or in part, any, all, or none of the applications submitted in response to this RFP. The City reserves the right to waive technicalities, irregularities, and omissions. The City reserves the right to make the award in a manner deemed to be in the best interests of the City and to correct any award erroneously made as a result of a clerical error on the part of the City. Proposals received after the due date and time indicated on the cover of this bid will not be considered. The City's Purchasing website includes a step-by-step guide for submitting a bid https://www.providenceri.gov/purchasing/how-to-submit-a-bid/.

3. Rhode Island Public Records Law

Vendors are advised that all materials submitted for consideration in response to this RFP will be considered Public Records as defined in Title 38, Chapter 2 of the General Laws of Rhode Island, without exceptions, and will be released for inspection immediately upon request after an award is made.

4. <u>RFP Interpretation</u>

Interpretation of the wording of this document shall be the responsibility of the City and that interpretation shall be final.

5. Modification of Terms

Any exceptions/additions/alterations to the terms and conditions contained herein must be included in the bidder's proposal response. Failure to provide the required data to allow for evaluation of the bidders response to the RFP, or failure to follow and complete the RFP proposal format and accompanying documents will be grounds for rejecting the proposal offer. The City reserves the right to reject any proposals that alter the terms specified in the RFP.

6. Confidentiality

From the date of issuance of the RFP until the opening date, the Bidder must not make available or discuss its proposal, or any part thereof, with any employee or agent of the City. The Bidder is hereby warned that any part of its proposal or any other material marked as confidential, proprietary, or trade secret, can only be protected to the extent permitted by Rhode Island State laws.

7. <u>Regulations</u>

The awarded bidder shall conduct all work funded under this agreement in compliance with all local, state, and federal laws, regulations, codes.



Evaluation Criteria

- 1. **Bid Forms:** Bidder shall complete and/or sign all bid forms, MBE/WBE forms, and RFP addenda, and meet all other baseline requirements stipulated by the RFP. Bidders that do not complete all baseline requirements shall be disqualified.
- 2. Electrical Licenses: Bidder shall certify that they or their subcontractor performing the applicable work has a valid Electric Vehicle Infrastructure Training Program (EVITP) License and any other appliable licenses for the requested scope. Bidder may be asked to provide documentation of licenses pertinent to the scope of work following the submission of their bid, but prior to award.
- 3. **Project Approach:** Bidder shall describe a professional, efficient, and realistic approach to the project described in this RFP, including all aspects of the scope of work.
- 4. **Schedule:** Bidder shall provide a project schedule with milestones, and note where uncertainty exists and how it could impact the overall project timeline. At a minimum the project schedule should include a kickoff meeting, completion of Planning, Technical Development, and Permitting tasks, completion of Site Work, Equipment Installation, and Electrical Connections tasks, and completion of Set up, Testing, and Close Out tasks.
- 5. **References:** Bidder shall submit information about three previous commercial electric vehicle (EV) charging installations, including (1) a detailed list of the equipment installed, (2) the specific locations of these installations, (3) project challenges and solutions, especially as they mirror the proposed project in this RFP, and (4) contact information for the owners or managers of these installation sites for reference purposes.
- 6. **Budget:** Bidder shall provide a line-item budget for the project that permits the City to understand the cost of the project at each site and the cost of different elements of the project described under the scope of work. The bidder should call out State or Federal incentives and rebates available to the contractor or City that will be pursued to reduce the overall cost of the project. Labor associated with the project shall be paid prevailing wages and registered apprentices shall be employed.
- 7. Add Alternate: Bidder may provide a full project budget that includes all items in the scope of work, including those designated to be completed by Parks Department staff.

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Item	Potential Points
1. Bid forms and RFP requirements	True/False
2. Required Licenses	True/False
3. Project Approach	10
4. Schedule	10
5. References	10
6. MBE/WBE	10
7. Cost	60



SUPPLEMENTAL INFORMATION

If the issuing department for this RFP determines that your firm's bid is best suited to accommodate their need, you will be asked to provide proof of the following prior to formalizing an award.

An inability to provide the outlined items at the request of the department may lead to the disqualification of your bid.

This information is <u>NOT</u> requested to be provided in your initial bid that you will submit to the City Clerk's office by the "date to be opened" noted on page 1. This list only serves as a list of items that your firm should be ready to provide on request.

<u>All bids submitted to the City Clerk become public record</u>. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record.

You must be able to provide:

- Business Tax ID will be requested after an award is approved by the Board of Contract and Supply.
- Proof of Insurance.
- Certificate of Good Standing with the Rhode Island Secretary of State.
- Valid licenses pertinent to the scope of work including a valid EVITP License.



CITY OF PROVIDENCE STANDARD TERMS & CONDITIONS

- 1. The terms "you" and "your" contained herein refer to the person or entity that is a party to the agreement with the City of Providence ("the City") and to such person's or entity's employees, officers, and agents.
- 2. The Request For Proposals ("RFP") and these Standard Terms and Conditions together constitute the entire agreement of the parties ("the Agreement") with regard to any and all matters. By your submission of a bid proposal or response to the City's RFP, you accept these Standard Terms & Conditions and agree that they supersede any conflicting provisions provided by bid or in any terms and conditions contained or linked within a bid and/or response. Changes in the terms and conditions of the Agreement, or the scope of work thereunder, may only be made by a writing signed by the parties.
- 3. You are an independent contractor and in no way does this Agreement render you an employee or agent of the City or entitle you to fringe benefits, workers' compensation, pension obligations, retirement or any other employment benefits. The City shall not deduct federal or state income taxes, social security or Medicare withholdings, or any other taxes required to be deducted by an employer, and this is your responsibility to yourself and your employees and agents.
- 4. You shall not assign your rights and obligations under this Agreement without the prior written consent of the City. Any assignment without prior written consent of the City shall be voidable at the election of the City. The City retains the right to refuse any and all assignments in the City's sole and absolute discretion.
- 5. Invoices submitted to the City shall be payable sixty (60) days from the time of receipt by the City. Invoices shall include support documentation necessary to evidence completion of the work being invoiced. The City may request any other reasonable documentation in support of an invoice. The time for payment shall not commence, and invoices shall not be processed for payment, until you provide reasonably sufficient support documentation. In no circumstances shall the City be obligated to pay or shall you be entitled to receive interest on any overdue invoice or payment. In no circumstances shall the City be obligated to

pay any costs associated with your collection of an outstanding invoice.

- 6. For contracts involving construction, alteration, and/or repair work, the provisions of applicable state labor law concerning payment of prevailing wage rates (R.I. Gen. Laws §§ 37-13-1 et seq., as amended) and the City's First Source Ordinance (Providence Code of Ordinances §§ 21-91 et seq., as amended) apply.
- 7. With regard to any issues, claims, or controversies that may arise under this Agreement, the City shall not be required to submit to dispute resolution or mandatory/binding arbitration. Nothing prevents the parties from mutually agreeing to settle any disputes using mediation or non-binding arbitration.
- 8. To the fullest extent permitted by law, you shall indemnify, defend, and hold harmless the City, its employees, officers, agents, and assigns from and against any and all claims, damages, losses, allegations, demands, actions, causes of action, suits, obligations, fines, penalties, judgments, liabilities, costs and expenses, including but not limited to attorneys' fees, of any nature whatsoever arising out of, in connection with, or resulting from the performance of the work provided in the Agreement.
- 9. You shall maintain throughout the term of this Agreement the insurance coverage that is required by the RFP or, if none is required in the RFP, insurance coverage that is considered in your industry to be commercially reasonable, and you agree to name the City as an additional insured on your general liability policy and on any umbrella policy you carry.
- 10. The City shall not subject itself to any contractual limitations on liability. The City shall have the time permitted within the applicable statute of limitations, and no less, to bring or assert any and all causes of action, suits, claims or demands the City may have arising out of, in connection with, or resulting from the performance of the work provided in the Agreement, and in no event does the City agree to limit your liability to the price of the Agreement or any other monetary limit.
- 11. The City may terminate this Agreement upon five (5) days' written notice to you if you fail to observe any of the terms and conditions of this Agreement, or if the City believes your ability to perform the



terms and conditions of this Agreement has been materially impaired in any way, including but in no way limited to loss of insurance coverage, lapsing of a surety bond, if required, declaration of bankruptcy, or appointment of a receiver. In the event of termination by the City, you shall be entitled to just and equitable compensation for any satisfactory work completed and expenses incurred up to the date of termination.

- 12. Written notice hereunder shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the entity for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known by the party providing notice.
- 13. In no event shall the Agreement automatically renew or be extended without a writing signed by the parties.
- 14. You agree that products produced or resulting from the performance of the Agreement are the sole property of the City and may not be used by you without the express written permission of the City.
- 15. For any Agreement involving the sharing or exchange of data involving potentially confidential and/or personal information, you shall comply with any and all state and/or federal laws or regulations applicable to confidential and/or personal information you receive from the City, including but not limited to the Rhode Island Identity Theft Protection Act, R.I. Gen. Laws § 11-49.3-1, during the term of the Agreement. You shall implement and maintain appropriate physical, technical, and administrative security measures for the protection of, and to prevent access to, use, or disclosure of, confidential and/or personal information. In the event of a breach of such information, you shall notify the City of such breach immediately, but in no event later than twenty-four (24) hours after discovery of such breach.
- 16. The Agreement is governed by the laws of the State of Rhode Island. You expressly submit yourself to and agree that any and all actions arising out of, in connection with, or resulting from the performance of the Agreement or relationship between the parties shall occur solely in the venue and jurisdiction of the State of Rhode Island or the federal court located in Rhode Island.
- 17. The failure of the City to require performance of any provision shall not affect the City's right to

require performance at any time thereafter, nor shall a waiver of any breach or default of this Agreement constitute a waiver of any subsequent breach or default or a waiver of the provision itself.

18. If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, in any extent, be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, and each term and provision shall be valid and enforceable to the fullest extent permitted by law.

Attachment A – VersiCharge Dual Post Installation Guide

SIEMENS

INSTALLATION GUIDE

VersiCharge[™] Dual Post and Cable Management System for an Electric Vehicle Charging Station



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VersiCharge Single/Dual/Back-to-Back Mounting:

Applications include any public or private place where Electric Vehicle (EV) charging is required. These places may include homes, both single and multifamily, places of business, commercial institutions, etc.

These instructions do not purport to cover all details or variations in equipment, or to provide for every possible contingency to be met in connection with installation, operation, or maintenance. Should further information be desired, or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the local Siemens sales office or Siemens Customer Service available at 1-800-SIEMENS. The contents of this Instruction Manual shall not become part of or modify any prior or existing agreement, commitment, or relationship. The sales contract contains the entire obligation of Siemens. The warranty contained in the contract between the parties is the sole warranty of Siemens. Any statements contained herein do not create new warranties or modify the existing warranty.

NOTE: This instruction outlines the recommended general installation procedure by a qualified person, as defined by all local electrical codes and/or the NEC[®].

PERMITS: Be aware that many areas require special permits and/or utility approvals to install EV charging equipment. Contact your local electrical inspector's office and your local utility prior to beginning work to understand local requirements.

WARRANTY: See Siemens' standard terms and conditions at usa.siemens.com/versicharge

TOUCH UP PAINT: See link below for replacement paint if needed for aesthetic restoration throughout post life. <u>https://www.lvppaints.com/RAL7035-Color-Plate.html</u>

Warning:



DANGER Hazardous voltage. Will cause death or serious injury. Disconnect before working on this equipment. This indicates a situation where the present voltage could cause injury or death. Extreme caution is required when servicing or installing the equipment referenced.



DANGER Explosion hazard. This equipment has arcing or sparking parts that should not be exposed to flammable vapors. Use extreme caution and follow instructions carefully.



WARNING! This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.

Dual Post and Cable Management System for Siemens VersiCharge

VersiCharge units sold separately

Features:

- Single or dual mount pedestal
- Siemens VersiCharge standard bolt pattern
- 4" Aluminum pedestal post .120" thick
- Aluminum pedestal base 3/4" thick
- Powder coated with primer undercoat for environmental durability
- Pedestal doubles as an electrical raceway

Supplied Parts:

Pedestal

- One 4" x 4" x 48" Square Pedestal
- One 4" x 4" Plastic End Cap Plug
- Four ¼-20 x ½" Machine Button-Head Philips Screws
- Four 10-32 x 1" Machine Button-Head Tamper Resistant Screws
- Two ¾" NM Flex Right-Angle Connector
- Two ¾" NM Flex Straight Thru Connector
- Two 1" to 3/4" Reducer Washer
- Two ¾" x 16" NM Liquid-Tight Flexible Conduit

Miscellaneous

- Four Drop-In Anchors
- Four Stainless Anchor Bolts with Washers
- One Tube of Silicone Sealer
- Two .19" Locking Hole Plugs, 8mm
- Three 1" Locking Hole Plug
- Two .158 Hole Plugs, 4mm

Cord Retractor (Optional)

- One 2" x 2" x 78-¾" Aluminum Post (1-for single unit or 2-for dual)
- One White Polyester Cable
- One 5/16" x ³/₄" Bolt with Washer
- One 3/8" x 1 ¼ " Bolt with Washer
- One Cord Clamp for Cord Retractor
- One Cast Iron Counterweight (11 lbs.)



Viewed from Underneath Pedestal Base

Figure 1. Post base







DANGER Hazardous voltage. Will cause death or serious injury. Please consider all safety warnings in the VersiCharge Installation and Operations Manual refer to the Siemens web link: usa.siemens.com/versicharge prior to wiring. Ensure breaker is off during all electrical work.

All pedestals shall be factory pre-drilled for installing two (2) Siemens VersiCharge EVSE units. The post product is compatible with all VersiCharge models.

Installation height is regulated by NEC; however, this can vary based on local jurisdiction. NEC[®] 2011 specifies: Outdoor (NEC[®] Article 625.30B) = installation 24-48 inches above ground level. Use appropriate tools and hardware to fasten equipment, see details.

Concrete Pad, Power Feed and Anchor Requirements

Provide an approved concrete or composite base with the top flush at ground level, with 12" conduit stub-up centered. The conduit shall be sized to provide 3 wires (L1, L2, GND) for each charger being mounted. The base size should be a minimum of 18" x 18" x 18" and can be poured or pre-cast / pre-made. Installation of protective concrete-filled steel bollard posts and/ or curb stops to protect the charger from an automobile strike is recommended. Feed-wire size shall be determined by a qualified electrician using industry standard calculations. Using the provided drop-in anchors with a concrete base, secure the pedestal to the base. If using a composite base, secure per manufacturer's instructions. Remove the pedestal access plate and place to the side.

There is an option to run the power supply and shielded communication wires underground, feeding through the bottom opening in the pedestal or, if the conduits are run above ground, the wires may be brought in through the sides of the post using the lower 1" holes on each side of the pedestal base. When using above ground conduits, use ³/₄" NPT fittings to enter through 1" holes in lower section of the pedestal.

Feed-wire size shall be determined by a qualified electrician using industry standard calculations.

The power conduit shall be sized to provide three wires (L1, L2, GND) for each charger being mounted. Install the wires so they extend sufficiently above the ground for direct attachment to the EVSE (the charger). The communication conduit shall be $\frac{3}{4}$ " to run one (or two) CAT 5/6 communication cable(s) to each VersiCharge charger.

NOTE: Communications wires must be shielded and suitable to be run by power wires, or the power wires may cause interference.

Single VersiCharge Mounting using US2:VCPOSTGRY2



- 1. Locate center of pedestal to attach the VersiCharge mounting bracket.
- 2. Locate 2 mounting bracket holes as mentioned above (items A and B 9.75 inches apart and 0.75 inches from the top
- 3. Attach the Mounting Bracket to the pedestal using 4 ¹/₄-20 Philips screws (D), torque to 14.5 lb.-in, placing silicone sealer at each hole to provide a liquid-tight securement.

NOTE: For installation, the mounting-bracket hinges will be pointing to the ceiling, and the flat side of the bracket will be against the pedestal.

- 4. Charger Mounting:
 - a. Slide the VersiCharge on to the hinges.
 - b. Rotate to the right until the unit clicks and is closed.
 - c. Secure Charger to Mounting Bracket: Using the kit-supplied tamper-resistant screw– secure the charger cover with one screw on the side.
 - d. Install Holster to Charger: Align Holster with guides in charger. Using the kit-supplied tamper-resistant screw, use the third screw to secure the holster to the charger (hole at the top of the holster).

Silicone sealer can be placed at each hole to provide a liquid-tight securement

- 5. Install NM flex conduit to the bottom opening of the VersiCharge unit and terminate using provided ³/₄" NM straight connector and reducer washers.
- 6. Attach the NM flex conduit to the center hole (underneath the charger) of the pedestal using the provided ³/₄" NM rightangle connector.
- 7. Pull/feed the power wires through the conduit and trim to the proper length to reach the charger connection points. Leave enough slack (15" to 20") in the wires inside the post to allow unrestricted access. Using a fold in the wires and a zip-tie(s), secure the wire bundle so wires are not touching the inside of the pedestal post.
- 8. Continue with manufactures' instructions for 'Wiring Steps for Hard-Wired Installation' in the VersiCharge Quick Start Guide.

Dual VersiCharge Mounting (Back-to-Back) using US2:VCPOSTGRY2



1. All steps for single unit mounting shall be repeated on two (2) sides of the pedestal.

Single/Dual Post and Cable System Installation using US2:VCPOSTGRY2 and US2:VCCMSSP



- 1. Align the square Cord Retractor body along the right side of the charging station.
- 2. The upper retractor bracket is threaded and slides the length of the retractor post. Locate the ⁵/₈" hole located at the top of the pedestal on right side, align unit with mounting bracket in place. Place the washers on the 5/16" x ³/₄" bolt before inserting to space the bracket bolt so it is fully threaded into the upper bracket but DOES NOT penetrate the retractor post. Insert bolt with washer from the inside of the post and tighten, torque to 14.5 lb.-in. Use silicone sealer between the pedestal post and retractor post to make it liquid-tight.
- 3. Make sure unit is plumb with hole at the baseplate, and anchor to baseplate with 3/8" anchor bolt.
- 4. Tighten all bolts. Seal pedestal bolt hole with an outdoor rated silicone to ensure it is watertight.
- 5. Install cord clamp in a location on the cord which keeps it off the ground when the connector is in the 'parked' or 'holstered' position. Use black electrical tape to take up any gap between the cord and the inside of the clamp. Tighten the clamp enough to not allow the cord to slide.

Dual Cord Retractor Mounting using US2:VCPOSTGRY2 and 2 US2:VCCMSSP parts



1. Steps for single cord retractor shall be repeated on two (2) sides of the pedestal.

Installing the Access Cover and Top Cap

Once all the above steps are complete and all screws, bolts, fittings, etc. are tight, place a thin bead of silicone sealer around the perimeter of the access plate and screw the plate onto the post using the provided stainless torx head screws. Wipe off any excess sealer. Place a generous bead of silicone sealer around the perimeter of the top cap and insert the cap into the pedestal post. A rubber mallet is recommended to properly seat the top cap. Wipe off any excess sealer.

Power the Station(s)

1. Turn on the power feed to the station(s) and test as per the VersiCharge installation manual.

Legal Manufacturer

Siemens Industry, Inc. 3617 Parkway Ln. Peachtree Corners, GA 30092 United States of America

Telephone: +1 (800) 333-7421 helpline.sii@siemens.com

Engineering Doc No: R814225-R04 Article No. SIDS-T40099-00-4AUS This document contains a general description of available technical options only, and its effectiveness will be subject to specific variables including field conditions and project parameters. Siemens does not make representations, warranties, or assurances as to the accuracy or completeness of the content contained herein. Siemens reserves the right to modify the technology and product specifications in its sole discretion without advance notice.

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Attachment B – VersiCharge Installation and Operations Manual

SIEMENS

INSTALLATION AND OPERATIONS MANUAL

VersiCharge[™] AC Electric vehicle charging station

June 2024



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VersiCharge[™] AC | Installation and Operations Manual

Contact Information

Siemens Industry, Inc. Smart Infrastructure eMobility Solutions 3617 Parkway Ln. Peachtree Corners, GA 30092

+1 (855) 950-6339, option 9 usa.siemens.com/versicharge

FCC Compliance

This equipment has been tested and found to comply with the limits for class A commercial and class B residential digital devices, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protections against harmful interference in a residential installation. Residential models have been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protections against harmful interference in a residential installation. Commercial models have been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protections against harmful interference in a residential installation. Commercial models have been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protections against harmful interference in a residential installation. Commercial models have been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protections against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, this is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority to operate the equipment and the warranty on the product.

This device should be operated with a minimum distance of at least 20 cm between the 802.11 b/g/n and cellular antennas and a person's body.

ISED Compliance

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1. L'appareil ne doit pas produire de brouillage;
- 2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device should be operated with a minimum distance of at least 20 cm between the 802.11 b/g/n and cellular antennas and a person's body.

Other Information

Product information is subject to change without notice. All trademarks are recognized as the property of their respective owners.

For Siemens VersiCharge™ Warranty Terms and Conditions, see Section 10 of this manual.

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Safety Information

1.1 Read this First

This manual contains instructions for use during the installation, operation and maintenance of the Siemens VersiCharge™ electric vehicle charging station.

1.2 Hazard Categories and Special Symbols

Read these instructions carefully and look at the equipment to become familiar with the equipment before trying to install, operate, service or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

Indicates a potentially hazardous situation which, if not avoided, can result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, can result in minor or moderate injury.

CAUTION

Used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, can result in property damage.

NOTICE

Used without the safety alert symbol, This indicates important information for optimal system operation. Follow instructions closely.

1.3 Safety Instructions (General and Specific)



DANGER

Hazardous Voltage. Will cause death or serious injury.

Turn off power to this equipment before working inside.

- Read this Installation and Operations Manual in its entirety prior to installing, maintaining, servicing or replacing a Siemens VersiCharge EV Charging System.
- **Permits:** Be aware that many areas require special permits and/or utility approvals to install EV charging equipment. Contact your local electrical inspector's office and your local utility prior to beginning work to understand local requirements.
- Qualified electrician: Because of the inherent dangers of electricity, only a qualified electrician should install, maintain, service or replace electrical wiring and connected equipment. For the purpose of this manual, a qualified electrician is someone who is familiar with equipment hazards of installation, construction and operation. In addition, this electrician should meet the definition of a qualified electrician pursuant to the National Electrical Code[®] (NEC[®]). Failure to comply with this recommendation may void the VersiCharge warranty.
- Weatherproof seals: All VersiCharge units are qualified for outdoor use.

WARNING

Failure to properly seat seals can result in water, debris, and other foreign objects entering the VersiCharge.

These can damage electrical components and prevent proper functioning.

1.4 Instructions Pertaining to a Risk of Fire or Electric Shock

WARNING

When using electric products, basic precautions should always be followed.

This manual contains important instructions for units supplied with and without a NEMA 6-50 plug that shall be followed during the installation, operation and maintenance of the unit.

- Read all of the instructions before using this product.
- Failure to follow these instructions may lead to death, serious injury or property damage.
- Any electrical wiring required to install this VersiCharge shall conform to applicable codes and standards (ANSI/NFPA 70). A qualified electrician should perform any wiring, maintenance or service.
- To reduce the risk of electric shock, never service, install or uninstall this VersiCharge from service while power is flowing to the unit.
- This equipment has arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be located at least 18 inches above the floor.
- The VersiCharge is equipped with an auto-reset feature.
 - If this VersiCharge is connected to a vehicle at the time that power is restored following an outage, charging may resume automatically.

- If this VersiCharge is connected to a vehicle and a ground fault trip occurs, charging may resume automatically after a delay period.
- Do not put fingers into the electric vehicle connector plug.
- Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation or has any other signs of damage.
- Do not use this product if the enclosure or the EV connector is broken, cracked, open or shows any other indication of damage.
- A torque driver shall be used to make power connections to ensure that adequate contact pressure is applied. See the Installation section of this manual for additional details.
- When a VersiCharge is hardwired during installation, power connections shall be made at line terminals with a torque driver according to the gauge of the line side wire. The wire gauge required is based on local codes.
- A VersiCharge charging station includes wire connector instructions for field installed wiring. Instructions included in this manual must be followed to ensure proper installation.
- An insulated grounding conductor that is identical in size, insulation material and thickness to the grounded and ungrounded branch circuit supply conductors, except that it is green with or without one or more yellow stripes, shall be installed as part of the branch circuit that supplies the VersiCharge or system.
- The grounding conductor shall be grounded to earth at the service equipment or (when supplied by a separately derived system) at the supply transformer.
- Do not attempt to operate this VersiCharge if the ambient temperature is greater than 50 °C (122 °F).
- #6 90 °C copper wire should be used for a 48 A charger and #8 90 °C copper wire should be used for a 40 A charger.
 NOTE: 1. Wire must have a temperature rating of 90 °C or higher. 2. Do not set the amp switch higher than 40 A (amp switch setting #4) unless hardwired to a dedicated 60 A branch protection circuit breaker (48 A units should be set to amp switch setting #5).

CAUTION

To reduce the risk of fire, connect only to a circuit provided with 50/60 ampere maximum branch circuit overcurrent protection in accordance with the ANSI/NFPA 70 National Electrical Code[™].

1.5 Code and Standard References

- This VersiCharge has been designated to meet the requirements in section 625 of the National Electric Code (NEC®).
- UL Listing with Listing Number Siemens VersiCharge devices are listed in UL file #E348556.
- Complies with the following UL Standards: UL 1998, UL 991, UL2594/CSA C22.2 No.280/NMX-J-677-ANCE, UL 2231-1/CSA C22.2 No.281.1/NMX-J-668-1, UL 2231-2/CSA C22.2 No.281.2/NMX-J-668/2-ANCE and UL 2251/CSA C22.2 No.282/NMX-J-678-ANCE. EV interface compliant to SAE J-1772 Level II.
- The residential models have been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The commercial models have been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses and can radiate radio frequency energy and may cause harmful interference to radio communications if not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.

VersiCharge[™] AC | Installation and Operations Manual

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Personal Protection Equipment: Use of proper personal protection equipment, including, but not limited to, eye protection, shock protection, gloves and other appropriate protection, is recommended when installing or servicing any electrical equipment.
- Charging Circuit Interrupting Device (CCID): The Siemens VersiCharge line of EV Charging Systems includes a CCID. The CCID is required by UL Standard 2231 and is designed to detect ground faults within the system and disconnect power from the downstream conductors when a fault is detected.



▲ DANGER

Hazard Of Electric Shock, Explosion, Or Arc Flash. Failure to follow these instructions will result in death or serious injury.

This equipment has arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be installed at least 18 inches above floor or ground level. Use extreme caution and follow instructions carefully.

• Arcing component in contactor: Siemens VersiCharge EV Charging Systems include a contactor that when opened or closed will cause a short duration arc. The contactor is enclosed in an appropriate electrical enclosure but if an arc occurs in the presence of flammable vapors, the vapors could ignite, creating an explosion. Store flammable vapors away from all electrical equipment and if vapors are present allow sufficient time for ventilation before operating this equipment.

1.6 Product Labels

The following symbols appear on the product label and are described here:



This label indicates the risk of hazardous voltage and electric shock which will cause death, serious injury or substantial damage. Turn off the power supplying this VersiCharge before working inside.

1.7 Definitions

The abbreviation "EV" used in this manual refers to an electric vehicle. The abbreviation "AC" used in this manual refers to alternating current.

1.8 Supported grounding systems

Only center-tapped systems should be used since neither line's voltage relative to ground may shift or change. To provide the necessary voltage reference with respect to ground, Siemens EVSEs must be correctly connected to ground at the panel or transformer.

VersiCharge stations need to be wired into a permanent, grounded, metal wiring system. In addition, plugged connections are accepted. It is mandatory to connect an equipment-grounding conductor to an equipment-grounding connector on the charging station and run it alongside circuit conductors.

A grounding conductor that is in compliance with applicable codes must be grounded to earth at the supply transformer or, if provided by a different system, at the service equipment. It could also be grounded to an earth electrode as an alternative method. Exercise caution to ensure that the grounding conductor is in accordance with and meets all applicable requirements and codes.

1.8.1 Grounding requirements

Specific system parameters must be met for proper connections with Siemens EVSEs. In wye systems, as depicted in the below images, connect the Siemens EVSE to any two lines. In delta systems, Siemens EVSEs should only be connected to L1 and L2 in a bonded, center-tapped secondary. This will permit voltages to stay consistent irrespective of other loads that may make use of the lines. The installer should attach the EVSE station to ground and the neutral should be bonded to ground. In addition, while in the provided example found in the image below L1 and L2 are the tapped leg and L3 is the high leg, this may not always be the case. Any leg may be tapped, which changes the high leg to L1 or L2, depending on which leg is tapped (this configuration may be present in older buildings).



1.8.2 Unsuitable grounding systems

Siemens EVSEs must not be connected to (1) a 120/208 VAC 3-phase ungrounded system, (2) a corner-grounded 120/240 VAC 3-phase delta system, or (3) any setup/configuration in which the center point of the AC power source is not grounded.



SECTION 2

Mounting Instructions

Visit usa.siemens.com/versicharge for additional manuals and information.

2.1 Equipment List

2.1.1 Kit-Supplied Equipment

- 1 VersiCharge (with optional NEMA 6-50 infrastructure plug for 40 A residential units only)
- 1 Mounting bracket
- 1 Cable holster
- 0, 1 or 3 Ferrite core(s) (depending on the VersiCharge purchased; residential 40 A variants have no ferrite cores, commercial 40 A / 48 A variants have one ferrite core, residential 48 A variants have three ferrite cores)

NOTICE

Plug-supplied units (40 A) will have the ferrite core factory installed. Only units to be hardwired (48 A) will install the ferrite core.

• 1 – Multi-use connector (this connector is used to connect both the Modbus and the External Remote Control Interface Connector)

NOTICE

Supplied with commercial units only.

- RFID Cards: two admin cards and five user cards (supplied with commercial units only)
- 1 Tamper-resistant 5/32" Allen wrench (for securing the charger)
- 1 #8 x 2-1/2" flathead drywall screw (for securing the holster to the wall stud)
- 2 Lag screws, hex head screws, 1/4 x 2" (for securing the mounting bracket to the wall studs)
- 2 #10-32 X 3/8", tamper-resistant, pin-in-hex socket button head cap screw or 1 M4 x 0.7 x 14mm, pan head Torx (T20) screw (for securing the charger)
- 1 M4 x 0.7 x 10mm pin-in button head cap screw (for certain variants)
- 2 Flat #8 washers (for certain variants)

2.1.2 Standard Installation Equipment

- Qualified electrician
- Cordless drill (Phillips bit with extender)-include 1/8" drill bit for pilot holes
- Level
- Stud finder
- 240 V AC voltmeter
- Follow local and national codes where applicable for rating supply equipment to the EVSE based on the charger's amp adjustment switch. A 40 A charger requires a 2-pole, 240 V, 50 A circuit breaker. A 48 A charger requires a 2-pole, 240 V, 60 A circuit breaker.

• NEMA 6-50 outlet (if not hardwiring charger)

Only used with the 40 A residential charger.

- 7/16" socket wrench
- Flathead screwdriver



If using the wallboard mounting (alternate mounting) for the charger, a Phillips head screwdriver will also be needed.

- Tamper-resistant 5/32" hex bit with a 1/4" Allen wrench (for securing the charger)
- If hardwiring the charger #6 AWG 90 °C copper wire, three conductors #6 AWG 90 °C copper wire should be used for a 48 A charger, and #8 AWG 90 °C copper wire should be used for a 40 A charger.

NOTICE

1. Wire must have a temperature rating of 90 $^{\circ}$ C or higher. 2. Do not set the amp switch higher than 40 A unless hardwired to a dedicated 60 A circuit according to national and local codes.

2.1.3 Alternate Installation Equipment (Screws and anchors are not included in the VersiCharge kit)

• 5 – #12 x 1- $\frac{1}{2}$ LG Phillips head Ø.375 head minimum, with five #12 wall anchors



2.2 Mounting Using a Stud – Recommended Stud Mounting (use center-top and bottom holes)

Adhere to the instructions that pertain to the VersiCharge variant purchased.





Figure 1A. Align the mounting bracket and screw into the stud.

NOTICE

For installation, the mounting-bracket hinges will be pointing to the ceiling and the flat side of the bracket will be against the wall.

- 1. Locate a stud within the wall that can handle the 17+ lb. load of the VersiCharge.
- 2. Place the mounting bracket no more than 12" above a 240 V outlet; level the mounting bracket and drill the center-top hole using a drill with an extender.
- 3. Mount the bracket using the top hole and the lag screws (with the hinges facing upward and with the flat side of the bracket against the wall). DO NOT tighten all the way.
- 4. Level the bracket.
- 5. Drill a 1/8" pilot hole for the center-bottom hole.
- 6. Secure with lag screws.
- 7. Tighten the top and bottom screws securely using an Allen wrench. DO NOT overtighten or the lag screw can be broken.
 - For concrete cinder block walls, install appropriate anchors. If using an existing outlet, ensure that the power cord will reach to the outlet. Mount in compliance with NEC[®] and local jurisdiction requirements.
 - For Siemens post installation, see the post instruction manual at <u>usa.siemens.com/versichargecommercial</u>, under the Installation section.

2.3 Alternate Mounting - Wallboard Mounting (use mounting holes on four corners)



Figure 2A. Alternate installation of the VersiCharge mounting

Figure 2B. Alternate installation of the VersiCharge mounting

NOTICE

For installation, the mounting-bracket hinges will be pointing to the ceiling and the flat side of the bracket will be against the wall.

NOTICE

The VersiCharge can be mounted using five #12 x 1-1/2 LG Phillips head with five #12 wall anchors.

NOTICE

Anchor rating: five anchors must be rated as 61 lb. anchors rated for $1/2^{\prime\prime}$ dry wall.

- 1. Locate the mounting bracket no more than 12" above a 240 V outlet or if hardwiring, the wiring will come through the bottom of the charger.
- 2. Level the mounting bracket and drill four holes, one in each corner of the bracket.
- 3. Place the anchors into the wallboard until they are flush with the wall.
- 4. Place the mounting bracket over the holes (with the hinges facing upward and the flat side of the bracket against the wall) with the anchors and securely screw the mounting to the wall.
- 5. Add a fifth hole for mounting the holster once the unit is mounted on the wall. Place the holster on the wall and mark the correct position for the hole. See Section 2.5 and its graphic.

2.4 Install VersiCharge





Figure 3A. Slide the VersiCharge onto the mounting hinges.

Figure 3B. Slide the VersiCharge onto the mounting hinges.

- 1. If hardwiring the unit, see the Hardwire Installation section of this manual.
- 2. Slide the VersiCharge on to the hinges.
- 3. Rotate to the right until the unit clicks and is closed.
- 4. Secure the enclosure with the locking mechanism or secure the enclosure with the tamper-resistant screw and supplied Allen wrench. Plug the VersiCharge into the 240 V outlet.



Figure 4A. Close the VersiCharge.



Figure 4B. Close the VersiCharge. Secure the back cover on the top right of the charger. Then insert the four screws and tighten them to 10 in-lbs. Rotate the charger to the right to close the charger shut.

2.5 Secure Charger and Install Cable Holster





Figure 5A. Secure the charger and mount the holster.

Align the holster with guides in the charger. Use the #10-32 x 3/8", tamper resistant pin-in hex screw and hex wrench to secure the holster to the charger (the hole at the top of the holster).

Standard installation: Use the #8 x 2-1/2" drywall screw to secure the holster to the wall stud.

Alternate installation: Use the additional wallboard screw with an anchor to secure holster to the wall.

Figure 5B. Secure the charger and mount the holster.

- Use the kit-supplied M4 x 0.7 x 10mm, tamper resistant pin-in hex screw and hex wrench to secure the charger cover with one screw on the side.
- 2. Align the holster with guides in the charger. Use the kit-supplied M4 x 0.7 x 14mm screw and washer to secure the holster to the charger (the hole at the top of the holster).

Standard installation: Use the $#8 \times 2-1/2''$ drywall screw and washer to secure the holster to the wall stud.

Alternate installation: Use the additional wallboard screw and washer with an anchor to secure holster to the wall.

If assistance is needed, please call 1 855-950-6339, option 9, or create a support ticket at https://sieops.my.site.com/eMobilityCloud.



inspect the pins in each. If damage is found, call a qualified service person.



A DANGER

Hazardous voltage. Failure to follow these instructions will result in death or serious injury.

Turn off power before working on this equipment. This indicates a situation where the present voltage could cause injury or death. Extreme caution is required when servicing or installing the equipment referenced.

2.6 Check the System

- 1. Turn the power on; the white Power Available light should illuminate. If it does not, verify that the outlet or wire is putting out 240 V or 208 V using the voltmeter.
- 2. With the Power Available light on, plug the Electric Vehicle Supply Equipment (EVSE) cable into the car. If you have any fault lights, please see the LED Light Display table in section 8.1.

Siemens Sifinity Go mobile app (for installations with 10 or less chargers per account): Download the Sifinity Go mobile app to your smartphone to get started using your charger. Find these applications at either <u>Google Play Store</u> or <u>Apple App Store</u>.

Siemens Configuration Tool (best used when configuring multiple chargers per account): Download the VersiCharge Configuration Tool (PC App) at <u>usa.siemens.com/versichargecommercial</u>. Unzip the tool to a PC and install by following the screens. This tool will allow charger management from a PC.

For Professional Electricians

3.1 Outlet Installation Instructions (skip if using an existing outlet)



A DANGER

Hazardous voltage. Failure to follow these instructions will result in death or serious injury.

Turn off power supplying equipment before working inside the unit.





Hazardous voltage.

Failure to follow these instructions will result in death or serious injury.

Any time the interior wiring is exposed while there is power to the unit, there is danger of hazardous voltage and serious injury.

NOTICE

Any electrical wiring required to install this VersiCharge shall conform to applicable codes and standards (ANSI/NFPA 70). A qualified electrician is recommended to perform these tasks.

NOTICE

Please consider your planned installation location for the mounting bracket when choosing the location to which you will run the wire.

NOTICE

Electrical outlets must be installed in accordance with appropriate NEC[®] and AHJ requirements. Please note that the outlet orientation required for proper installation of the VersiCharge product is per the illustration below.

1. A qualified electrician should install the outlet with the ground facing down (only the 40 A charger is available with a plug; the 48 A charger MUST be hardwired). See Section 2.2, Figure 1, for outlet positioning.



Figure 6. Outlet ground facing down



moisture. Installing outdoors without properly rated outdoor receptacles and enclosures will void the VersiCharge warranty.

3.1.1 Removing the Cord-and-Plug Assembly for Hardwiring (Only for the Plug-Supplied 40 A Units)

Plug removal is only for the plug-supplied 40 A units; 48 A units must be hardwired.



Follow local and national codes where applicable for rating supply equipment to the EVSE based on the charger's amp adjustment switch.

NOTICE

This enclosure has not been evaluated for rigid metallic and rigid non-metallic conduit. In order to maintain a Type 4 UL50E environmental rating, a hardwired installation should use liquidtight flexible conduit only, with conduit glands rated UL Type 4, 4X, 6 or 6P.

- 1. The VersiCharge will need to be mounted on the bracket to hardwire the device. Access the back of the unit by shifting the unit up and rotating it on the bracket hinges.
- 2. Remove the high voltage door by releasing the snaps (use a flathead screwdriver if needed to assist).



Figure 7. Remove the plug

- 3. Disconnect the attachment plug wires from the terminal block by loosening the screws in positions 1, 2 and 3, and remove the ferrite core (the core will be reinstalled when hardwired).
- 4. Do not adjust the two lugs of the pre-installed wiring. These are for factory use only.
- 5. Disconnect and remove the strain relief and entire cord-and-plug assembly.
- 6. Route the conductors into the VersiCharge from the conductor opening with proper strain relief.
- 7. Pull 3-6 inches of slack through the conductor opening.
- 8. Slide the ferrite core over the black and red wires ONLY and into position per Figure 8 (the green wire/ground should not be placed through the ferrite core).
- 9. Wire the conductors (copper only) into the VersiCharge (L1, L2 and Ground) from the connected conduit. Using a torque wrench, torque all lugs to a value dependent on wire gauge size. For 6 AWG, torque to 35 in-lbs; for 8 AWG, torque to 25 in-lbs; for 10 AWG, torque to 20 in-lbs. See Appendix C for the hardwire bending diagram.



Figure 8. Hardwire the VersiCharge

- 11. Replace the high voltage door.
- 12. Swing the unit closed until the bracket clip engages and secure the charger with the tamper-resistant security screws.
- 13. Turn the circuit breaker for this circuit to the ON position.

3.2 Amperage Adjustment





Figure 9A. Amperage dial setting

Figure 9B. Amperage dial setting

The VersiCharge comes set to the maximum of the model purchased. For example, a 40 A model will come with the amperage adjustment switch set to 4, and a 48 A unit amperage adjustment switch will be set to 5. Verify the required amperage adjustment switch setting based on the branch circuit protection (see the table below).

NOTICE

The VersiCharge cannot control the power draw to the EV; it can only communicate the current capacity to the VersiCharge to the EV.

3.2.1 Dial Settings



electrician only.

- When changing the amperage adjustment dial, verify that the VersiCharge is disconnected from power.
- The purpose of the amperage adjustment dial is to set the maximum current that the EV is allowed to draw from the charging stations.
- The dial has 10 settings.
- Settings 0-5 are for amperage adjustments.
- Settings 6-9 are for factory use only. These settings will result in a bad switch fault if used.

Amperage Settings

Switch Position	Amperage
0	12
1	16
2	24
3	32
4	40
5	48

NOTE: Do not set the switch above the 40 A unless hardwired via the dedicated 60 A branch protection.

Settings: 0 - 4 amperage adjustment settings are used for the 40 A charger (Note: the #5 position will cause a bad switch fault for the 40 A charger) and 0 - 5 amperage adjustment settings are used for the 48 A charger. Setting the amperage adjustment higher than 5 will result in a fault.

3.2.2 Circuit Requirements

• Follow local and national codes where applicable for rating supply equipment to the EVSE based on the charger's amp adjustment switch.

3.3 VersiCharge Units with a Remote Control Interface (Commercial Units)



Figure 10A. Remote control termination point

Figure 10B. Remote control termination point

1



Remote Control Interface should be low-voltage, control wiring (22AWG [0.64mm]).

Installing higher voltage on this interface can cause damage to the unit, preventing it from functioning properly. Do not hook up 120/240 V to these connections.

The Siemens VersiCharge has a Remote Control Interface that allows charging to be controlled by an external device by wiring a remote control interface to pins #7 and #9. Examples include demand response switches, building automation systems, digital sensors, and so on.

- Control Switch Input is a dry contact input from an external source.
- Status Output indicates the charging status of the VersiCharge.
- The Remote Control Interface is located inside the unit, so to connect a VersiCharge the unit has to be opened by taking the following steps:

Pin	Label	Description
7	Utility_1	Utility lockout (dry contact input; locked
9	Utility_2	when closed)

1. Remove the multi-use connector from the bag and wire an additional Remote Control Interface cable to pins #7 and #9.

NOTICE

The Remote Control Interface cable is not supplied as part of the in-box equipment.

- 2. Access the back of the unit by shifting the unit up and rotating it on the bracket hinges.
- 3. Remove the small access door by releasing snaps (use a flathead screwdriver if needed to assist).
- 4. Connect to the multi-use connector by gently pressing the connector on to it.
- 5. Press the Remote Control Interface cable through the rubberized gland at the back of the unit without the connector attached. This gland will self-seal.

NOTICE

Do not press the cable with the connector attached through this gland; this will cause the loss of the NEMA 4 rating.

- 6. Attach the Remote Control Interface cable connector and attach the two cable connectors.
- 7. Gently tuck the cables into the back of the unit and close the case.



When the external contact is closed, no charging will occur.

NOTICE

The status output is a switch that indicates charging status. When the contacts are closed, the unit is in a charging state.

▲ DANGER



Explosion hazard.

Failure to follow these instructions will result in death or serious injury.

This equipment has arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be installed at least 18 inches above the floor or ground level. Use extreme caution and follow instructions carefully.

3.4 SIM Card Installation – If Not Factory-Installed (Commercial Cellular Units Only)



Figure 11A. SIM card installation

Figure 11B. SIM card installation

This hardware uses a micro SIM card, but will allow nano SIM cards when used with an adapter. The SIM card should NOT require a PIN and must be an IoT SIM card. Locked SIM cards are not supported by VersiCharge hardware. AT&T and T-Mobile are supported carriers for the United States. Rogers and Telus are supported carriers for Canada. Data plans should have a minimum consumption of 250 MB per month per charger.

- 1. Expose the area holding the SIM card hardware by unlatching the cover. The SIM card sits next to the Ethernet connection.
- 2. Slide the micro SIM card into the slot.
- 3. The SIM card socket is spring loaded. Slide the SIM card towards the bottom of the slot until it stays in place. To remove/replace the SIM card, press the SIM card down and it will "spring" up and out of the slot.

NOTICE

If the SIM card is factory-installed, ensure that it is seated properly. If it is not seated properly in place, remove the SIM card, record its serial number, and then fully reinsert the SIM card.

3.5 Ethernet Connection – (Commercial and Smart Residential Units)

There is an Ethernet port standard on the VersiCharge controller module 10/100BASE-T port with an RJ45 modular connector. The Ethernet port is capable of data rates up to 100 Mbps and supports Modbus/TCP protocol. The Ethernet can be used to commission/configure chargers and monitor charger activity on a daily basis (download the VersiCharge Configurator Tool ([PC application] or Sifinity Go mobile app at <u>usa.siemens.com/versicharge</u>). Note that the PC tool is only used for configuring -Sifinity Go mobile app is used for configuring AND monitoring.





Figure 12A. CAT6 Ethernet port connection

NOTICE

The Ethernet cable connector should NOT be attached to the Ethernet cable when it is pushed through the rubberized Ethernet gland. This gland will not self-seal if the Ethernet connector is pushed through the rubberized Ethernet gland and the NEMA 4 rating will be lost.

- 1. Push the Ethernet cable through the rubberized Ethernet gland.
- 2. Snake the Ethernet cable up through the back to the opening.
- 3. Connect the Ethernet RJ45 plug to the cable.
- 4. Insert the RJ45 plug from the bottom up into the Ethernet port.

Figure 12B. CAT6 Ethernet port connection

3.6 General Ethernet Network Connection Illustration



Figure 13. General Ethernet network connection illustration

3.7 Modbus Communications Setup

Using the Modbus RTU protocol. VersiCharge chargers can act as Modbus non-cellular devices, making any real-time data available through the Modbus RTU protocol. Modbus cellular devices connected to the charger can access (read) this data or write data to the charger's registers, initiating control actions.

3.7.1 Modbus RTU Connection (Commercial Units Only)





Figure 14A. Multi-Use/Modbus connector

NOTICE

Push the RS-485 wire through the rubberized cable gland and then terminate the wires into the multi-use connector terminal block. This gland will not self-seal if the connector is pushed through the rubberized cable gland and the NEMA 4 rating will be lost.

Figure 14B. Multi-Use/Modbus connector



This enclosure has not been evaluated for rigid metallic and rigid non-metallic conduit. In order to maintain a Type 4 UL50E environmental rating, a hardwired installation should use liquid tight flexible conduit only, with con-duit glands rated UL Type 4, 4X, 6 or 6P.

- 1. Push the external Modbus RTU cable through the rubberized cable gland at the back of the charger (this will self-seal).
- 2. Attach the external Modbus cable wires to the internal (supplied) multi-use connector.
- 3. Gently tuck the wiring into the space and secure the back of the charger.

SECURITY NOTICE

The Modbus RTU is open protocol and it is the responsibility of the installer to ensure the security of the wiring of these connections to prevent tampering.

3.7.2 Modbus Termination Switch Settings – (Commercial Cellular/Non-Cellular Units)



Figure 15A. Termination switch setting for cellular/non-cellular units



Figure 15B. Termination switch setting for cellular/non-cellular units

1. SW3-1 (left side) labelled RS485 is the termination switch. This switch should be in the ON position for the cellular unit or in the OFF position for a non-cellular unit, unless that non-cellular unit is the last non-cellular unit in the daisy chain, in which then it must be ON.

3.7.3 Modbus Termination Switch Settings – (Commercial Non-Cellular Units Only)





Figure 16A. Termination switch setting for non-cellular units only

Figure 16B. Termination switch setting for non-cellular units only

1. SW3-2 (right side), labelled RS485 Term, is the termination switch. For the non-cellular units, the termination switch must be set to OFF; if the unit is the last one in the daisy chain, then the switch must be set to ON.

3.7.4 General Modbus RTU RS-485 Wiring Considerations

Devices connected on the Modbus RS-485 wire, including the VersiCharge, converter(s) and other instrumentation, must be wired as follows:

- Connect the shield of each cable segment to ground at one end only.
- Isolate the cables as much as possible from sources of electrical noise.
- Install a ¼ watt termination resistor (RT) between the (+) and (-) terminals of the device at each end point of a straight-line bus. The resistor should match the nominal impedance of the RS-485 cable, which is typically 120 ohms (consult the manufacturer's documentation for the cable's impedance value).

RS-485 Connection methods to avoid

Any device connection that causes a branch in the main RS-485 Modbus cable should be avoided. This includes star and tee (T) methods. These wiring methods cause signal reflections that may result in interference. No more than two cables should be connected at any connection point on the RS-485 Modbus daisy chain. This includes connection points on instruments, converters and terminal strips. Following these guidelines ensures that both star and tee connections are avoided.



Figure 17. Serial Modbus network wiring example

RFID Setup (Commercial Units Only)

RFID Cards supported by VersiCharge

Cards Family	Memory	Security	Protocol Support
MIFARE Classic	1K, 4K	Crypto1	ISO14443A Part 1-3
MIFARE Plus	1K, 2K,4K	AES, Crypto1	ISO14443A Part 1-4
MIFARE DESFire	2K, 4K, 8K	AES, 3DES	ISO14443A Part 1-4
MIFARE Ultralight	40,48,128,144	None, 3DES	ISO14443A Part 1-3

RFID functionality is an available feature only for commercial units. Pass the RFID card in front of the RFID and if successful the Charging Process Light will flash twice from the bottom up and there will be an audible tone. If the card swipe is not successful, the Charging Process Lights will flash for one second, decreasing to 0.25 second; this will happen two times. There will be two audible tones, decreasing if the card swipe is unsuccessful.

RFID State	Description
RFID swipe successful	Charging LED ON/Blinking. White #2, #4, #6 and #8 every 0.25 second in incremental patterns starting from 0.25 second, 0.50 second, 0.75 second, and 1 second. Repeat 2 times. Audible single beep tone.
RFID swipe not successful	Charging LED OFF. White #2, #4, #6 and #8 one second in decremental pattern, starting from 1 second, 0.75 second, 0.50 second, and 0.25 second. Repeat 2 times. Audible dual beep tone.

RFID card management can be performed via the Modbus controller, OCPP-based server or by manually using Admin Cards provided with the unit (note: Admin Cards may not be used when the unit is connected to an OCPP server and RFID cards must be managed by the OCPP server through the "Local Auth List Management" profile). Please refer to the Modbus map to implement the appropriate commands to add/remove or authorize charging sessions. VersiCharge maintains a local preauthorized list that holds the list of all authorized User Cards. An authorized User Card in the preauthorized list will allow the charging session to start when tapped.

To add User Cards to pre-approved, tap Admin Card, followed by tapping the User Card(s) that are to be added to the preauthorized list. Once all User Cards are added, tap the Admin Card to finish the operation of adding User Cards to local preauthorized list. In order to remove a User Card from pre-approved, tap the Admin Card followed by the User Card already in the preauthorized list, and then tap Admin Card again to end the removal process.



User Card

NOTE: Admin Cards are **only** used to add/remove user cards to the system when RFID is enabled.

NOTE: User Cards are necessary to begin charging when RFID is enabled.

SIEMENS

SECTION 5

Application Setup

Siemens is proud to offer industry-leading control and monitoring functionality built into the VersiCharge product.

- Smartphone Application. This is the preferred method for VersiCharge charger owners with 10 or less chargers per account. Search for Sifinity Go in the <u>App Store</u> for the iOS operating system (for iPhone owners) or in the <u>Google Play Store</u> for the Android operating system. Download the application.
- 2. **PC Application.** The VersiCharge Configuration Tool is the preferred method for VersiCharge owners and installers that are commissioning multiple chargers, such as with network-sharing.

NOTE: In case of a Wi-Fi network failure, the charger will continue to function based upon the registered state. If the schedule function is enabled, it will continue to run indefinitely. All demand response settings will be saved. User interface functionality will remain the same.

5.1 Mobile App User Registration

NOTICE

If the charger is moved or ownership changes, it must be deregistered prior to recommissioning. Deregistering the unit can be done through the mobile app or VersiCloud for multiple chargers.

Install the Sifinity Go mobile application from the <u>Google Play Store</u> or <u>Apple App Store</u> (ensure you have an internet connection on your VersiCharge). Upon opening the app, follow the prompted instructions to create an account and set up your charger(s), if you are configuring 10 or fewer charges per your account. The web app (<u>https://www.versichargesg.com/Account</u>) and smartphone app follow the same steps.

5.1.1 Create an Account

NOTICE

If a charger is moved to another network or if ownership is changed, the charger must be deregistered before recommissioning. The charger will not automatically commission to a new network, but remembers the initially commissioned network.

The following process links your VersiCharge to your chosen wireless network, enabling communication with the Siemens Cloud network.

• Follow the next steps to add a charger to your account.

NOTICE

Residential 40 A Unit Only - Before beginning to link the charger to an account, ensure the breaker powering the dedicated branch circuit is 'OFF'; plug in the VersiCharge. Turn the breaker 'ON' after plugging the unit in.

- The Power Available LED will turn white and the Wi-Fi Status LED will go through the following process:
 - The indicator should initially slowly blink red, switch to slowly blinking yellow, and then slowly blink white.
 - Once the indicator slowly blinks white, the charger has transitioned to Access Point (AP) mode, will switch to blinking white, and is ready to be connected to a Wi-Fi, LAN or cellular network.
- Once in AP mode, you may use your Sifinity Go mobile app or your laptop to commission the VersiCharge to a network with an open internet connection to establish connection to the Siemens VersiCloud system for management and to receive periodic charger updates.

Wi-Fi LED Light Sequence When Adding a Charger

Description of Sequence	LED Color (Blinking)	LED Color (Steady)
Software loading	(în centre de la c	
Software running	((i):	
Charger in AP mode	((it:	
Receiving connection credentials	(((;	
Received connection credentials	((t·	
Connecting to network	((t·	
Connected to network		((t·
Connecting to VersiCloud		
Connected to network, registered and connected to VersiCloud		((i·

NOTE: A gray LED color indicates no lit LED.

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SECTION 6

Configure/Commission VersiCharge Using the Configurator Tool

- Download the Configurator Tool, VersiCharge Configuration Tool Installation Manual, and VersiCharge Configuration Tool Manual from <u>usa.siemens.com/versichargecommercial</u>.
- Unzip the Configuration Tool and install. Follow the steps for the configuration of VersiCharge. Use the manual for any questions.

6.1 Required Open Ports (for IEC and UL)

Note that these open ports are required for communication with the Siemens Device Management and logging server:

Instance	Domain Name	Ports	Application Layer Protocol	Purpose
	https://versicharge.emobility.siemens.cloud	443, 9019	HTTPS, WSS	Registration, upgrade requests, WebSocket communication
	versichargesgeuprod.blob.core.windows.net	443	HTTPS	Firmware updates
IEC	data.logentries.com	443	HTTPS	Logging
	eu.data.logs.insight.rapid7.com	443	HTTPS	Logging
	s-b184b487ff5c4c75a.server.transfer.eu-central-1.amazonaws.com	22	SFTP	Secondary server for firmware updates
	https://versichargesg.com	443, 9019	HTTPS, WSS	Registration, upgrade requests, WebSocket communication
	versichargesg.blob.core.windows.net	443	HTTPS	Firmware updates
UL	data.logentries.com	443	HTTPS	Logging
	eu.data.logs.insight.rapid7.com	443	HTTPS	Logging
	s-771b624ad7e94b258.server.transfer.us-east-2.amazonaws.com	22	SFTP	Secondary server for firmware updates
	us.data.logs.insight.rapid7.com	443	HTTPS	Logging
	<u>siemens.com</u>	N/A	ICMP	Determine if charger has network connectivity
	pool.ntp.org	123	UDP	NTP server
	siemens.pool.ntp.org	123	UDP	NTP server
IEC and UL	dns.opendns.com	53	UDP and TCP	Access to domain name server
	dns.opendns.com	53	DNS	*.store.core.windows.net
	*.store.core.windows.net	443	HTTPS	Firmware updates

If an OCPP server is used, it may require additional ports to be open. Refer to the OCPP server documentation for such information.

SECTION 7

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Figure 18. Residential HMI

NOTE: Number of LEDs may change based on specific part number and features.



NOTE: Number of LEDs may change based on specific part number and features.

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- The Power Available LED will turn white and the Wi-Fi Status LED will go through the following process:
 - The indicator should initially slowly blink red, switch to slowly blinking yellow, and then slowly blink white.
 - Once the indicator slowly blinks white, the charger has transitioned to AP mode and is ready to be connected to a Wi-Fi network.
- Once in AP mode, you may use your Sifinity Go mobile app or your laptop to commission the VersiCharge to a network with an open internet connection to establish connection to the Siemens VersiCloud system for management and to receive periodic charger updates.

Operating VersiCharge

8.1 LED Light Display

Display	Description	Action
Normal Operation		
	Charger is locked.	Pass the RFID card in front of the reader to unlock and begin charging.
Applicable to commercial units, only if RFID is enabled.		
	Charger is unlocked.	Enable RFID authentication. To unlock, pass an RFID card over the RFID reader.
Applicable to commercial units, if RFID is enabled.		NOTE: The charger is in the unlocked state by default.
$= \bigcup_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} \sum_$	Charging station is ready.	
Lights up white		
	Charging is paused.	Charging can be resumed through the Sifinity Go mobile app.
LED off		
	Vehicle is connected.	
Lights up white		
- 20-	Charging in progress.	
Lights up white		
	After switching on, the charger will go to Access Point mode.	Connect PC or mobile device for commissioning, charger is ready to be added to the account.
Flashes white		
	No Wi-Fi.	Check the router.
Lights up red		
- () -	Charger is connected to router. Weak Wi-Fi.	Strengthen the Wi-Fi.

Lights up orange

Display	Description	Action
Normal Operation		
	Charger is connected to router. Strong Wi-Fi.	
Lights up green		
	Attempting to connect to VersiCloud.	
Flashes blue		
	Ready (with successful connection and registration in VersiCloud)	
Lights up white		
	Access blocked	Unlock via RFID / OCPP / Modbus / Sifinity Go mobile app.
Control of the second se	2-hour delay	Wait until the charging process starts.
Illuminates white		
A MILLION CONTRACTOR OF A DESCRIPTION	4-hour delay	Wait until the charging process starts.
Illuminates white		
A MANUFARMAN	6-hour delay	Wait until the charging process starts.
Illuminates white		
	8-hour delay	Wait until the charging process starts.

Flashes white

Display	Description	Action	
Fault Status			
5 s	Press the Touch button for 5 seconds for maximum charging power.	Power presetting is set to the maximum for the charging process.	
~	riess once for ground fault reset.		
5 s	A fault has occurred.	The device is in a fault state. Eliminate the fault and then push the touch button and hold for 5 seconds to reset.	
Ground fault			
	Random delay between 1-5 minutes on power cycle if EV is connected. EVSE will resume charging after delay expires.	No action is needed.	
Cold start - lights up steady white			

8.1.1 Troubleshooting Tips



If the LED faults on the Siemens VersiCharge begin to flash after the unit has already been commissioned, attempt to resolve the issue by power cycling the unit.

If the LEDs continue to flash after power cycling the Siemens VersiCharge, the unit must be returned to Siemens for replacement. Please fill out a support ticket at <u>usa.siemens.com/createcase</u> to begin the replacement process.

8.2 VersiCharge Operation

Safety instructions during the charging process



- Do not kink or squeeze the charging cable. Do not draw the charging cable over sharp edges or hot surfaces.
- Do not use the charging station if damage or tampering is visible. If damage is visible, inform the operator. Until damage is repaired, keep away from the charging station and do not attempt to charge an EV.
- Grip the power plug/connector to disconnect from the charging unit. Do not remove the connector by pulling on the cable.
- Never touch the power plug/connector with wet hands.
- Do not connect or disconnect any cables during a thunderstorm.

Risk of overheating and fire

Unauthorized accessories should not be used with the VersiCharge due to risk of fire and/or overheating.

- Do not use a charging cable that is not approved for the vehicle.
- Do not use an extension to connect the charging station to the vehicle.
- The utilization of adapters or extension cables is not allowed by the charging standards and is not recommended; it therefore is the sole responsibility of the cable or adapter provider.

A CAUTION Bisk of accident.

Failure to follow these instructions will result in serious injury or property damage.

Ensure that the charging cable does not block an exit or pose a tripping hazard. Ensure the cable cannot be ripped out of the charging station.

8.2.1 Basic Procedure

- Using the charger connector, gently insert the connector into the EV. Be sure not to force the connection or bend any pins in the connector.
- Check the charger "Lock" light (see Figure 19, commercial chargers only); when lit, the front panel is locked and will not begin charging. Pass a user RFID card in front of the reader to unlock and begin charging. The "Lock" light will be off.
- RFID authentication is successful when the Charging Process Light flashes twice from the bottom up and there is an audible tone. RFID authentication is not successful when there are two audible tones.
- If RFID authentication is successful, charging will begin automatically.
Set a delay by using the Sifinity Go mobile app. Delays can be set for 2, 4, 6 or 8 hours.

The LED bar display indicates that current is flowing to the vehicle and the vehicle battery is charging. The LED bar display is off in the following cases:

- The vehicle is not drawing power.
- The charging unit pauses, for example, because of load management.
- The vehicle pauses the charging.
- Charging is completed.



- Once charging is completed, the "Ready" status light will turn off.
- Carefully remove the connector from EV and stow the cable in the cable holster to prevent damage to either the cable or the connector.

8.2.2 Start Charging - RFID Feature

Proceed as follows to begin charging:

- Check that the charger is ready for operation; the Power LED must be lit and white.
- Register an RFID card on the device.
 - If the RFID function is activated on your device, hold your RFID card in front of the card reader.
 An acoustic signal should emit.
 - Register on the device with a method supported by the operator; for example, via an app.
- Open the EV connection cover and insert the charger connector into EV socket. Make sure that the connector pins are not bent or damaged before inserting into the EV socket.
- The device will lock the plug into the socket. The "Vehicle connected" LED will light up.

LED lights indicate the charger status:







Vehicle connected. LED lights up white.

Charging in progress. LED lights up white.

Charging completed. Charger is ready.

After successful authorization, charging will begin automatically unless a delay has been set.

The communication connection to the vehicle is established. This process may take some time depending on the connection speed and response speed of the backend (such as VersiCloud) and the vehicle.

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SECTION 9

Maintenance

While there is no maintenance for the internal works of the VersiCharge, the exterior does require some basic, common-sense maintenance. The following maintenance can be performed by the owner/user. All other service must be conducted by qualified personnel.

If there is any damage to the charger, contact your supplier.

General exterior maintenance is recommended to be performed every six months, depending on the environment. In harsh environments, maintenance should be performed more often.

9.1 General Exterior Maintenance

Regular cleaning is recommended to avoid accumulation of debris/dust/dirt on or around the unit. Wipe surfaces with a soft cloth dampened with water, or for harder to remove marks, use an alcohol-based cleaner. Do not spray with high pressure cleaning hoses or use abrasive chemicals.

9.2 General External Checks

Check the cable for damage such as cuts or wear.

Ensure there is no debris or damage inside charger connector, cable holder and connector/plug. If present, remove any debris.

Check the connector/plug pins for any signs of corrosion.

Check the charger body for damage.

Check the HMI for damage.

Check for snow buildup and clear the area around the VersiCharge. This should be checked daily in areas with high snowfall.

9.3 Cleaning Steps for Polluted Coupler

- 1. De-energize the unit and only clean when the coupler is not connected to the vehicle.
- 2. Use a dry cloth to clean the outside of the cable, vehicle connector, equipment plugs and pin contacts.
 - a. Use a dry cotton swab to clean the inside of the pins and ensure there is no debris left behind.
 - b. DO NOT use abrasive cleaning agents, compressed air, water jet or steam jet cleaners. NEVER submerge the article into liquid.
 - c. If pin(s) are burnt, deformed or have signs of burning, these units must be removed from service and replaced immediately.

SECTION 10

Warranty

LEGAL NOTICE: Please access the product warranties at the following:

VersiCharge™:

https://assets.new.siemens.com/siemens/assets/api/uuid:aa957eb2-0e18-4983-a559-6c9a30851e1d/SIE-B40053-00-4AUS-VersiCharge-AC-Limited-Warranty.pdf

VersiCharge Blue™:

https://assets.new.siemens.com/siemens/assets/api/uuid:3861e648-9b33-4f4f-9f52-73f04b8fe4b7/SIE-B40058-00-4AUS-VersiCharge-Blue-AC-Limited-Warranty.pdf

Post and accessories:

Use of this product indicates acceptance of these terms and non-compliance may void the warranty.

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SECTION 11

Help!

Call us any time, any day, at +1 (855) 950-6339, option 9, or contact us at <u>https://siemens-smartinfrastructure.force.com/SI/s/</u> <u>createcase</u>.

VersiCharge[™] AC series – Technical Data

Features and functions

Charging mode	Level 2			
Vehicle connection	J1772 plug with 20-foot cable, 40 A / 48 A / integrated cable management			
AC power output	Single phase up to 9.6 kW (40 A) - requires a 50 A breaker, or 11.5 kW (48 A) - requires a 60 A breaker			
Mounting options	Wall and post mounting, see accessories			
Touch button	Return to maximum power level, reset ground fault			
Charging status LEDs	Power, time delay, charging state, reduced power level, authentication, cold start			
Communication status LEDs	Connected / not connected during operation, signal strength during commissioning			
Network-sharing	Connects to one non-cellular charger by Wi-Fi within 20 feet line of sight			
Load management	Via OCPP, Modbus RTU and Modbus TCP/IP			
Communication				
Interfaces	Ethernet, Wi-Fi; for cellular units additionally LTE, WCDMA			
User authentication	RFID (local Whitelist, MIFARE)			
Configuration	Via Siemens mobile app or the PC Configuration Tool			
Back-end protocol	OCPP 1.6, upgradeable to OCPP 2.0.1			
Software upgrade	Over-the-air (OTA)			
Electrical design				
Power supply voltage	208 V / 240 V AC, 60 Hz			
Rated current settings (A)	12, 16, 24, 32, 40, 48			
Wire cross section	Wire size - 8 AWG / 6 AWG (90 °C rated wire)			
Network type	Single split phase			
Energy metering	Embedded metering			
Ground fault protection	20 mA			
Over voltage protection	Over voltage: 267 V (maximum 275 V)			
Over current protection	Current +10% above configured threshold, minimum +2A, 5 seconds			
Operating altitude	2,000 m			
General design				
Environmental rating	Indoor and outdoor, NEMA 4, IK 8			
Dimensions (H x W x D)	16.10 in x 7.09 in x 3.78 in			
Weight	17 lbs			
Ambient conditions	Operating temperature: -31 °F to +122 °F; storage temperature: -40 °F to +140 °F, 98% non-condensing			
Colors	Silver metallic (Pantone 10077), black holster			
Certificates and standards				
cUL listed	According to UL 1998, UL 991, UL2594/CSA C22.2 No.280/NMX-J-677-ANCE, UL 2231-1/CSA C22.2 No.281.1/ NMX-J-668-1, UL 2231-2/CSA C22.2 No.281.2/NMX-J-668/2-ANCE, UL 2251/CSA C22.2 No.282/NMX-J-678-ANCE			
EMC	FCC Part 15 Class A (commercial variants), FCC Part 15 Class B (residential variants)			
Consumption	Energy Star certified			

		Maximum current	Model number	Wi-Fi and Ethernet	RFID identification	Embedded metering	LTE WCDMA	Installed SIM card
Residential Sm version	Current	40 A	8EM1312-4CF18-0FA3	~	_	~	_	-
	Silidit	48 A	8EM1312-5CF18-0FA3					
Commercial Commercia Commercial Commercial Commercial Commercial C	Non- cellular	40 A	8EM1310-4CF14-0GA0	~	~	~	_	-
		48 A	8EM1310-5CF14-0GA0					
	Cellular	40 A	8EM1310-4CF14-1GA2	~	~	~	~	~
		48 A	8EM1310-5CF14-1GA2					
Buy American Commercial versions	Non- cellular	48 A	8EM13155CG140GF0	~	~	~	-	_
	Cellular	48 A	8EM13155CG141GF2	~	~	~	~	~

Back-end protocol: OCPP 1.6, upgradeable to OCPP 2.0.1

Data plans, accessories and bundled packages for chargers: Siemens offers chargers with data plans, posts and bundled solutions for customer convenience. See table below:

Description	Catalog Number
Multi-carrier pooled data plan: 1-year data plan, 1 GB capped monthly bandwidth (supports one cellular charger and one non-cellular charger). This is an annual fee.	US2:DATA1YRMULTI
Extended warranty per Level 2 charger: 1 additional year, no in / out services	US2:VCEXWAR1YR
Extended warranty per Level 2 charger: 2 additional years, no in / out services	US2:VCEWAR2YR
Standard post: can support one or two chargers. Comes with installation kit, made of aluminum. Includes 1-year warranty.	US2:VCPOSTGRY2
Standard post cable retraction unit: used with US2:VCPOSTGRY2 post design. One required for each charger. Includes 1-year warranty.	US2:VCCMSSP

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Description	Catalog Numbers
VersiCharge dual post: 72 inches tall (side by side), with dual cable retraction system for 20-foot charging cable.	US2:VCPOSTCR2S
VersiCharge single post: 72 inches tall, with cable retraction for 20-foot charging cable. Comes with installation kit and includes a 1-year warranty.	US2:VCPOSTCR1S
VersiCharge dual post: 95 inches tall (side by side), with dual cable retraction for 25-foot charging cable. Comes with installation kit and includes a 1-year warranty	US2:VCPOSTCR2A
VersiCharge single post: 95 inches tall, with cable retraction for 25-foot charging cable. Comes with installation kit and includes a 1-year warranty.	US2:VCPOSTCR1A
48 A VersiCharge basic package: Includes two 48A J1772 chargers , one year cell service plan and one VersiCharge side-by-side post with cable retraction system, 72 inches tall.	US2:VERSIPACK48BAS
48 A VersiCharge cloud package: Includes two 48A J1772 chargers, one year cell service plan, two years of VersiCharge cloud service and one VersiCharge side-by-side post with cable retraction system, 72 inches tall.	US2:VERSIPACK48CLO



AC StartUp includes:

- All travel and living costs included in price
- Configuration and connection of the chargers to the Cloud
- A dedicated project engineer to work with the end user
- Remote site evaluation review to ensure everything is set up and ready to go
- Basic onsite AC charger review during startup
- A personalized experience to ensure a stress-free commissioning of chargers

Description	Catalog Number		
StartUp for up to 4 AC chargers	US2:ACSTARTUP		
StartUp for up to 10 AC chargers	US2:ACSTARTUP10		
StartUp for more than 10 AC chargers (will require business unit review)	US2:ACSTARTUPBULK		

APPENDIX A Useful Links

- Register the VersiCharge hardware at: https://siemens-smartinfrastructure.force.com/eMobilityCloud/s/login/
- If you don't have an existing account, create an account in VersiCloud use the following link and click "Register" or use the Sifinity Go mobile app to create a new account: <u>https://www.versichargesg.com/Account/Login?ReturnUrl=%2f</u>
- Download the Sifinity Go mobile app at the following links for installations with 10 or less chargers per account.

Android - https://play.google.com/store/apps/details?id=com.siemens.VersiChargeSG

iOS - https://apps.apple.com/us/app/versicharge/id989742892

- Download the VersiCharge Configuration Tool (PC application). Recommended for commercial installations. Download available on usa.siemens.com/versichargecommercial under the download section.
- Find the following at <u>usa.siemens.com/versichargecommercial</u>:
 - Configure your VersiCharge
 - VersiCharge Frequently Asked Questions
 - UL VersiCharge AC Series Post Installation Manual
 - Open Source Report: Product clearing report for third-party SW components
 - End User License Agreement (EULA)
 - Privacy Rights
 - Installation and commissioning videos
 - Mobile app user guide

APPENDIX B

Wiring Schematics for VersiCharge 40 A and 48 A VersiCharge Units



Figure 20. Hardwire installation schematic for advanced 40 A / 48 A unit

NOTICE

Follow local and national codes where applicable for rating supply equipment to the EVSE based on the charger's amp adjustment switch. 40 A requires a 50 A breaker, and 48 A requires a 60 A breaker. In addition, the wiring should not be exposed to any conditions that could potentially damage wiring or cause a potential hazard.

APPENDIX C Hardwire Bending Diagrams



A full-size wire bending diagram is supplied in the box. Locate the diagram, place the cable (22AWG [.64mm]) being wired to the unit on it, and bend the wires to match the diagram. Insert the wires into the unit and tighten the connections (to 14.5 in-lbs).

Hardwire Bending Diagrams







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Notes



Notes

Notes



Legal Manufacturer

Siemens Industry, Inc. 3617 Parkway Ln. Peachtree Corners, GA 30092 United States of America

Telephone: 855-950-6339, option 9, or visit <u>www.usa.siemens.com/createcase</u> for service questions or inquiries.

Engineering No. R815071 - June 2024

Article No. SIE-T40011-00-4AUS

This document contains a general description of available technical options only and its effectiveness will be subject to specific variables, including field conditions and project parameters. Siemens does not make representations, warranties, or assurances as to the accuracy or completeness of the content contained herein. Siemens reserves the right to modify the technology and product specifications in its sole discretion without advance notice.

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Attachment C - Supplemental Conditions

Attachment C - Supplemental Conditions

Project: INSTALLATION OF SIX SINGLE-PORT ELECTRIC VEHICLE CHARGING STATIONS AND SITE PREPARATION OF FIVE ADDITIONAL PARKING SPACES FOR FUTURE EV CHARGING AT DALRYMPLE BOATHOUSE AND THE CARRIAGE HOUSE IN ROGER WILLIAMS PARK, PROVIDENCE, RI

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6.4 Backup Stock/Spare Parts6.5 Additional Requirements

1.0 General Description of the Work

Supply installation of six single-port electric vehicle charging stations and complete site prep, including but not limited to laying conduit for wires and ethernet, for five additional parking spaces at the Dalrymple Boathouse and Carriage House in Roger Williams Park, Providence, RI for use by the City of Providence (City) Parks Department vehicles.

In coordination with the City's Fleet Manager and Parks Department, provide all necessary supervision, installation personnel, equipment, materials, and Support Services to complete the work in a professional and timely manner as defined in:

- RFP Electric Vehicle Charging Infrastructure Design & Construction Parks Department
- Attachment A VersiCharge Dual Post Installation Guide
- Attachment B VersiCharge Installation and Operations Manual
- Attachment C Supplemental Conditions (this document)
- Attachment D Location Diagrams

Provide As-Built Documentation and Closeout Procedures as defined in Attachment C - Supplemental Conditions

1.1 The following are included in the contract documents:

- RFP Electric Vehicle Charging Infrastructure Design & Construction Parks Department
- Attachment A VersiCharge Dual Post Installation Guide
- Attachment B VersiCharge Installation and Operations Manual
- Attachment C Supplemental Conditions (this document)
- Attachment D Location Diagrams

2.0 Working Conditions

2.1 Operation of Facilities - The facilities will remain open and occupied. Normal business will be conducted concurrent with the contractor's work. Contractor will make every effort to minimize disruption of the operation of the facilities. 24 hours' notice shall be provided to a facility before any anticipated power interruption.

2.2 Schedule - The work shall proceed as established in the Project Schedule as determined in section 3.2

2.2.1- Expected project completion date is: Three months from award of contract and execution of agreement.

2.3 Safety - Safety is of the utmost importance. Contractor will provide for the protection of its personnel as well as the protection of Parks Department workers and the general public. The Contractor shall coordinate with the Parks Department who will provide and deploy protective equipment, signage, barricades, etc. required to maintain a safe working environment at all times.

Contractor shall comply with safety requirements and practices in accordance with Parks Department requirements and Occupational Safety and Health Administration (OSHA). Contractor shall coordinate with the Parks Department who will provide safety cones or similar signage to clearly mark active work areas.

2.3.1 Additional Safety requirements for this project include the following; Coordinate with Parks Department to ensure, excavated areas are properly secured and barricaded at the end of each workday. Contractor shall provide all pedestrian and vehicle traffic control, Police detail(s), signage as required.

2.4 Identification - Contractor will maintain a daily log of all personnel and visitors on site. All contractor personnel will display identification at all times when on site.

2.4.1 Additional identification and sign-in requirements for this project include the following; *To be determined in consultation with Parks Department Facilities Staff.*

2.5 Working Hours - Standard working hours for this project are as follows; *To be determined*

2.6 Access to Work Area – On-site Parks Department personnel will provide contractor access to the work area in accordance with the Schedule of Work submitted by the contractor. Changes and adjustments to the Schedule should be requested as far in advance as is practical. The Parks Department will make every effort to accommodate such changes but cannot guarantee access for schedule change requests submitted with less than 24-hour notice.

2.6.1 Additional access requirements for this project include the following; *To be determined*

2.7 Protection of Property - Contractor will provide all equipment, coverings etc. required for the protection of facilities and personal property located in the construction area. Contractor will identify any specific property that requires protection by others in the <u>Pre-Construction</u> <u>Report</u> as defined in sec 3.6.

2.7.1 Additional property protection requirements for this project include the following: *To be determined*

2.8 On-Site Storage - The security of all project material is the sole responsibility of the Contractor until installation is completed and accepted.

2.8.1 On-site storage is available as follows: To be determined

2.9 On-Site Parking - Contractor personnel will park in designated areas only or in public spaces. Daily parking for construction vehicles will be in designated areas only. No overnight parking of construction vehicles is permitted.

2.10 Special Working Conditions – Contractor will ensure that all project personnel are properly informed of and in compliance with any additional requirements for working in specified areas or conditions.

2.11 Supervision - The Parks Department will designate an Parks Department Project Manager prior to the start of work. The Parks Department Project Manager will be the primary point of contact for all matters related to the project. The Contractor will provide on-site supervision whenever work is in progress. Site supervisor(s) must be identified in the <u>Project</u> <u>Personnel Listing</u> (sec 3.1) and provide emergency contact information to the Parks Department Project Manager and Facility Contact. The on-site supervisor will meet daily with designated facility contact(s) to coordinate current and future work. On-site supervisor will attend meetings as requested by the Parks Department Project Manager.

3.0 Pre-Construction Requirements - Upon execution of a contract and issuance of a Purchase Order and prior to the start of construction, the contractor will transmit to the Parks Department Project Manager the following:

3.1 Project Personnel Listing - Provide Name, Title, and contact information for Primary Contractor contact, Contractor's On-Site Supervisor, Construction Foreman.

3.2 Project Schedule– Provide an installation schedule in sufficient detail to facilitate coordination with facility personnel to expedite the work.

3.3 Schedule of Project Values – Provide a schedule of project phases and associated contract values.

3.4 Materials Submittals – Provide technical data specification sheets for all materials to be installed in the project for review and approval. Proposed materials shall be consistent with bid specifications. Changes to the materials specifications required by special field conditions or technical requirements should be listed separately with supporting documentation. Prior to ordering materials, the contractor shall verify all materials and equipment are as specified and appropriate for the intended use.

3.5 Pre-Construction Report – Contractor will verify the scope of work as listed and include in the report any discrepancy in quantities or required changes to the specification. The Contractor will inspect the facility and report any existing condition that will impact the contractor's work schedule or that may require correction prior to the commencement of the contractor's work.

3.6 Permits and Licenses - **Contractor will obtain and pay for all necessary permits required prior to the commencement of work.** Such permits shall be properly displayed at the work site and a copy transmitted to the Parks Department Project Manager. Contractor will deliver to the Parks Department Project Manager a copy of the Contractor's or subcontractor's State of Rhode Island Electrician's License or any other License or certification required for the project work.

3.6.1 Specified permits or licenses required for this project as follows: *To be determined*

3.7 Hazard Response Plan – The contractor will provide a detailed procedure to be implemented in the event of any of the following conditions:

• Discovery of Hazardous Material or Conditions.

4.0 Installation

4.1 General Installation - All equipment and materials shall be installed in a workmanlike manner to industry standard and in compliance with all applicable codes. Installation shall

comply with the manufacturer instructions and ensure warranty requirements are met. Work shall be continuous per the established Project Schedule, see Section 3.2.

4.2 Removal and Disposal - Contractor is responsible for the proper disposal of all materials and equipment removed, excess excavated material, construction waste, packaging materials, and trash. Contractor will supply disposal receptacles and may not use the facility's waste receptacles or systems.

4.2.1 Space for a dumpster will be provided as follows; *To be determined with awarded vendor*

4.3 Recycling - Contractor will provide for the proper recycling of removed materials, packaging materials, and other items as required by local, state, and federal laws. Certification of recycling documentation will be transmitted to the Parks Department Project Manager upon completion of the project.

4.4 Material Handling - Contractor is responsible for the delivery, off-loading, inventory, storage, and distribution of the project material. Parks Department personnel cannot receive material deliveries on behalf of the Contractor, except as agreed to between the contractor and Parks Department where the materials relate to a portion of the project being conducted with Parks Department labor.

4.5 Equipment - Contractor will provide all equipment required for the safe completion of the work. Except where the equipment relates to a portion of the project being conducted with Parks Department labor, no Parks Department-owned equipment may be utilized by the contractor. All equipment operators must carry valid certification as required for the equipment being operated.

4.6 Fastening - All fasteners, anchors, etc. will be installed in accordance with the manufacturer's instructions and shall meet requirements of all codes in force. Fasteners of high quality, suitable material, and in sufficient quantity shall be employed to ensure proper installation.

4.7 Electrical – All electrical components shall be installed in accordance with NEMA standards and requirements of the National Electrical Code pertaining to installation of electric vehicle charging stations and with applicable portions of NECA's "Standard of Installation." All electrical components shall be RoHS compliant. Certification: All Electrical Components, Devices, Accessories, and Controls and associated components shall be new, listed, and UL labeled and marked for intended location and application and comply with current National Electric Code.

4.8 Site Work - Contractor shall coordinate site work with the Parks Department, which will provide labor and equipment for certain tasks as described in the RFP. Exterior service wiring and conduit shall be installed in accordance with NEMA standards and requirements of the National Electrical Code pertaining to installation of electric vehicle charging stations and with applicable portions of NECA's "Standard of Installation. Conduit to be properly bedded, supported, encased, etc. as is required for the intended use. All required concrete bases or poured in place mountings shall be as defined in the manufacturer's installation instructions. All disturbed pavement, sidewalks, curbing, irrigation, lawn, landscaping, etc. will be replaced or restored to match existing conditions. The outcome of the site work shall not interfere with the site's existing ADA compliance.

4.8.1 Specified site work requirements for this project include the following; *to be determined*.

4.9 Cleaning – Upon completion of the work, all excess material will be removed and the general area will be broom cleaned.

4.10 Hazardous Condition – Upon the creation or discovery of a hazardous condition the Contractor will immediately stop all work, notify the Parks Department Project Manager, notify Onsite Facility Contact, and implement the appropriate Hazard Response Plan as established in section 3.7.

4.10.1 Specified Installation conditions for this project include the following: *To be determined*

4.11 Striping and Signage – The contractor shall coordinate with the Parks Department, which will provide labor and equipment for certain tasks as described in the RFP. New striping will be added to the EV parking spaces to clearly designate them as EV charging spaces. Signage will be installed to identify the charging stations and provide any necessary usage instructions.

4.11.1 Additional: To be determined

5.0 Warranty - The Contractor shall warrant its work against defective materials and workmanship for a period of three years from the date of acceptance of the completed project, unless longer term is specified. Neither Final Payment nor any provisions in the Contract Documents shall relieve the Contractor of the responsibility for faulty materials or workmanship. Contractor shall register all materials installed for the project with the manufacturer and ensure all applicable manufacturer warranties are in force and valid at the time of project completion. Warranty shall be for the entire installation and its associated components and shall not refer warranty of components to other manufacturers of components that make up the equipment. All equipment shall be covered by manufacturer's warranty against defects in workmanship or material. Warranty shall not define any limitations or percentage of acceptable failure for any component thereby allowing the failure or any component to not be covered under the warranty. Any failure of any component(s) and/or sub-components shall be deemed a failure and subject to replacement of the failed component(s) and/or sub-components under the warranty.

6.0 Project Completion

6.1 Closeout Meeting - Upon substantial completion of the work, the Contractor will attend a closeout meeting to determine punch list items, discrepancies or changes in the scope of work and any final requirements for completion of the project.

6.2 Closeout Documents - Contractor will transmit to the Parks Department Project Manager and the City's Fleet Manager the following:

- Project Book Provide a binder of related project information including warranty information, product data sheets, as-built listing of fixtures installed and product manuals and training materials.
- Service Plan Provide contact information and procedure to request a service call during the contractor warranty period.
- Certificate(s) of recycling.

• Signed permits.

6.3 Training and Commissioning - Contractor will provide instruction in the proper use of all installed equipment. Contractor will supply the Parks Department and the City's Fleet Manager with necessary commissioning and control equipment for the future programming and maintenance of the system(s) installed.

6.4 Back up Stock / Spare Parts– Upon project completion Contractor will deliver to the facility the following additional material(s): *To be determined*

6.5 Additional Requirements - Additional project closeout requirements are as follows: *To be determined.*

End of Document

Attachment D – Location Diagrams



6



Roger Williams Park Providence, RI **Carriage House**

2nd charger if needed w/conduit to support Single-port EV charger in future









Carriage House Parking



Carriage House – Two Car Bay



Carriage House – 9 car bay looking south



Carriage House – 9 car bay looking north





Dalrymple Boathouse Roger Williams Park Providence, RI

Single-port EV Charger





