

**CITY OF SANTA ROSA  
PROFESSIONAL SERVICES AGREEMENT  
WITH SAGE RENEWABLE ENERGY CONSULTING, INC. DBA NV5, INC.  
AGREEMENT NUMBER \_\_\_\_\_**

This "Agreement" is made as of this \_\_\_\_ day of \_\_\_\_\_, 2024 by and between the City of Santa Rosa, a municipal corporation ("City"), and Sage Renewable Energy Consulting, Inc. dba NV5, Inc., a California Corporation ("Consultant").

**RECITALS**

A. City desires to obtain a qualified firm to evaluate City's transition to an electrical fleet, provide considerations for energy storage options and resiliency, provide policy considerations, and develop an Electric Vehicle Fleet Infrastructure Master Plan.

B. City desires to retain a qualified firm to conduct the services described above in accordance with the Scope of Services as more particularly set forth in Exhibit A to the Agreement.

C. Consultant represents to City that it is a firm composed of highly trained professionals and is fully qualified to conduct the services described above and render advice to City in connection with said services.

D. The parties have negotiated upon the terms pursuant to which Consultant will provide such services and have reduced such terms to writing.

**AGREEMENT**

**NOW, THEREFORE**, City and Consultant agree as follows:

**1. SCOPE OF SERVICES**

Consultant shall provide to City the services described in Exhibit A ("Scope of Services and Compensation") Consultant shall provide these services at the time, place, and in the manner specified in Exhibit A. Exhibit A is attached hereto for the purpose of defining the manner and scope of services to be provided by Consultant and is not intended to, and shall not be construed so as to, modify or expand the terms, conditions or provisions contained in this Agreement. In the event of any conflict between this Agreement and any terms or conditions of any document prepared or provided by Consultant and made a part of this Agreement, including without limitation any document relating to the scope of services or payment therefor, the terms of this Agreement shall control and prevail.

**2. COMPENSATION**

a. City shall pay Consultant for services rendered pursuant to this Agreement at the rates, times and in the manner set forth in Exhibit A. Consultant shall submit monthly statements to City

which shall itemize the services performed as of the date of the statement and set forth a progress report, including work accomplished during the period, percent of each task completed, and planned effort for the next period. Invoices shall identify personnel who have worked on the services provided, the number of hours each worked during the period covered by the invoice, the hourly rate for each person, and the percent of the total project completed, consistent with the rates and amounts shown in Exhibit A.

b. The payments prescribed herein shall constitute all compensation to Consultant for all costs of services, including, but not limited to, direct costs of labor of employees engaged by Consultant, travel expenses, telephone charges, copying and reproduction, computer time, and any and all other costs, expenses and charges of Consultant, its agents and employees. In no event shall City be obligated to pay late fees or interest, whether or not such requirements are contained in Consultant's invoice.

c. Notwithstanding any other provision in this Agreement to the contrary, the total maximum compensation to be paid for the satisfactory accomplishment and completion of all services to be performed hereunder shall in no event exceed the sum of three hundred and seventy thousand dollars and no cents [\$370,000.00]. The City's Chief Financial Officer is authorized to pay all proper claims from JL Key 54063.

### **3. DOCUMENTATION; RETENTION OF MATERIALS**

a. Consultant shall maintain adequate documentation to substantiate all charges as required under Section 2 of this Agreement.

b. Consultant shall keep and maintain full and complete documentation and accounting records concerning all extra or special services performed by it that are compensable by other than an hourly or flat rate and shall make such documents and records available to authorized representatives of City for inspection at any reasonable time.

c. Consultant shall maintain the records and any other records related to the performance of this Agreement and shall allow City access to such records during the performance of this Agreement and for a period of four (4) years after completion of all services hereunder.

### **4. INDEMNITY**

a. Consultant shall, to the fullest extent permitted by law, indemnify, protect, defend and hold harmless City, and its employees, officials and agents ("Indemnified Parties") from all claims, demands, costs or liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, interest, defense costs, and expert witness fees), that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Consultant, its officers, employees, or agents, in said performance of professional services under this Agreement, excepting only liability arising from the sole negligence, active negligence or intentional misconduct of City.

b. The existence or acceptance by City of any of the insurance policies or coverages described in this Agreement shall not affect or limit any of City's rights under this Section 4, nor shall the

limits of such insurance limit the liability of Consultant hereunder. This Section 4 shall not apply to any intellectual property claims, actions, lawsuits or other proceedings subject to the provisions of Section 17(b), below. The provisions of this Section 4 shall survive any expiration or termination of this Agreement.

## **5. INSURANCE**

a. Consultant shall maintain in full force and effect all of the Insurance coverage described in, and in accordance with, Attachment One, "Insurance Requirements." Maintenance of the insurance coverage set forth in Attachment One is a material element of this Agreement and a material part of the consideration provided by Consultant in exchange for City's agreement to make the payments prescribed hereunder. Failure by Consultant to (i) maintain or renew coverage, (ii) provide City notice of any changes, modifications, or reductions in coverage, or (iii) provide evidence of renewal, may be treated by City as a material breach of this Agreement by Consultant, whereupon City shall be entitled to all rights and remedies at law or in equity, including but not limited to immediate termination of this Agreement. Notwithstanding the foregoing, any failure by Consultant to maintain required insurance coverage shall not excuse or alleviate Consultant from any of its other duties or obligations under this Agreement. In the event Consultant, with approval of City pursuant to Section 6 below, retains or utilizes any subcontractors or subconsultants in the provision of any services to City under this Agreement, Consultant shall assure that any such subcontractor has first obtained, and shall maintain, all of the insurance coverages set forth in the Insurance Requirements in Attachment One.

b. Consultant agrees that any available insurance proceeds broader than or in excess of the coverages set forth in the Insurance Requirements in Attachment One shall be available to the additional insureds identified therein.

c. Consultant agrees that the insurance coverages and limits provided under this Agreement are the greater of: (i) the coverages and limits specified in Attachment One, or (ii) the broader coverages and maximum limits of coverage of any insurance policy or proceeds available to the name insureds.

## **6. ASSIGNMENT**

Consultant shall not assign any rights or duties under this Agreement to a third party without the express prior written consent of City, in City's sole and absolute discretion. Consultant agrees that the City shall have the right to approve any and all subcontractors and subconsultants to be used by Consultant in the performance of this Agreement before Consultant contracts with or otherwise engages any such subcontractors or subconsultants.

## **7. NOTICES**

Except as otherwise provided in this Agreement, any notice, submittal or communication required or permitted to be served on a party, shall be in writing and may be served by personal delivery to the person or the office of the person identified below. Service may also be made by mail, by placing

first-class postage, and addressed as indicated below, and depositing in the United States mail to:

City Representative:

Peter Martin  
Deputy Director, Water Resources  
69 Stony Circle  
Santa Rosa, CA 95401  
Tel. 707-543-4294  
PMartin@srcity.org

Consultant Representative:

Arthur Tseng, PE  
Clean Transportation Project Manager  
101 Lucas Valley Road, #302  
San Rafael, CA 94903  
Tel. 415-805-6325  
Arthur.Tseng@nv5.com

## **8. INDEPENDENT CONTRACTOR**

a. It is understood and agreed that Consultant (including Consultant's employees) is an independent contractor and that no relationship of employer-employee exists between the parties hereto for any purpose whatsoever. Neither Consultant nor Consultant's assigned personnel shall be entitled to any benefits payable to employees of City. City is not required to make any deductions or withholdings from the compensation payable to Consultant under the provisions of this Agreement, and Consultant shall be issued a Form 1099 for its services hereunder. As an independent contractor, Consultant hereby agrees to indemnify and hold City harmless from any and all claims that may be made against City based upon any contention by any of Consultant's employees or by any third party, including but not limited to any state or federal agency, that an employer-employee relationship or a substitute therefor exists for any purpose whatsoever by reason of this Agreement or by reason of the nature and/or performance of any services under this Agreement.

b. It is further understood and agreed by the parties hereto that Consultant, in the performance of Consultant's obligations hereunder, is subject to the control and direction of City as to the designation of tasks to be performed and the results to be accomplished under this Agreement, but not as to the means, methods, or sequence used by Consultant for accomplishing such results. To the extent that Consultant obtains permission to, and does, use City facilities, space, equipment or support services in the performance of this Agreement, this use shall be at the Consultant's sole discretion based on the Consultant's determination that such use will promote Consultant's efficiency and effectiveness. Except as may be specifically provided elsewhere in this Agreement, the City does not require that Consultant use City facilities, equipment or support services or work in City locations in the performance of this Agreement.

c. If, in the performance of this Agreement, any third persons are employed by Consultant, such persons shall be entirely and exclusively under the direction, supervision, and control of Consultant. Except as may be specifically provided elsewhere in this Agreement, all terms of employment, including hours, wages, working conditions, discipline, hiring, and discharging, or any other terms of employment or requirements of law, shall be determined by Consultant. It is further understood and agreed that Consultant shall issue W-2 or 1099 Forms for income and employment tax purposes, for all of Consultant's assigned personnel and subcontractors.

d. The provisions of this Section 8 shall survive any expiration or termination of this Agreement. Nothing in this Agreement shall be construed to create an exclusive relationship between City and Consultant. Consultant may represent, perform services for, or be employed by such additional persons or companies as Consultant sees fit.

#### **9. ADDITIONAL SERVICES**

Changes to the Scope of Services shall be by written amendment to this Agreement and shall be paid on an hourly basis at the rates set forth in Exhibit B, or paid as otherwise agreed upon by the parties in writing prior to the provision of any such additional services.

#### **10. SUCCESSORS AND ASSIGNS**

City and Consultant each binds itself, its partners, successors, legal representatives and assigns to the other party to this Agreement and to the partners, successors, legal representatives and assigns of such other party in respect of all promises and agreements contained herein.

#### **11. TERM, SUSPENSION, TERMINATION**

a. This Agreement shall become effective on the date that it is made, set forth on the first page of the Agreement, and shall continue in effect until both parties have fully performed their respective obligations under this Agreement, unless sooner terminated as provided herein.

b. City shall have the right at any time to temporarily suspend Consultant's performance hereunder, in whole or in part, by giving a written notice of suspension to Consultant. If City gives such notice of suspension, Consultant shall immediately suspend its activities under this Agreement, as specified in such notice.

c. City shall have the right to terminate this Agreement for convenience at any time by giving a written notice of termination to Consultant. Upon such termination, Consultant shall submit to City an itemized statement of services performed as of the date of termination in accordance with Section 2 of this Agreement. These services may include both completed work and work in progress at the time of termination. City shall pay Consultant for any services for which compensation is owed; provided, however, City shall not in any manner be liable for lost profits that might have been made by Consultant had the Agreement not been terminated or had Consultant completed the services required by this Agreement. Consultant shall promptly deliver to City all documents related to the performance of this Agreement in its possession or control. All such documents shall be the property of City without additional compensation to Consultant.

#### **12. TIME OF PERFORMANCE**

The services described herein shall be provided during the period, or in accordance with the schedule, set forth in Exhibit A. Consultant shall complete all the required services and tasks and complete and tender all deliverables to the reasonable satisfaction of City, not later than June 30, 2025.

**13. STANDARD OF PERFORMANCE**

Consultant shall perform all services performed under this Agreement in the manner and according to the standards currently observed by a competent practitioner of Consultant's profession in California. All products of whatsoever nature that Consultant delivers to City shall be prepared in a professional manner and conform to the standards of quality normally observed by a person currently practicing in Consultant's profession, and shall be provided in accordance with any schedule of performance. Consultant shall assign only competent personnel to perform services under this Agreement. Consultant shall notify City in writing of any changes in Consultant's staff assigned to perform the services under this Agreement prior to any such performance. In the event that City, at any time, desires the removal of any person assigned by Consultant to perform services under this Agreement, because City, in its sole discretion, determines that such person is not performing in accordance with the standards required herein, Consultant shall remove such person immediately upon receiving notice from City of the desire of City for the removal of such person.

**14. CONFLICTS OF INTEREST**

Consultant covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, that would conflict in any manner with the interests of City or that would in any way hinder Consultant's performance of services under this Agreement. Consultant further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor, without the written consent of City. Consultant agrees to avoid conflicts of interest or the appearance of any conflicts of interest with the interests of City at all times during the performance of this Agreement.

**15. CONFLICT OF INTEREST REQUIREMENTS**

a. **Generally.** The City's Conflict of Interest Code requires that individuals who qualify as "consultants" under the Political Reform Act, California Government Code sections 87200 *et seq.*, comply with the conflict of interest provisions of the Political Reform Act and the City's Conflict of Interest Code, which generally prohibit individuals from making or participating in the making of decisions that will have a material financial effect on their economic interests. The term "consultant" generally includes individuals who make governmental decisions or who serve in a staff capacity.

b. **Conflict of Interest Statements.** The individual(s) who will provide services or perform work pursuant to this Agreement are "consultants" within the meaning of the Political Reform Act and the City's Conflict of Interest Code:

yes  no (check one)

If "yes" is checked by the City, Consultant shall cause the following to occur within 30 days after execution of this Agreement:

- (1) Identify the individuals who will provide services or perform work under this Agreement as "consultants"; and

- (2) Cause these individuals to file with the City Clerk the assuming office statements of economic interests required by the City's Conflict of Interest Code.

Thereafter, throughout the term of the Agreement, Consultant shall cause these individuals to file with the City Clerk annual statements of economic interests, and "leaving office" statements of economic interests, as required by the City's Conflict of Interest Code.

The above statements of economic interests are public records subject to public disclosure under the California Public Records Act. The City may withhold all or a portion of any payment due under this Agreement until all required statements are filed.

## **16. CONFIDENTIALITY OF CITY INFORMATION**

During performance of this Agreement, Consultant may gain access to and use City information regarding inventions, machinery, products, prices, apparatus, costs, discounts, future plans, business affairs, governmental affairs, processes, trade secrets, technical matters, systems, facilities, customer lists, product design, copyright, data, and other vital information (hereafter collectively referred to as "City Information") that are valuable, special and unique assets of the City. Consultant agrees to protect all City Information and treat it as strictly confidential, and further agrees that Consultant shall not at any time, either directly or indirectly, divulge, disclose or communicate in any manner any City Information to any third party without the prior written consent of City. In addition, Consultant shall comply with all City policies governing the use of the City network and technology systems. A violation by Consultant of this Section 16 shall be a material violation of this Agreement and shall justify legal and/or equitable relief.

## **17. CONSULTANT INFORMATION**

a. City shall have full ownership and control, including ownership of any copyrights, of all information prepared, produced, or provided by Consultant pursuant to this Agreement. In this Agreement, the term "information" shall be construed to mean and include: any and all work product, submittals, reports, plans, specifications, and other deliverables consisting of documents, writings, handwritings, typewriting, printing, photostating, photographing, computer models, and any other computerized data and every other means of recording any form of information, communications, or representation, including letters, works, pictures, drawings, sounds, or symbols, or any combination thereof. Consultant shall not be responsible for any unauthorized modification or use of such information for other than its intended purpose by City.

b. Consultant shall fully defend, indemnify and hold harmless City, its officers and employees, and each and every one of them, from and against any and all claims, actions, lawsuits or other proceedings alleging that all or any part of the information prepared, produced, or provided by Consultant pursuant to this Agreement infringes upon any third party's trademark, trade name, copyright, patent or other intellectual property rights. City shall make reasonable efforts to notify Consultant not later than ten (10) days after City is served with any such claim, action, lawsuit or other proceeding, provided that City's failure to provide such notice within such time period shall not relieve Consultant of its obligations hereunder, which shall survive any termination or expiration of this Agreement.

c. All proprietary and other information received from Consultant by City, whether received in connection with Consultant's proposal, will be disclosed upon receipt of a request for disclosure, pursuant to the California Public Records Act; provided, however, that, if any information is set apart and clearly marked "trade secret" when it is provided to City, City shall give notice to Consultant of any request for the disclosure of such information. Consultant shall then have five (5) days from the date it receives such notice to enter into an agreement with the City, satisfactory to the City Attorney, providing for the defense of, and complete indemnification and reimbursement for all costs (including plaintiff's attorneys' fees) incurred by City in any legal action to compel the disclosure of such information under the California Public Records Act. Consultant shall have sole responsibility for defense of the actual "trade secret" designation of such information.

d. The parties understand and agree that any failure by Consultant to respond to the notice provided by City and/or to enter into an agreement with City, in accordance with the provisions of subsection c, above, shall constitute a complete waiver by Consultant of any rights regarding the information designated "trade secret" by Consultant, and such information shall be disclosed by City pursuant to applicable procedures required by the Public Records Act.

## **18. MISCELLANEOUS**

a. Entire Agreement. This Agreement contains the entire agreement between the parties. Any and all verbal or written agreements made prior to the date of this Agreement are superseded by this Agreement and shall have no further effect.

b. Modification. No modification or change to the terms of this Agreement will be binding on a party unless in writing and signed by an authorized representative of that party.

c. Compliance with Laws. Consultant shall perform all services described herein in compliance with all applicable federal, state and local laws, rules, regulations, and ordinances, including but not limited to, (i) the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, et seq.) ("ADA"), and any regulations and guidelines issued pursuant to the ADA; and (ii) Labor Code sections 1720, et seq., which require prevailing wages (in accordance with DIR determinations at [www.dir.ca.gov](http://www.dir.ca.gov)) be paid to any employee performing work covered by Labor Code sections 1720 et seq. Consultant shall pay to the City when due all business taxes payable by Consultant under the provisions of Chapter 6-04 of the Santa Rosa City Code. The City may deduct any delinquent business taxes, and any penalties and interest added to the delinquent taxes, from its payments to Consultant.

d. Discrimination Prohibited. With respect to the provision of services under this Agreement, Consultant agrees not to discriminate against any person because of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status of that person.

e. Governing Law; Venue. This Agreement shall be governed, construed and enforced in accordance with the laws of the State of California. Venue of any litigation arising out of or



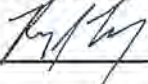
**CONSULTANT:**

Name of Firm: Sage Renewable Energy Consulting Inc., dba NV5, Inc.

TYPE OF BUSINESS ENTITY (check one):

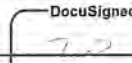
- Individual/Sole Proprietor
- Partnership
- Corporation
- Limited Liability Company
- Other (please specify: \_\_\_\_\_)

Signatures of Authorized Persons:

By: 

Print Name: Randy Lorenz, PE

Title: Senior Vice President

By: 

Print Name: Edward H. Codispoti

Title: Chief Financial Officer

City of Santa Rosa Business Tax Cert. No.

06532416

Attachments:

- Attachment One - Insurance Requirements
- Exhibit A - Scope of Services and Compensation


**CITY OF SANTA ROSA**  
a Municipal Corporation

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

APPROVED AS TO FORM:

  
Office of the City Attorney

ATTEST:

\_\_\_\_\_  
City Clerk

**ATTACHMENT ONE  
INSURANCE REQUIREMENTS FOR  
PROFESSIONAL SERVICES AGREEMENTS**

**A. Insurance Policies:** Consultant shall, at all times during the terms of this Agreement, maintain and keep in full force and effect, the following policies of insurance with minimum coverage as indicated below and issued by insurers with AM Best ratings of no less than A-:VI or otherwise acceptable to the City.

<b>Insurance</b>	<b>Minimum Coverage Limits</b>	<b>Additional Coverage Requirements</b>
1. Commercial general liability	\$ 1 million per occurrence \$ 2 million aggregate	Coverage must be at least as broad as ISO CG 00 01 and must include completed operations coverage. If insurance applies separately to a project/location, aggregate may be equal to per occurrence amount. <b>Coverage may be met by a combination of primary and umbrella or excess insurance but umbrella and excess shall provide coverage at least as broad as specified for underlying coverage. Coverage shall not exclude subsidence.</b>
2. Business auto coverage	\$ 1 million	ISO Form Number CA 00 01 covering any auto (Code 1), or if Consultant has no owned autos, hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$ 1 million per accident for bodily injury and property damage.
3. Professional liability (E&O)	\$ 1 million per claim \$ 1 million aggregate	Consultant shall provide on a policy form appropriate to profession. If on a claims made basis, Insurance must show coverage date prior to start of work and it must be maintained for three years after completion of work.
4. Workers' compensation and employer's liability	\$ 1 million	As required by the State of California, with Statutory Limits and Employer's Liability Insurance with limit of no less than \$ 1 million per accident for bodily injury or disease. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Consultant, its employees, agents and subcontractors.

**B. Endorsements:**

1. All policies shall provide or be endorsed to provide that coverage shall not be canceled, except after prior written notice has been provided to the City in accordance with the policy provisions.

2. Liability, umbrella and excess policies shall provide or be endorsed to provide the following:
  - a. For any claims related to this project, Consultant's insurance coverage shall be primary and any insurance or self-insurance maintained by City shall be excess of the Consultant's insurance and shall not contribute with it; and,
  - b. **The City of Santa Rosa, its officers, agents, employees and volunteers are to be covered as additional insureds on the CGL policy.** General liability coverage can be provided in the form of an endorsement to Consultant's insurance at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of both CG 20 10 and CG 20 37 if a later edition is used.
- C. **Verification of Coverage and Certificates of Insurance:** Consultant shall furnish City with original certificates and endorsements effecting coverage required above. Certificates and endorsements shall make reference to policy numbers. All certificates and endorsements are to be received and approved by the City before work commences and must be in effect for the duration of the Agreement. The City reserves the right to require complete copies of all required policies and endorsements.
- D. **Other Insurance Provisions:**
  1. No policy required by this Agreement shall prohibit Consultant from waiving any right of recovery prior to loss. Consultant hereby waives such right with regard to the indemnitees.
  2. All insurance coverage amounts provided by Consultant and available or applicable to this Agreement are intended to apply to the full extent of the policies. Nothing contained in this Agreement limits the application of such insurance coverage. Defense costs must be paid in addition to coverage amounts.
  3. Policies containing any self-insured retention (SIR) provision shall provide or be endorsed to provide that the SIR may be satisfied by either Consultant or City. Self-insured retentions above \$10,000 must be approved by City. At City's option, Consultant may be required to provide financial guarantees.
  4. Sole Proprietors must provide a representation of their Workers' Compensation Insurance exempt status.
  5. City reserves the right to modify these insurance requirements while this Agreement is in effect, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

# ELECTRIC VEHICLE FLEET INFRASTRUCTURE MASTER PLAN

SEPTEMBER 25, 2023

Prepared For:

**CITY OF SANTA ROSA**

Jennifer Myles  
Senior Buyer  
Jmyles@srcity.org

707.543.3709



**OFFICE CONTACT INFO:**

101 Lucas Valley Road  
Suite 302  
San Rafael, CA 94901  
Phone: 415.520.7516

**R163240**

**PRINCIPAL-IN-CHARGE:**

Brent Johnson, PE, LEED AP  
Clean Transportation Lead  
Phone: 415.851.9076  
Brent.Johnson@NV5.com

## 1.0 COVER LETTER

September 25, 2023

Jennifer Myles, Senior Buyer  
City of Santa Rosa  
707-543-3709, [jmyles@srcity.org](mailto:jmyles@srcity.org)

Dear Ms. Myles,

Sage Renewable Energy Consulting Inc. DBA NV5 (NV5), based in San Rafael, is pleased to present this proposal to the City of Santa Rosa for an Electric Vehicle Fleet Infrastructure Master Plan, a task we've done successfully for multiple California cities, including current efforts for the City of Petaluma and the City of San Diego. For this effort, we are teaming with the Center for Transportation and the Environment (CTE), a non-profit with decades of zero-emission vehicle planning experience (and our frequent partner).

Our group's core business is working with public clients to plan, procure, and implement clean energy and clean transportation projects. Over the past 14 years, our team has served as owner's representative to more than 150 California public agencies on all phases of energy projects. In addition to our clean transportation experience, our clean energy expertise includes all mainstream clean energy technologies that could support your EV transition efforts, including solar PV, battery energy storage, and microgrids.

A few things make us stand out from other clean transportation consultants:

- **Broad experience with fleet transitions and EVSE.** Our group is working nationwide on zero-emission fleet transition projects. Our current work spans the scope outlined in this RFP, including strategic EV/EVSE planning; total cost of ownership (TCO) and energy cost analyses; EVSE design; utility coordination; onsite generation, storage and microgrids; procurements; and incentives management.
- **Full project services.** Our services are tailored to the goals and requirements of each client, providing project controls and hands-on project management through planning, design, procurement, construction, and into operations. This expertise means we can continue supporting the City throughout the project.
- **Highly vetted approach.** Our approach to planning and managing energy projects has been vetted and refined over many projects and is continually improved by our close working relationships with our clients and the many stakeholders involved in a successful project.
- **A focus on finance.** We are experts at energy project finance, EVSE business models, and grant programs, providing the detailed financial analyses necessary for stakeholders to evaluate a project. Our work includes detailed utility tariff modeling, sophisticated lifecycle cost estimates, risk analysis, public-private partnership contracting, and capital planning.

We are confident that our team can be the perfect partner for the City of Santa Rosa for the scope outlined in the RFP. We could also support the City in the future with in-house capabilities for detailed design, permitting, owner's representation services for procurement, construction, and commissioning, and public-private partnership contracting. We look forward to the opportunity to work with you.

I acknowledge that I am authorized to bind the firm for a period of 90 days post-submittal.

Sincerely,



Brent Johnson, PE, LEED AP  
NV5 Clean Transportation Principal-in-Charge  
101 Lucas Valley Road, Suite 302  
San Rafael, CA 94903  
415-851-9076, [Brent.Johnson@NV5.com](mailto:Brent.Johnson@NV5.com)

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## 2.0 PROJECT TEAM

NV5 will be providing overall program management for the City of Santa Rosa, with support from the nonprofit organization Center for Transportation and the Environment (CTE) as a subconsultant. NV5 and CTE are frequent partners on projects involving EV fleet transitions and have previously teamed up on eight successful transition planning projects for a number of public agencies, including: Culver City Bus, North County Transit District, Santa Cruz Metropolitan Transit District, Long Beach Transit, Stockton Unified School District, and Redwood City School District.

At Stockton USD, our team successfully secured over \$5M in grant funding for the District to purchase vehicles, install charging infrastructure, review onsite generation/storage, implement zero-emission lawn equipment, and develop a district-wide decarbonization plan. Independently, NV5 and CTE have worked with several cities in California to support zero-emission transitions of mixed municipal fleets, which are highlighted below.

### 2.1 NV5

NV5 is a leading provider of technology, conformity assessment, and consulting solutions for public and private sector clients supporting infrastructure, utility, and building assets and systems, with more than 100 offices nationwide and abroad.



The NV5 Clean Energy & Transportation Group, which includes Sage Renewable Energy Consulting, Inc., is focused on the planning, implementation, and asset management of zero-emission energy and vehicle projects. Sage, based in San Rafael, is a local energy consultancy with 14 years of experience on more than \$2B of renewable generation, vehicle electrification, EVSE infrastructure, battery storage, and microgrid projects for hundreds of public and private entities across the United States. We provide expert consulting on all phases of projects, including feasibility and planning, design/engineering, procurement, implementation, commissioning, and asset management.

We are helping clients plan for the transition to zero-emission transportation across light-, medium- and heavy-duty applications with fleet plans, infrastructure scoping, incentive management, EVSE design, and owner's representative services. Our work includes EV/EVSE implementation strategy, vehicle modeling and selection, grant and incentive support, EVSE planning and design, Charge Management System (CMS) specification, public-private partnership contracting, and owner's representative services during procurement, construction, and commissioning.

As the clean transportation sector has grown over the past decade, NV5 has expanded its design resume to include over 400 Electric Vehicle Supply Equipment (EVSE) projects representing 4,500+

Level-2 and Level-3 ports. We currently have dozens of active EV/EVSE projects underway, including zero-emission transition plans for municipalities, schools, transit agencies, and private fleets; large-scale EVSE designs/implementations; and CARB, CEC, PG&E, and local air board grant-funded EV projects. NV5 also serves as a design engineer to Southern California Edison for their Charge Ready Program (similar to PG&E's EV Fleet). With this resume, we are both serving as owner's representative to leverage utility programs for clients, including a handful of active EV Fleet applications, as well as providing service to the utilities to implement their programs.

Our expertise includes a unique combination of technical knowledge, market insight, energy expertise, and financial acumen. This broad understanding of EVs, EVSE, and energy markets results in sophisticated transition strategy for fleets, EVSE, and electricity as a fuel, inclusive of total cost of ownership (TCO) analyses, funding plans, and grant/incentive management. We also maintain a close watch on the EV and EVSE market, actively engaging with vehicle manufacturers, and EVSE/CMS providers on behalf of clients.

NV5 is currently supporting many local California governments and public agencies with their multi-use EVSE infrastructure needs to support fleet, employee, and visiting public vehicles:

<b>EVSE Infrastructure for Government/Utilities/Private Clients</b>	<b>EV Fleet Transitions &amp; Infrastructure for School Districts</b>	<b>Zero-Emission Projects For Transit Districts</b>
City of Petaluma	Kern High School District	Culver City Bus
City of San Diego	Stockton Unified School District	Anaheim Transportation Network
City of Placentia	Modesto Unified School District	Santa Cruz METRO
City of Ontario	Redwood City School District	Long Beach Transit
City of Gonzales	San Mateo Unified High School District	San Joaquin Regional Transit
City of Vista	Santee School District	Petaluma Transit
State of Maryland	Lemoore Unified High School District	North County Transit
National Association of State Procurement Officials	Los Banos Unified School District	San Joaquin Regional Transp. District
Pacific Gas & Electric	Turlock Unified School District	
San Diego Gas & Electric	Sequoia Union High School District	
Southern California Edison	Ventura County Community College District	
350+ EVSE Designs for public & private entities		

## 2.2 CENTER FOR TRANSPORTATION AND THE ENVIRONMENT (CTE)

The Center for Transportation and the Environment (CTE) is a 501(c)(3) nonprofit, membership-based planning and engineering organization. CTE's mission is to improve the health of our climate and communities by bringing people together to develop and commercialize clean, efficient, and sustainable transportation technologies. CTE collaborates with federal, state, and local governments, fleets, and vehicle technology manufacturers to advance clean, sustainable, innovative transportation and energy technologies. Since its founding in 1993, CTE has managed a portfolio of



more than \$1.1 billion in team research, development, and demonstration projects funded by a variety of federal and state organizations including the U.S. Departments of Transportation, Energy, Defense, and Interior, as well as the California Air Resources Board and the California Energy Commission.

CTE is experienced in developing, implementing, and administering advanced transportation technology projects, with a focus on zero-emission fleets. CTE has provided technical assistance and project management services on many zero-emission fleet deployment projects made possible through the Federal Transit Administration's (FTA) Low or No Emission Vehicle Program (Low-No), TIGGER Program, and Clean Fuels Program. CTE has also demonstrated experience in the fuel cell arena as one of the three National Fuel Cell Bus Program Consortia responsible for deploying fuel cell transit buses for FTA.

Through these and other programs, CTE has assisted nearly 100 transit agencies that have either deployed, or will soon deploy, more than 700 zero-emission buses. CTE has also managed or participated in almost 40 transit transition planning projects across the country. As a result, the level of experience and expertise with zero-emission vehicles that CTE provides to its clients is unprecedented in the transit industry.

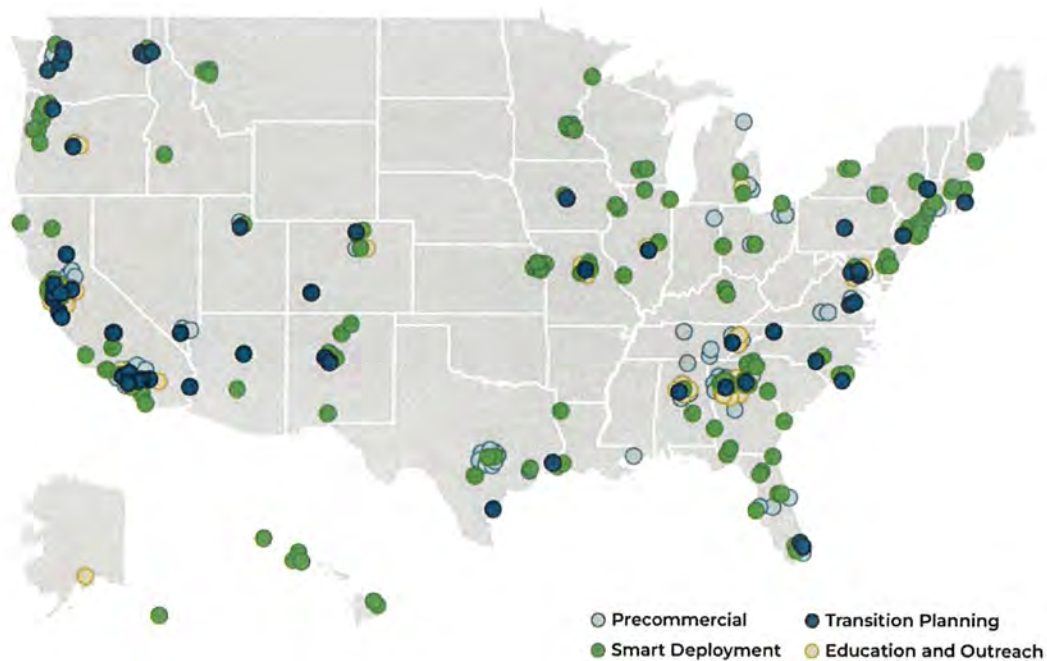


Figure 1 – CTE's Zero-Emission Projects

## 2.3 TEAM STRUCTURE

Our team acknowledges that personnel can't change without prior City approval. Below is an organizational chart describing the key team members and proposed structure.



## 2.4 PROJECT MANAGER COMMITMENT TO AVAILABILITY

If awarded, project manager Alfahild Aspelin will allocate an average of 3.6 hours/week to her City of Santa Rosa work. We assume that there will be regular every-other-week meetings with the City for the duration of the project. Alfie will also be supported by CTE's Leslie Eudy on the vehicles and fleet assessment portion of the scope. Concurrently, Alfie will work on the following projects:

- **City of Petaluma** - 21-site EV Master Plan and design effort for public, staff, and fleet applications.

- **City of Placentia** - City Hall and Police Station EVSE Feasibility, Design, Procurement & Construction Support with Solar PV & HVAC.
- **Charge Ready** – Provides oversight of NV5’s program to provide design services to SCE’s Charge Ready Electric Vehicle Program serving public and private clients.

### 3.0 PROJECT TEAM QUALIFICATIONS AND REFERENCES

Below, you’ll find project highlights from our team with references. We have included resume summaries for all of our individual team members detailing projects they have worked on in section 7.0: Resume and Project Experience Summary.

#### 3.1 GROUP PROJECT TEAM QUALIFICATIONS HIGHLIGHTS & REFERENCES

Below are some relevant project highlights with references.

##### City of Petaluma 21-Site EV Master Plan and EVSE Design

Diane Ramirez, Project Manager, City of Petaluma Public Works & Utilities  
707.776.3658, DRamirez@cityofpetaluma.org

NV5 is helping the City of Petaluma develop a strategic plan for EV charging infrastructure for fleets, staff, and the public across 21 city-owned facilities. Our team is responsible for developing a fleet transition plan, selecting EVSE to pair with the target vehicles, site inspections at 21 city facilities, grant and incentive assistance, preparing conceptual and detailed design of charging infrastructure, permitting, and eventual owner’s representative services for procurement and construction. At four of the 21 sites, we are exploring multiple charging end uses (e.g., fleet, public, and/or staff). To date, we have been working closely with the City to inventory vehicles and develop a transition plan, conducted the site visits and are progressing with design at multiple priority sites. The most advanced design is the Transit Center, where we have been working closely with Petaluma Transit, PG&E, and Chargepoint to advance the design and order long-lead switchgear.

NV5 is responsible for: an EV Master Plan; EVSE infrastructure scoping and design; initiating and managing the PG&E EV Fleet Program at multiple sites; grants and incentives support; procurement and owner’s representative services during implementation.

*Team member participation:* Brent Johnson, Alfhild Aspelin, Megan Dawe, Charlie Joy, Cameron Cederlind, and Miguel Gonzalez are all working on the City of Petaluma project in the same roles being proposed for the City of Santa Rosa.

##### City of San Diego EV Fleet Transition Plan for 4600+ Vehicles

Kathleen Ferrier, Program Manager, EV Programs, City of San Diego  
619.967.8795, ferrierk@sandiego.gov

NV5 was tasked with creating a strategic fleet transition plan for the City of San Diego to meet its Climate Action Plan goals and state mandates. The study included high-level transition planning for the City’s fleet to Electric Vehicles (EVs), a review of the Electric Vehicle Supply Equipment (EVSE)

needed to charge the vehicles, and a review of other changes to operations to support the EV transition.

The study considered the transition of the City's entire vehicle fleet, which is approximately 4,600 vehicles currently, and focused on EV infrastructure and associated costs to four sites representing 25% of the fleet portfolio. Strategic planning involved the development of a preliminary EV Roadmap that included conceptual phasing and transition of EVs and EVSE over time, while considering typical fleet retirement thresholds, regulatory impacts, and projected availability of EV technology. NV5 developed conceptual EVSE requirements in coordination with client-provided information and planning for onsite electrical infrastructure. The EV Roadmap was developed and refined based on the site information gathered. NV5 also conducted a Total Cost of Ownership (TCO) analysis, inclusive of procurement and activities required to successfully transition to an EV fleet. Using this data and feedback from the city, NV5 developed a recommendation for EV phasing and chargers at the four locations. Charger recommendations included power levels, metering/billing capability, and charge/fleet management recommendations. We evaluated regulatory drivers and environmental drivers and identified credit opportunities. We also assisted with vehicle and equipment selection.

**Team member participation:** Megan Dawe and Brent Johnson worked on this project. CTE separately worked with the City of San Diego MTA on their fleet transition plan.

### City of Glendale Fleet Transition Plan

Shea Eccleston, Transportation Manager, Public Works Department  
(818) 548-3900, [SEccleston@glendaleca.gov](mailto:SEccleston@glendaleca.gov)

The Center for Transportation and the Environment (CTE) led an effort on behalf of the City of Glendale to study the feasibility, expected greenhouse gas reductions, and anticipated high-level cost for transition of all gasoline, diesel, and compressed natural gas non-bus fleets to zero-emission vehicles. The study identified the costs, performance issues, risks, and recommended procurement timeline regarding transitioning to the City of Glendale's long-term goal of operating a fully zero-emission fleet. CTE collected, reviewed, and evaluated data on the city fleet's operations.

CTE's assessments of zero-emission vehicle options, charging infrastructure, and transition planning recommendations provided the City of Glendale with a comprehensive strategy to maximize emissions reduction by employees, the general public, and potentially other electric vehicle operators through optimization of its charging infrastructure. The strategy included funding opportunities for local governments in California, including local utility programs, state-funded zero-emission vehicle incentive programs, and programs administered by the local air quality management district. CTE presented the final report to the City Council in September 2022. Based on the City Council feedback, CTE is working with Glendale to add a task to address hydrogen fuel cell vehicles and fueling infrastructure into the plan.

**Team member participation:** Leslie Eudy was the project manager for this project.

## Stockton Unified School District CARB Clean Mobility in Schools

Jess Martin

(209) 933-7005 Ext 2027, JMMartin@stocktonusd.net

CTE and NV5 were part of the Stockton Unified School District (SUSD) team that secured a \$4.8M Clean Mobility in Schools Grant from the California Air Resources Board for the District. CTE was responsible for project management and technical services for SUSD on the electric vehicle and equipment procurement and deployment, long-term fleet planning, data collection and reporting, and community outreach. NV5 assisted with grants and incentives, developing a District-wide energy strategy, evaluating solar and battery storage paired with EV charging, and performing carbon accounting and emissions evaluation.

As part of the work, the team developed a [blueprint report providing guidance about reducing costs of electric school bus charging](#) for other districts.

*Team member participation:* Brent Johnson, Megan Dawe, and Alder Young all worked on the project, and Leslie Eudy was the program manager for the CEC Blueprint report, a subsequent effort at Stockton that CTE and NV5 collaborated on.

## Culver City ZEB Transition and Pilot Program

Allision Cohen, Chief Transportation Officer

(310) 253-6543, Allision.Cohen@culvercity.com

CTE led Culver City's zero-emission bus (ZEB) pilot program and fleet transition plan, with support from NV5 as a subconsultant. CTE used its ZEB transition planning methodology to guide the creation of CC's transition plan, which included a ZEB market analysis, data collection, assessing energy requirements through modeling and simulation, defining necessary facility upgrades, and developing a transition timeline and cost/benefit model in 2020. CTE analyzed routes and service requirements to determine how ZEBs may best be used in CC service as part of the feasibility assessment within the ZEB transition plan. The feasibility assessment included analysis of CC facilities to determine how the facilities could accommodate charging infrastructure. The transition plan assessed the costs of the fleet, fuel, maintenance, and facilities purchases required to transition to a 100% battery electric bus fleet by 2040.

CTE supported the deployment of four battery electric zero-emission buses and supporting infrastructure and is working with CC to conduct Key Performance Indicator (KPI) analyses for the buses and charger. CTE is also continuing work supporting the infrastructure design and deployment for the facility build-out and is coordinating with AECOM, NV5, and Southern California Edison to develop a spaceframe structure and permanent charging infrastructure in the bus yard. NV5 determined the location, sizing, expected performance, costs, and savings expected from the renewable energy system. NV5 then provided full solar design documents that included the necessary structural and electrical engineering for both the rooftop and gantry PV; developed technical specifications for the electrical PV system and racking; and is providing technical support during procurement.

*Team member participation:* Brent Johnson, Megan Dawe, and Alder Young supported this client.

### 3.2 INDIVIDUAL TEAM MEMBER QUALIFICATIONS

We have attached team member qualifications and project experience resumes in section 7.0 Resume & Project Experience Summary, which appears at the end of the proposal.

## 4.0 WORK PLAN

The following section describes our approach to the scope of work, aligned with the scope outline provided in the RFP. Our overarching organization of the team assumes CTE will lead vehicle evaluation and market review, and NV5 will lead on infrastructure, resiliency, power supply, and the public-private partnership (PPP) review under Element #3. A project schedule with deliverables follows in Section 5.0.

### 4.1 ELEMENT 1: CITY OF SANTA ROSA MUNICIPAL FLEET TRANSITION EVALUATION

Our team will leverage its experience in helping organizations through their initial zero-emission vehicle deployment programs to develop a Zero-Emission Vehicle Transition Planning Methodology. This methodology supports organizations planning for compliance with California Air Resources Board's Innovative Clean Transit and Advanced Clean Fleet Regulations, as well as internal goals, such as the City's 2030 carbon neutrality goal. These plans consider vehicle and service requirements, fleet procurement timelines, infrastructure assessments, resiliency, vehicle and facilities capital costs, operating and maintenance cost impacts, and emission benefits.

CTE's standard Zero-Emission Vehicle Transition Planning Methodology, as highlighted in Figure X, encompasses ten key phases: Planning & Initiation; Requirements & Data Collection; Service Assessment; Fleet Assessment; Fuel Assessment; Maintenance Assessment; Facilities Assessment; Redundancy, Resilience, and Response; Total Cost of Ownership Assessment; and finally, the creation of the Zero-Emission Vehicle Transition Plan itself.

This framework will serve as the foundation for the development of Santa Rosa's Electric Vehicle Fleet Infrastructure Master Plan, which aligns well with the scope outlined by the City in their RFP.

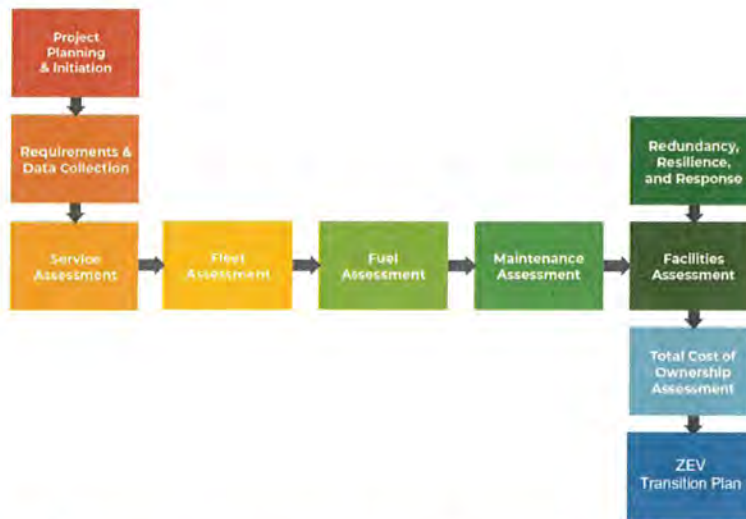


Figure X - Steps in CTE's Zero-Emission Vehicle Transition Planning Methodology

### 4.1.1 Fleet Electrification Market Analysis

#### Fleet Assessment

The market analysis will begin with the fleet assessment. The fleet assessment is accomplished through the Requirements & Data Collection, Service Assessment, and Fleet Assessment phases of the Transition Planning Methodology. Recognizing that the City has a centralized fleet manager, the FASTER asset management system, and Geotab data, we expect the fleet characterization to be more efficient than we have experienced with entities with distributed management across departments.

We will collect, review, and evaluate data on the fleet through analysis of telematics data provided by Santa Rosa. We will use the current CityBus Zero Emission Bus Rollout Plan to inform the overall fleet assessment and charging needs.

We will also conduct an "Assumptions Workshop" in the Data Collection phase of the Zero-Emission Vehicle Transition Planning Methodology. The assumptions collected during this phase provide key parameters used in each of the Assessment phases that follow.

#### EV Vehicle Technologies

Essential elements in developing a Fleet Electrification Plan are feasibility and suitability. Feasibility, in this context, is the measure of the likely range of an EV under strenuous conditions as compared to the required daily duty cycle. In other words, does the EV have enough battery energy to operate a full day, with air conditioning or heating, before returning to its designated parking area for an overnight charge? Or is there reasonable opportunity to charge during the day to increase feasibility? Suitability determines if an EV exists, or is likely to exist in the future, that can perform the same functions as current vehicles in the City's fleet. The feasibility and suitability evaluations are the keys to developing the long-term strategy for building the supporting infrastructure and electrifying Santa Rosa's fleet.

## Market Assessment

We will evaluate the feasibility of replacing each vehicle in the City's fleet with an EV model in a 1:1 ratio, considering the current capabilities of EVs on the market. We will also consider how feasibility is expected to improve over time with improvements in battery and EV technology.

Key assumptions in this assessment include:

- Fleets typically charge overnight during off-peak hours (currently 12am – 3pm on most EV SCP and PG&E Tariffs) when the cost of energy is lowest, thus each EV would accomplish most charging in this window and have enough charge to operate during high-priced evening hours.
- EV efficiency and range is impacted by topography, traffic speed and conditions, and climate. We will factor these elements in developing EV efficiency models for the Santa Rosa region to determine range and feasibility.

A market overview will be prepared of currently available battery electric vehicles suitable for Santa Rosa's fleet. This overview will include Light-, Medium- and Heavy-Duty EVs along with Emergency EVs (discussed further below). Market information will include battery range, estimated capital cost, charging requirements, and estimated maintenance costs.

CTE will perform a fleet evaluation that will analyze the City's current fleet to determine duty cycles and schedules. CTE will identify which vehicles are suitable for replacement using currently available and anticipated commercially available electric vehicles. CTE will present feasible ranges by vehicle type based on the expected operating conditions of Santa Rosa (topography, speed, and climate). Three feasibility scenarios will be offered:

- **Achievable:** daily mileage that is feasible under most conditions
- **Uncertain:** daily mileage that may be feasible under some conditions (light traffic, minimal A/C or heater use)
- **Unachievable:** range is considered not feasible under any normal conditions

We will evaluate duty cycles of any vehicles that could not be replaced in a 1:1 ratio with an EV and will identify operational strategies that could be implemented to achieve a feasible duty cycle. If operational changes are not sufficient to achieve a suitable duty cycle, electrification of that vehicle type may be delayed. We will coordinate with City staff to develop procurement assumptions (e.g., vehicles are eligible for replacement once they have reached the end of their useful life). For vehicles that reach the replacement age before a suitable EV is available, the City may opt for replacing it with a conventional fueled vehicle or keeping it in service longer to wait until there is a replacement.

A vehicle replacement schedule will then be developed that considers market availability, state of technology, duty cycle, and the City's identified targets. We will assign a "Suitability Score" to each vehicle type.

The timing of replacing existing internal combustion engine vehicles with electric vehicles will be based on the following primary factors:

- **Asset Replacement Schedule:** is the vehicle ready for replacement based on age, mileage, or hours?
- **Duty Cycle Feasibility:** can the replacement EV meet the daily duty cycle?
- **Vehicle Availability and Suitability:** is the EV commercially available and is it a suitable replacement?



- Santa Rosa's Transition goals: What strategies allow the City to reasonably achieve a 100% zero emission fleet over time?
- Advanced Clean Fleet (ACF), Innovative Clean Fleet, and other regulatory drivers

### City Bus

We will familiarize ourselves with the City's existing ZEB Rollout Plan and incorporate elements from that transition plan into this effort as needed, understanding that the City Bus electrification effort is further advanced than for other areas of the fleet.

### Market Assessment First Responders

As noted above, we acknowledge and anticipate addressing first responder vehicles in the transition plan. Our recent experience with the Cities of Petaluma, Glendale, and San Diego encompass first responder vehicles and transition efforts. Tiering from this experience, we will seek direct conversations with the first responder stakeholders at Santa Rosa to review any vehicles they may be considering and collect their input/preferences. As part of our market review of EVs, we will cover options for first responders separate from other vehicles.

In our experience, pilot programs with light duty, non-specialty vehicles currently employed by first responders is a good place to start to begin the introduction of EVs into these critical fleets. For instance, fire inspectors in Petaluma have begun using Ford Lightning vehicles and the Police have some passenger EVs for administrative tasks. The market currently has minimal options for specialty vehicles, such as interceptors and specialty fire apparatus. As such, these vehicles would be pushed later in the transition to allow the market to mature, with bridging measures such as renewable diesel and hybrid vehicles recommended to continue GHG reductions in the near term.

#### 4.1.2 EV Charging Strategy Options

NV5 will lead this task, relying on our extensive EV charging design experience, recent work with similar fleets and infrastructure, and our ongoing interface with PG&E on new service applications for EVSE projects in Northern California.

### Facilities Assessment

During the Facilities Assessment phase, we will further define the requirements for fueling equipment to support the transition to alternative fuel vehicles. The assessment will identify the quantity, type, and power level of charging equipment to support the City's fleet transition. Data gathering will include as-built electrical and civil information, as well as utility energy consumption and load data.

With this information in-hand, we will review existing electrical supply and establish a power supply, metering plan, and phasing recommendations. For sites with charging needs more than a few vehicles, we typically see a need for a new, dedicated EV service, both for capacity reasons, but also to leverage EV tariffs and PG&E programs that pay for new service connections to service EV loads.

This phase consists of site visits to select sites to gather information about existing utility service and potential EVSE siting locations. Site visits will be coordinated with other onsite time noted in other sections to make efficient use of staff time. The assessment also provides a high-level projection to define the timeline for various facility and infrastructure projects to build-out the charging capacity consistent with the addition of alternative fuel vehicles to the City's fleet.

### **Current Charging Facilities at City Sites**

As part of the Facilities Assessment phase, we will account for current charging facilities and incorporate them into the overall charge infrastructure plan. For existing charging, we will consider how best to integrate with future buildouts, particularly where we are exploring new, dedicated EV service, and for compatibility with future chargers and charge management software to operate. In some instances, we find that a replacement of existing EVSE at the time new EVSE is constructed is the best path to streamline long-term operations.

### **Available / Recommended Charging Stations for Targeted Sites and Facilities**

We will prepare a market overview of suitable charging options for the City's transition to battery electric vehicles, including available models, considerations for interfacing between the chargers and the vehicles, and preliminary costs. We have developed detailed reviews of the L2 and L3 EVSE market on several recent efforts that we will start from, and then update with any recent market entrants or newer models. This also includes screening for compatibility with grant/incentive programs.

### **Load Calculations / Costs**

Using outputs from the Fleet Assessment discussed above, we will complete the Fuel Assessment to determine charging requirements to support the City's daily fleet operations. The Fuel Assessment will result in the daily energy and peak demand requirement for each facility on an annualized basis to show the increase in energy and peak demand over time. We will use this information to plan the proper type and quantity of chargers at each location. This assessment will account for duty cycles, vehicle schedules, and potential fleet growth over time.

The team will identify utility rates and programs that can be applied to the City's electrification program to minimize fuel costs while keeping downtime to a minimum. NV5 will develop annual fuel cost estimates for charging EVs leveraging our extensive retail tariff modeling expertise with comparisons to fuel consumption in the City's current fleet. Working closely with City staff, the team will develop a charging plan for decentralized locations such as fire stations, libraries, parks, etc. This assessment will inform the City and discussions with PG&E of future power needs so that infrastructure upgrades can be planned accordingly.

### **Charging Infrastructure**

NV5 will develop charging/fueling concepts for up to 12 sites. Concepts will utilize aerial imagery as a base and will identify the parking stalls, EVSE siting, main electrical service (or proposed location for a new EV service), utility power supply infrastructure, conduit runs, etc. If public-facing charging is included, we will also address accessible parking stalls on the drawing sets. Initial concepts will be developed at a desktop level prior to site visits.

Site visits will then be conducted as part of the Facility Assessment described above. For the review of charging infrastructure, site visits will focus on observing existing electrical infrastructure, target parking areas, utility-side supply to the sites, available footprint for onsite generation/storage, and review any upcoming changes to site use/configuration with site staff. While we expect that some sites will feed EVSE from existing electrical services on smaller sites with few chargers, many sites will pursue new, EV-dedicated services from PG&E (including via the PG&E EV Fleet Program). This is for both capacity purposes, as well as the cost-savings potential from gaining access to EV-specific retail tariffs only available to EV loads that are separately metered. As such, we will review potential

siting and utility feeds for new, EV-dedicated equipment. Initial concepts will be refined and finalized based on the site walks and City input.

The result will be a conceptual site plan and single line for the target facilities, which will include associated electrical supply equipment, including L2 and L3 dispensers and target parking stalls. Capital cost estimates for EVSE and supply infrastructure will be developed as part of this effort. As noted previously, we will carefully consider power availability from an existing service, upgrades to an existing service, or a new, dedicated EV service.

#### **4.1.3 Capital Project Scopes & Phasing**

Upon completion of the Fleet Assessment and EVSE Assessment, the project team will develop a phased-in approach to guide the implementation of charging infrastructure. We will work with stakeholders to ensure the transition strategy not only meets the City's goals and regulatory requirements but is also feasible to achieve. This assessment provides a high-level timeline for facility and infrastructure projects to build out the charging capacity consistent with the addition of electric vehicles to the City's fleet.

We regularly work with the PG&E EV Fleet Program and understand the program nuances and the need for a 5-year planning horizon to maximize the benefit to the City.

#### **Concept Drawings for BTM**

Our typical infrastructure effort includes a scoping level set of drawings consisting of site plan and single line to conceptualize EVSE infrastructure projects as described in the "Charging Infrastructure" section above, inclusive of transformer and panel sizing. Our scope and budget assumes we would prepare these drawing sets for each site under consideration. We have found this level of detail useful in initiating an EV Fleet or Rule 29 process for new service. The drawing sets can serve as the first progress set for a detailed design process or to solicit quotes for a Charging as a Service (CaaS) arrangement.

Acknowledging Q&A #2.5, we can advance the 10% concept to a more advanced level for the Municipal Operations Complex as needed to coordinate with the EV Fleet program. We have been performing this exact scope for Petaluma Transit. Petaluma Transit had submitted an EV Fleet application prior to our involvement, and we were able to pick up the process with PG&E and advance BTM design.

We regularly develop cost estimates for EVSE projects and will leverage our experience here to provide estimates for each site, including phased implementation. Through the SCE program that we support, we regularly develop detailed cost estimates for EVSE projects. We also support procurements and collect market pricing for EVSE projects.

#### **4.1.4 Total Cost of Ownership Considerations, Financial Strategies**

We will assess the capital expenditure and operational cost of the proposed electric fleet and charging alternatives based on the transition strategy. We will consider the total capital investment for the replacement vehicles over the transition period, the upgrade of utility service to each facility, the design and construction of charging infrastructure, and the purchase and installation of chargers. This task will also include an assessment of the total fuel and maintenance operating costs over the transition period. All of these analyses will be aligned with ACF compliance. The goal of this analysis is to assess the impact that EV transition will have on both operating and capital costs for the entire fleet. While fuel and maintenance costs are likely to be lower, it may not offset the incremental capital costs of an electric fleet.

#### 4.1.5 Available Grant/Rebate Opportunities

Our team has an established process for tracking public funding opportunities and is knowledgeable of programs public agencies can access to receive funding to support a transition to electric vehicles. The project team can develop a matrix of potential public funding sources for rebates, incentives, grants, and other opportunities. The matrix shall include eligibility requirements, funding amounts and availability, and application timelines.

NV5 will collaborate with CTE to bring our experience managing a number of relevant incentive and grant programs for clients. We will integrate our incentives matrix developed on recent projects in the Bay Area and integrate our experience with PG&E EV Fleet, Rule 29 Interconnections, Carl Moyer, HVIP, EnergiIZE, CALeVIP, CARB & CEC Grants, IRA Direct Pay, and others. Key to this effort is understanding the schedule and constraints of the various programs. As one example, different programs maintain separate lists of eligible charging equipment, requiring a Venn diagram to ensure selected equipment complies with stacked incentives.

#### 4.1.6 Summary of GHG Emissions Reduction Potential

We will develop greenhouse gas (GHG) reduction models based on current operations with ICE vehicles as the base case versus the zero-emission vehicle transition plan. GHG modeling will focus on Scope 1 and Scope 2 emissions. Key assumptions will include the vehicle transition rate, carbon content of electricity sources, utility conversion rate to cleaner electricity, access to green tariffs, and potential onsite generation/storage of electricity.

Reporting will include model output showing GHG/pollutant reduction over time. If the City has a preferred methodology or proforma to illustrate GHG reduction, reporting can be tailored to show how the fleet transition program helps to achieve City targets, which we understand to be carbon neutrality by 2030, and that there is ongoing development of the City's Climate Action Plan (CAP). Base scope assumes NV5 will use in-house, spreadsheet-based modeling for this task with tabular output aligned with City inventory methodology and CAP metrics.

#### 4.1.7 Integration with local power suppliers (PG&E and Sonoma Clean Power)

NV5 is actively engaged with PG&E on multiple EV Fleet applications, including one for Petaluma Transit, where we are designing all of the BTM infrastructure, and assisting with specifying and pre-purchasing long-lead items, like the main electrical switchgear. NV5 staff also includes former PG&E employees from Distribution Engineering that we engage on projects where significant grid upgrades are required and a higher level of coordination is needed with the utility.

We anticipate that we will initiate conversations with PG&E soon after kickoff to make them aware of the project. Once we have power estimates, we will review readily available distribution capacity maps and re-engage with PG&E. Once concepts are firmed up through the planning process, we can prepare and submit, or assist the City, with initiating EV Fleet or Rule 29 processes at sites where new EV services are planned. Because power supply is often the critical path for these projects and the clear financial benefit from these programs, we encourage clients to initiate this process as soon as a transition plan is solidified that identifies the 5-year vehicle transition plan.

We will also engage with Sonoma Clean Power on their incentive programs where applicable (SCP is focused on publicly available chargers leveraging the CALeVIP program).

## 4.2 ELEMENT 2: MUNICIPAL PROPERTY ENERGY STORAGE OPTIONS & RESILIENCY

Our team has deep experience with onsite generation, storage, and microgrids, including solar PV, stationary batteries, and traditional gensets. We are presently working with numerous public agencies to develop resiliency scenarios, model energy systems to meet the scenarios, provide detailed design of solar+battery and solar+battery+genset systems, and provide owner's representative services during implementation.

Recognizing that the City recently completed the Citywide Energy Efficiency, Renewables and Microgrid Feasibility Study, we will tier from this recent effort to review onsite generation, storage, and resiliency at City facilities, with the additive load and resiliency requirements for the City's vehicles.

A Redundancy, Resilience and Response (3R) Assessment will first be conducted to investigate new risks to the City's ability to provide service with a zero-emission fleet during power outages or other fuel disruptions and will evaluate the agency's ability to fulfill any emergency response obligations, such as evacuation support and first responder operations, based on the required vehicle types and duty cycles. The analysis helps establish the resiliency scenarios and explores the effectiveness of various adaptation measures at reducing these risks.

### 4.2.1 Off-Grid Energy Charging Potential

Under this first task, we will focus on the ability to charge during grid outages, with the base assumption that the grid will be the primary source of electricity for day-to-day charging. If, however, the City wants to explore charging without any connection to the grid, we can evaluate this, but we caution that this would likely be cost-prohibitive. For daily charging, we will consider onsite solar PV and battery systems that have microgrid function during outages but would also help to serve load under normal operations.

With the 3R assessment described above, charging needs will be established for different durations of grid outage. The potential to serve these loads will then be assessed with onsite generation and storage assets. We will assume this initial task will be used to establish resiliency scenarios for the City's EV fleet, and that subsequent tasks in Element #2 will provide the assessment to determine the technical and economic potential to develop these assets.

### 4.2.2 Demand/Output Considerations

With the resiliency scenarios established under Task 2.1, we will develop load estimates for the vehicle needs under each of the resiliency scenarios. We have assumed two scenarios for the purposes of this proposal, generally one short duration outage and another long duration outage, each with different vehicle needs and charging requirements.

For each resiliency scenario, we will establish load requirements for each facility from EV charging. We intend to work with the City to determine non-essential locations that can be eliminated from the analysis to reduce the effort under this task. For this proposal, we are assuming eight sites would be evaluated for resiliency. We are excluding modeling of vehicle-to-building (V2B) from this initial effort; however, we can provide a qualitative review of how vehicles could be used to support critical operations and the state of V2B technology.

### 4.2.3 Recommended Potential for City Sites

As mentioned above, we assume eight City sites will be carried forward for resiliency modeling and that we will tier from the earlier Citywide EE/RE/Microgrid study. The potential to site and operate microgrid infrastructure on the sites will be reviewed under Task 2.4 below, then financial analyses performed under Tasks 2.5 and 2.6 below. The effort under these tasks will provide the feasibility assessment needed to determine the potential at each of the City sites. As such, we would recommend moving this task later in Element #2. Alternatively, we can take an iterative approach with high-level assumptions in these earlier tasks, then only carry forward deeper analysis on a few City sites under Tasks 2.4 to 2.6. We welcome this discussion with the City.

### 4.2.4 Distributed Energy Resources Assessment & Recommendations

NV5 has extensive experience assessing the feasibility of behind-the-meter systems, including detailed energy and cost modeling using a mix of industry-standard software and custom in-house models. Under this task we would also review day-to-day benefits from a solar PV and BESS system as a means of mitigating energy costs, and to enhance low carbon fuel credits (LCFS).

NV5 would first review the Citywide EE/RE/Microgrid study, validate assumptions and concepts, collect updated energy consumption data, then develop resiliency concepts that build on earlier efforts. This includes layering in the increased load from charging during utility outages developed in earlier tasks.

NV5 will then model onsite generation and storage options at up to eight sites to meet the identified resiliency scenarios, with considerations of the earlier study. Onsite generation of electrical energy will consider solar PV, stationary battery energy storage (BESS), traditional ICE gensets, and hybrid systems. Based on site footprint constraints and outage/service scenarios, NV5 will provide scoping-level concepts illustrating preliminary footprint, performance, and cost of onsite back-up energy systems to meet resiliency goals. NV5 will perform microgrid modeling to size the systems and detail their ability to meet outage scenarios.

### 4.2.5 Capital Deliverables and Phasing

NV5 regularly develops investment grade renewable and microgrid feasibility studies, inclusive of sophisticated cost estimates and lifecycle costs. We typically estimate capital costs from recent market data collected from our projects and, when necessary, outreach to developers. We have found this approach, rather than a bottom-up estimating, is more accurate at the conceptual phase of a project and better reflects market trends.

Phasing of the energy system elements will be coordinated with EVSE phasing and optimized for the most cost-efficient build. When considering timing of energy projects, our strategy typically includes timing with other capital projects, availability of grants/incentives, utility constraints, resiliency requirements, and retail utility tariff deadlines or existing grandfathering. NV5 would use our standard financial proforma to present financial analyses to the City. Financial analyses would be aligned with those developed under Element #1 to assist with capital planning.

### 4.2.6 Total Cost of Ownership Considerations, Financial Strategies

Following on from capital cost and phasing developed under Task 2.5, we will develop lifecycle cost modeling, often referred to as Total Cost of Ownership (TCO) in the vehicle world. NV5 has developed sophisticated in-house models to assess energy system value under retail tariffs, inclusive of operational costs, system degradation over time, various financing alternatives, grants and incentives, savings, value of resiliency, and other factors. Our modeling results in a number of

financial metrics to assess the project, most typically focusing on the net-present value of the investment. As noted previously, our modeling would also consider day-to-day operation of solar and battery assets to offset load and generate savings through reduced consumption and export to the grid.

With regard to financial strategies, we are well-versed in all forms of energy project finance available to public entities. We regularly procure, contract, and manage Public-Private-Partnership (PPP) arrangements for renewable energy projects for public entities. For example, we recently solicited third-party financed solar, battery, and microgrid projects for Santa Barbara USD and the Judicial Council of California (30+ sites across CA). We also assisted the Anaheim Transportation Network with negotiating a Charging-as-a-Service (CaaS) contract, inclusive of solar and BESS assets, for which we successfully secured a large SGIP incentive for ATN.

#### **4.2.7 Available Grants/Funding Opportunities**

Similar to the effort outlined under Item 4.1.5 above, we will leverage our deep experience with energy projects to develop a matrix of grant and funding opportunities for the onsite energy systems. The pool of funding sources is not as deep as for EVSE presently, however, there are opportunities, including IRA Direct Pay, SGIP, and utility microgrid programs. As noted above, we also regularly assist with evaluating and procuring PPP arrangements for these types of projects.

### **4.3 ELEMENT 3: PRIVATE DEVELOPMENT POLICY CONSIDERATIONS SUMMARY**

NV5 regularly engages with public entities in an owner's representative role for private development energy projects. We also commonly serve as surrogate building officials and permit reviewers to municipalities and state agencies throughout California. We regularly interface with Authorities Having Jurisdiction (AHJs) about code requirements when performing detailed design on projects. A preliminary approach to Element #3 is described below, and we welcome further discussion on how best to support the City with private development policy considerations.

For this element, we expect that we would support the City with research into example codes, private business models for EVSE development, and coordination with other jurisdictions, including Sonoma Clean Power.

#### **4.3.1 Private Development EV Requirements**

New development for multifamily, hotels/motels, and non-residential is subject to California Green Building Standards Code ("CALGreen", Title 24, Part 11), inclusive of requirements for "Electric Vehicle Charging Stations" (EVCS). The latest 2022 version of the code sets a relatively high bar of 20% of stalls to be EV capable, with 25% of those stalls to include chargers. The code also includes additional requirements for locations with expected medium and heavy-duty traffic, such as warehouses and grocery stores. In addition, recent California legislature has put the onus on AHJs to streamline and simplify EVCS permitting under AB 1236 and AB 970.

NV5 is prepared to review these requirements with the City and discuss potential enhancements or stretch goals, as well as compliance with permit streamlining.

#### **4.3.2 Impact Fee Options**

NV5 will support the City to evaluate potential impact fees on new development to be directed towards development of public charging amenities. A review of impact fee constraints would be needed in the context of the intended end project. One example could involve utilizing fees to make

City-owned properties ready to host DCFC charging. The City could perform initial due diligence and secure power supply, then contract with a third-party Charge Point Operator (CPO) to build-out and operate the site.

### 4.3.3 Incentive Programs

NV5 can help the City research incentive programs to support Element #3 items. This screening would be incorporated with the grant and incentive research being conducted under previous Elements and highlighted as applicable to public-facing charging. Examples include the CALeVIP program through Sonoma Clean Power and Rule 29 TTM funding by PG&E for new EV services. If the City is interested in developing an incentive program to encourage EVSE development, we could support this effort, bringing our experience from leveraging numerous other programs.

### 4.3.4 Development Standards for Public Charging Stations

To support the City with development standards, we would engage our permitting team to research existing standards at other municipalities. We would also review California code to ensure alignment with various assembly bills, such as AB 1236 and AB 970, requiring streamlining of EVSE permitting. We could also conduct market research with developers to collect feedback on pain points and examples of standards they think work well.

## 4.4 OTHER REQUIRED ITEMS

NV5 acknowledges the six meetings for the public and stakeholders outlined in the RFP, and we have included our preparation and attendance in the cost proposal.

## 4.5 GRANT FUNDING REQUIREMENTS

We are prepared to partner with the City to meet all grant requirements. NV5 has participated in EECBG block grants in the past. Both NV5 and CTE regularly participate in Federally funded efforts and are very familiar with the provisions required on Federal grants.

## 5.0 PROJECT SCHEDULE & DELIVERABLES

	Element	Start Date	End Date	Deliverables
<b>1</b>	<b>City of Santa Rosa Municipal Fleet Transition Evaluation</b>			
1.1	Fleet Electrification Market Analysis	Dec-23	May-24	- Technical memorandum
1.2	EV Charging Strategy Options	Mar-24	Oct-24	- Technical memorandum - Site concepts (12 sites)
1.3	Capital Project Scopes & Phasing	Sep-24	Nov-24	- Technical memorandum
1.4	Total Cost of Ownership Considerations/Financial Strategies	Sep-24	Nov-24	- Financial proforma spreadsheet
1.5	Available Grant/Rebate Opportunities	Dec-23	Aug-24	- Spreadsheet matrix/database



	Element	Start Date	End Date	Deliverables
1.6	Summary of GHG Emissions Reduction Potential	May-24	Jul-24	- Spreadsheet model output
1.7	Integration with local power suppliers	Apr-24	Dec-24	- Technical memorandum
<b>2</b>	<b>Municipal Property Energy Storage Options &amp; Resiliency Project Considerations</b>			
2.1	Off-grid/Energy Charging Potential	Mar-24	May-24	- Technical memorandum (single TM for Element #2 with interim reporting)
2.2	Demand/Output Considerations	May-24	Jun-24	- Technical memorandum
2.3	Recommended Potential for City Sites	Jun-24	Jul-24	- Technical memorandum
2.4	Distributed Energy Resources Assessment & Recommendations	Jul-24	Sep-24	- Technical memorandum - Site concepts (up to 8 sites)
2.5	Capital Deliverables & Phasing	Aug-24	Sep-24	- Technical memorandum
2.6	Total Cost of Ownership Considerations, Financial Strategies	Aug-24	Sep-24	- Spreadsheet financial proforma
2.7	Available Grants/Funding Opportunities	Jun-24	Sep-24	- Spreadsheet matrix integrated with Element 1 incentive matrix - Technical memorandum
<b>3</b>	<b>Private Development Policy Considerations Summary</b>			
3.1	Requirements for private development, Impact fees, Incentives and Development standards	Apr-24	Oct-24	- TBD with the City. Preliminary – sample code and a technical memorandum. Grants/incentives matrix integrated with matrix from other Elements above.
<b>1-3</b>	<b>Overall Deliverables</b>			
1-3	Summary Report, Draft & Final	Nov-24	Jan-25	- Draft & Final Report summarizing all elements.
1-3	Presentations & Meetings	Jun-24	Feb-25	- 2 unprogrammed placeholder public meetings, to be defined - 2 meetings to present information to targeted regional stakeholders - 2 public meetings with formal presentations to the City Council

## 6.0 COST PROPOSAL

Our NV5 cost proposal follows on the next page.

Additionally, we confirm that we are willing to sign the City's Standard Agreement and will cooperate with the City to meet all of the Federal provisions set forth within the EECBG program as part of the Infrastructure Investment and Jobs Act of 2021, should the City be awarded grant funding for the project.

We also confirm that NV5 carries sufficient insurance to meet contractual requirements, and we will provide the required insurance upon receipt of a notice of intent to award from the City.



## 7.0 RESUME & PROJECT EXPERIENCE SUMMARY

Our team's work and project experience summaries begin on the next page.

## RESUME &amp; PROJECT EXPERIENCE SUMMARIES

**BRENT JOHNSON, PE, LEED AP**

NV5 PRINCIPAL IN-CHARGE

Brent has 25 years of engineering and management experience in the clean transportation, renewable energy, and water sectors. He leads zero-emission transportation strategy and planning for NV5's Clean Energy group. Brent was one of the founders of Sage Energy Consulting in 2009 and was one of three owners and principals until acquisition by NV5 in 2021. Brent is responsible for the overall strategy, oversight, and quality assurance/quality control for all of our zero-emission transportation projects. Brent has assisted several California cities with EVSE infrastructure planning and design for fleet and public charging, including the cities of San Diego, Placentia, Ontario, Vista, and Petaluma. He has consulted for transit agencies, such as Culver City Bus, Anaheim Transit District, Santa Cruz METRO, Long Beach Transit, San Joaquin Regional Transit District, Petaluma Transit, and North County Transit District. He has also helped many California school districts scope and implement EV and EVSE projects, including Modesto City Schools, Ventura County Community College District, Santee School District, San Mateo Union High School District, Stockton Unified School District, and Redwood City School District, to name a few. In addition to his focus on clean transportation, Brent continues to consult on clean energy and resiliency projects, incorporating solar, battery, and microgrid elements with EV projects.

**EDUCATION & CERTIFICATIONS:**

MS, CIVIL ENVIRONMENTAL ENGINEERING, UC BERKELEY  
BS, CIVIL ENVIRONMENTAL ENGINEERING, WORCESTER POLYTECHNIC INSTITUTE (WPI)  
PROFESSIONAL ENGINEER (PE), CIVIL ENGINEERING CA REG. #C62137, LEED AP

**ALFHILD "ALFIE" ASPELIN**

NV5 PROJECT MANAGER

Alfild ("Alfie") brings 20 years of management and consulting experience in sustainability and asset management. She has experience managing electric vehicle infrastructure, solar PV, and battery storage projects. Prior to joining NV5, Alfie managed projects and initiatives at Tesla, Duke Energy and REC Solar. She has strong leadership and communication skills managing complex projects working with multi-discipline and remote teams. She specializes in process improvements, automation, and project efficiency.

Alfie has been the project manager (PM) for EVSE infrastructure projects for multiple California cities, including Petaluma, Placentia, and Vista. Alfie also oversees the Program Management Group at NV5, which is responsible for managing the EVSE design projects for SCE in the Charge Ready Program. Alfie has a master's in international environmental policy with a business, sustainability, and development specialty from the Middlebury Institute of International Studies.

**EDUCATION & CERTIFICATIONS:**

MA, INTERNATIONAL ENVIRONMENTAL POLICY, MIDDLEBURY INSTITUTE OF INTERNATIONAL STUDIES  
BS, MARINE TRANSPORTATION, MASSACHUSETTS MARITIME ACADEMY

**TOM WILLIARD**

NV5 PRINCIPAL, RESILIENCY, FINANCING, &amp; PUBLIC-PRIVATE PARTNERSHIPS

Tom has more than 20 years of experience in energy consulting and development of energy sector businesses, with a focus on building technical and financial models to predict potential energy asset production and financial performance. He served as CEO of Sage Energy Consulting from its founding in 2009 until its acquisition by NV5 in 2021. In 2013, Tom cofounded SolEd Benefit Corporation and wrote the project financial models used to structure PPA and lease financing that reduced the cost of renewable energy projects for public schools. In 2005, he cofounded Solmetric, which developed the SunEye, a high-precision instrument now widely used in the solar industry to measure shade characteristics.

Tom has helped dozens of government agencies and school districts in California with renewable energy projects involving solar PV, battery energy storage systems (BESS), and microgrids, including the cities of Gonzales and Ontario; the counties of Santa Clara, San Mateo, and San Joaquin; and school districts in Santa Rosa, Sebastopol, Novato, San Barbara, Temecula, Mendocino, Larkspur, Bakersfield, Albany, and Brentwood, to name just a few.

**EDUCATION & CERTIFICATIONS:**

20 YEARS RENEWABLE ENERGY;  
8 YEARS ENGINEERING  
MANAGEMENT; 20 YEARS  
ELECTRICAL ENGINEERING

## RESUME & PROJECT EXPERIENCE SUMMARIES



**EDUCATION & CERTIFICATIONS:**  
MS, ARCHITECTURE, BUILDING  
SCIENCE, AND TECHNOLOGY,  
UC BERKELEY  
BS, ENVIRONMENTAL STUDIES,  
UC SANTA BARBARA

### MEGAN DAWE

#### NV5 SENIOR DATA ANALYST

Megan Dawe is a skilled data scientist with 10 years of experience in energy savings analysis, model development, and energy efficiency. At NV5, she performs energy modeling, financial modeling, field assessments, and geospatial analysis. Megan has been integral to developing NV5's clean transportation modeling capabilities and has been involved in most of NV5's zero-emission transition planning projects. She has also provided expert analysis to help local governments meet their energy goals.

Her clients have included the City of San Diego for a 4500+ vehicle fleet transition; the City of Placentia for PV, BESS & EVSE infrastructure; the town of San Anselmo for microgrid feasibility and EVSE services; the City of Petaluma for EVSE master planning for 21 sites; and the City of Gonzales for CEC REV grant management. She has also helped multiple California public school districts with their fleet electrification plans, including Kern High School District, Redwood City School District, Stockton USD, and Santee School District. Megan has an MS in Architecture, Building Science, and Technology from UC Berkeley.



**EDUCATION & CERTIFICATIONS:**  
BS, MECHANICAL ENGINEERING  
CALIFORNIA POLYTECHNIC STATE  
UNIVERSITY, SAN LUIS OBISPO  
PE, ELECTRICAL ENGINEERING (CA  
20461)

### CHARLIE JOY, PE

#### NV5 ELECTRICAL INFRASTRUCTURE LEAD

Charlie is a skilled electrical engineer with 12 years of experience who provides technical support for all phases of NV5's energy projects. He is responsible for electrical design for electric vehicle supply equipment (EVSE), solar, BESS, and microgrid projects.

Charlie has worked on multiple EVSE infrastructure projects to support electric buses, including Petaluma Transit, Modesto City Schools, Santee School District, Lemoore UHSD, Los Banos School District, and Kern High School District. Charlie is also helping to design the City of Petaluma's 21-site EVSE infrastructure. Charlie also performs electrical utility coordination in all of his assignments, including multiple PG&E EV Fleet applications. Before starting at NV5, Charlie was responsible for the electrical engineering of commercial and residential buildings and their associated electrical infrastructure including BESS, solar PV, generators, and Level 2 and 3 EVSE. He performed site visits, coordinated interconnection, developed designs, and produced permit-ready plans in the role of engineer of record. He has also worked on Tesla Supercharger projects. Charlie is a professional engineer (PE), Electrical Engineering in multiple states, including California (CA 20461).



**EDUCATION & CERTIFICATIONS:**  
BS, ELECTRICAL ENGINEERING  
UNIVERSITY OF KANSAS

### CAMERON CEDERLIND

#### NV5 ELECTRICAL ENGINEER

Cameron is an electrical engineer with over 12 years of experience, including EV charging projects, engineering design, and SCADA configuration. He is familiar with NEC electrical design requirements for EV Charging Stations, electrical designs for nationwide utility-specific construction requirements, practices, and electrical line side designs. Cameron is experienced in coordinating and assisting with utility design, while having experience in Medium Voltage DCFC infrastructure design, combination DC and L2 Design, and low voltage utility service planning for new electrical service for 2MW or higher while working on multiple projects.

He has assisted city government EVSE projects, including recently for the City of Petaluma; has served as the utility coordinator for Chargepoint, Tesla Supercharger Network, Electrify America Cycle 1-3, and Air Liquide Hydrogen Fueling Station; has been a lead electrical engineer for SCE's Charge Ready EV Charging Program; and has served as a design engineer for New Flyer and Revolv Charging.

## RESUME &amp; PROJECT EXPERIENCE SUMMARIES

**MIGUEL GONZALEZ, PE**

## NV5 LEAD CIVIL ENGINEER

Miguel is a civil engineer with seven years of civil engineering and design experience, including grading, public improvements, storm drain plans and profiles, and earthwork calculations. He has been leading the civil engineering and design team on NV5's EV charging projects in Southern California. He is knowledgeable in the design of EV charging projects, providing civil engineering support since 2019 to the SDG&E Power Your Drive/Fleet and the SCE Charge Ready Programs. Miguel has experience with wet utilities, grading, traffic control plans, cost estimates and quantity takeoffs, and the design of hardscape for ADA accessibility.

In addition to his work with SDG&E and SCE, Miguel has provided services as a civil engineer to local governments, including the cities of Petaluma, La Mesa, and Vista; and California colleges, such as Southwestern College, Mira Costa College, and Grossmont-Cuyamaca Community College.

**EDUCATION & CERTIFICATIONS:**  
BS, CIVIL ENGINEERING,  
SAN DIEGO STATE UNIVERSITY  
REGISTERED PROFESSIONAL  
ENGINEER, CIVIL (CA#91598)

**TODD WALTON**

## CTE SENIOR MANAGING CONSULTANT

Todd Walton is a Senior Managing Consultant at the Center for Transportation and the Environment. He has worked in the transportation industry for more than 30 years, with the last 23 years in the school bus industry. His experience includes design engineering, manufacturing engineering, operations, quality, finance, and sales. Currently, as a project manager, Todd provides organizational, technical, and developmental oversight for projects that deploy both fuel cell electric vehicles and battery-electric vehicles and the related fueling/charging infrastructure.

He is engaged in zero-emission bus deployments for Corvallis Transit System (OR), Atlanta Region Transit Link Authority (GA), Salem Area Mass Transit District (OR), Valley Regional Transit (ID), Napa Valley Transportation Authority (CA), and LYNX Central Florida Regional Transportation Authority. In addition to active deployments, Mr. Walton is currently leading zero-emission bus transition plans for six metro Atlanta transit agencies; CATS Transportation, RIDE Gwinnett, Xpress GA, Henry County Transit, Douglas Connect, Cobb Transit Service.

**EDUCATION & CERTIFICATIONS:**  
MS, MANAGEMENT OF TECHNOLOGY  
BS, MECHANICAL ENGINEERING  
GEORGIA INSTITUTE OF  
TECHNOLOGY

**LESLIE EUDY**

## CTE MANAGING CONSULTANT

Leslie Eudy has more than 24 years' experience managing teams and providing technical analysis evaluating the performance of low- and zero-emission vehicles with a focus on transit buses. Leslie previously worked at the Department of Energy's National Renewable Energy Laboratory, evaluating zero-emission buses including fuel cell electric and battery electric buses. Her projects involved data collection, analysis, and publishing reports to document the progress of zero-emission bus development and commercialization. Leslie's work at CTE includes support to school districts for transitioning to electric buses, ZEB deployment projects at Washington Metropolitan Area Transportation Authority, Pinellas Suncoast Transit Authority (FL), Central Florida Regional Transportation Authority, and Gainesville RTS (FL), as well as a ZEV transition study for the municipal fleet for the City of Glendale (AZ). Additional projects include the evaluation of fuel cell electric buses at AC Transit (CA), SunLine Transit Agency (CA), Orange County Transportation Authority (CA), and Stark Area Regional Transit Authority (OH). She evaluated battery electric buses at Foothill Transit (CA), Long Beach Transit (CA), and King County Metro (WA). In addition, she is leading a team developing a method to analyze detailed maintenance data by vehicle system, report cost trends, and determine the systems driving the costs.

**EDUCATION & CERTIFICATIONS:**  
BA, GEOLOGY, UNIVERSITY OF  
NORTH CAROLINA

## RESUME &amp; PROJECT EXPERIENCE SUMMARIES

**AARON WRIGHT**

CTE MANAGING ASSOCIATE

Aaron is an associate at the Center for Transportation and the Environment with 13 years of experience. He is the Electric School Bus Market Development lead and assists CTE's electric school bus program development effort. His projects range from initial transit smart deployments, transition planning, and technical advisement. Aaron assists engineers and project managers with a variety of technical and administrative tasks related to clean transportation analysis and deployment, including battery-electric powered vehicles and hydrogen fuel powered vehicles. He assists project engineers with bus modeling and simulation, data analysis, and other tasks to determine the feasibility of alternate fuel vehicles for client applications. He provides grant writing support to senior project managers for the Electric School Bus Market Development. Aaron is also the Project Manager for VIA Metropolitan Transit, in San Antonio Texas where he is responsible for leading all aspects of project management including budgeting and contract management, project planning, client contact, and required project reporting.

**EDUCATION & CERTIFICATIONS:**

BS, BUSINESS ECONOMICS  
BA, PHILOSOPHY  
GEORGIA STATE UNIVERSITY

**ALDER YOUNG**

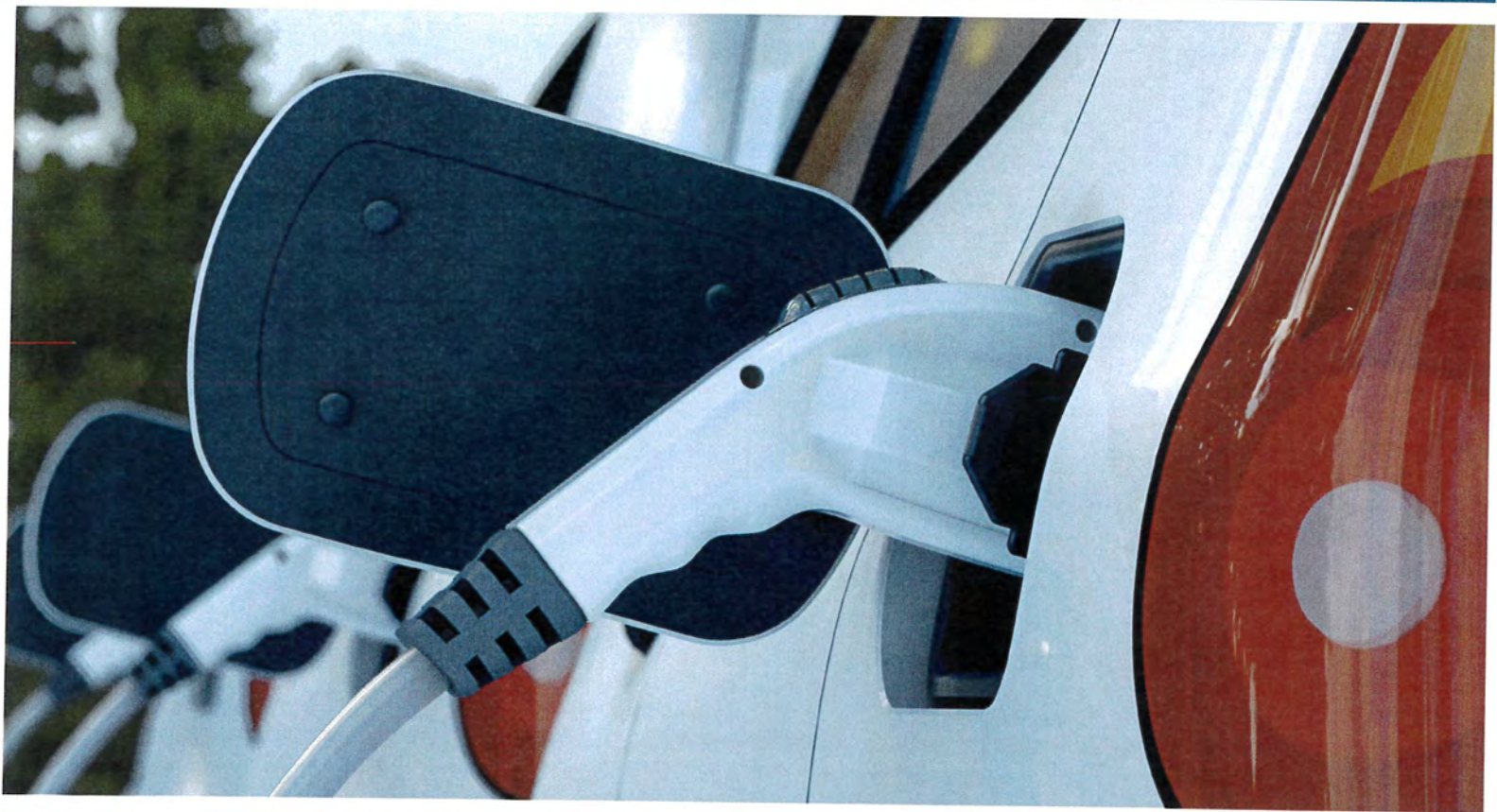
CTE ENGINEERING ASSOCIATE

Alder is an Engineering Associate at the Center for Transportation and the Environment. At CTE, he provides technical and administrative support for advanced transportation projects, including battery electric transition planning and deployment projects. He has worked with a number of clients, including the City of Las Cruces' RoadRUNNER transit (NM), Stockton Unified School District (CA), Riverside County Transportation Commission (CA), Butte County Association of Governments (CA), Las Vegas Regional Transportation Commission (NV), Culver CityBus (CA), Lane Transit District (OR), Community Transit (WA), and North Central Regional Transit District (NM).

**EDUCATION & CERTIFICATIONS:**

BS, MECHANICAL ENGINEERING  
UNIVERSITY OF SAN DIEGO





**NV5** Beyond Engineering



# For Morgan's Sig - Sage PSA signed by vendor

Final Audit Report

2024-03-25

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By:	Catherine Noceti (cnoceti@srcity.org)
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-  Document e-signed by Morgan Biggerstaff (mbiggerstaff@srcity.org)  
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