

San Rafael City School District
PROP. 39 ENERGY CONSERVATION AND ENERGY EFFICIENCY SERVICES
Mechanical Equipment Replacement
REQUEST FOR PROPOSALS

PROJECT

San Rafael City School District (DISTRICT) is requesting proposals from qualified contractors, herein referred to as “Contractor” with experience working in K-12 educational settings. The DISTRICT has received funding from Proposition 39. A previous energy management audit report has identified several mechanical upgrade opportunities. The scope of the project includes replacement of mechanical equipment to San Rafael High School, Davidson Middle School, and Glenwood Elementary School.

The selected Contractor will work with the assigned project manager, prepare final project designs, gather and submit verification data consistent with Prop 39 and any PG&E rebate requirements, complete construction and installation, obtain required permits, register project with CA Department of Industrial Relations, and complete project close out.

It is the intent of this Request for Proposals (RFP) to establish the project approach, specifications and work-scope, schedule and terms and conditions governing the selection process. Proposals shall be firm for ninety (90) days from the date of their opening. All Proposals must meet or exceed all the specifications contained herein. Three (3) signed copies of the Proposal should be addressed to the attention of:

Dan Zaich
Senior Director of Capital Facilities Program
San Rafael City School District
310 Nova Albion Way
Room 505
San Rafael, CA 94903

Proposals due 4:00 PM November 29th, 2018.

PROCUREMENT

The project must conform to all requirements of California Government Code 4217, Title 24, California Division of State Architect (DSA) and all the parameters laid out in the Proposition 39 guidelines. In addition, the DISTRICT will make a best value selection based upon objective criteria related to price, features, functions and life-cycle costs.

The DISTRICT will evaluate proposals to determine the Firm best qualified consistent with the evaluation criteria set forth, below. The DISTRICT intends to use the authority granted by Government Code sections 4217.10, et seq. as the basis for any contract award that may result from this RFP.

PREVAILING WAGE RATES AND COMPLIANCE WITH SENATE BILL 854

All work on this project is subject to the payment of prevailing wages as determined by the Dept. of Industrial Relations. This Project is subject to labor compliance monitoring and enforcement by the Department of Industrial Relations pursuant to Labor Code section 1771.4 and subject to the requirements of Title 8 of the California Code of Regulations. All bidders, contractors and subcontractors working at the site shall be duly registered with the Department of Industrial Relations at the time of bid opening and during the entire course of the work. The contractor will be required to furnish certified payroll records directly to the Department of Industrial Relations in accordance with Labor Code Sections 1771.4(a) and 1776.

SCOPE OF WORK

The scope of the project will include the following:

PART 1 PROJECT DESCRIPTION

1. San Rafael High School
 1. Upgrade two (2) boilers in AD Building to 95% or greater efficiency, and modify boiler pump control so that water circulates through the boilers only when the boiler is operating.
 2. Replace one (1) AC unit in Transformer Room
2. Davidson Middle School
 1. Upgrade one (1) Boiler to 95% or greater efficiency
 2. Install a VFD on Air Handler Unit on the boiler
3. Glenwood Elementary School
 1. Upgrade nine (9) furnaces to AFUE 95 or greater efficiency
 2. Replace four (4) electric storage water heater units with tankless units

PART 2 SCOPE OF WORK INCLUDES AND REQUIRES

- 2.1 The scope of work is to remove existing units and install new equipment per the specification.
- 2.2 The Work shall include all designs, final product specifications, materials, labor, equipment, temporary fencing, trenching, paving, electrical connections, breakers, controls, services, and incidentals necessary to install the mechanical equipment, including, but not limited to, the work included in this SPECIFICATION. The Contractor is expected to work closely with The District personnel to avoid potential damage to existing infrastructure.
- 2.3 Meet all DSA requirements and obtain DSA approval for the installation if required.
- 2.4 All current California Building Codes, and all other applicable codes, shall apply.
- 2.5 Secure any permits and submittals required by State building jurisdictions, the local utility, and the local and state fire authorities. Provide all necessary equipment, hardware, adapters, and any other materials necessary for a quality installation. Ensure installation quality, compliance with project schedule and proper disposal and/or recycling of old equipment.
- 2.6 It is the Contractor's responsibility to review all available drawings and visit the jobsites to collect information and document existing conditions. No allowance shall be made for any additional costs incurred by the Contractor due to failure to properly understand site conditions.
- 2.7 As necessary based upon the scope of work, provide Structural engineering analysis and documentation, stamped and signed by a Civil or Structural Engineer registered in the State of California, certifying that the installation meets requirements resulting from local applicable seismic and wind-load activity, as necessary. A Professional Engineer in the appropriate discipline must stamp all relevant drawings.
- 2.8 The contractor is responsible for identifying all underground obstructions in the working area using a District approved Underground contractor. The District will support the contractor by providing all available drawings and institutional knowledge that is available.
- 2.9 Contractor shall be responsible for patching, repairing, or replacing any District property that is damaged over the course of the work.
- 2.10 The installation shall include all material, labor, equipment, services and incidentals necessary to install a functional equipment system including, but not limited to, the work included in this Specification.
- 2.11 Contractor shall warrant all labor and replace all parts thereof for a period of one year from the date of project acceptance. The warranty for the equipment shall be no less than five (5) years.
- 2.12 Train DISTRICT personnel in all aspects of routine operation, maintenance, and

safety of equipment installed.

2.13 Removal and proper disposal of all waste.

2.14 Immediately inform client of any potential scope changes that take place during the project.

PART 3 CONSTRUCTION SUBMITTAL

3.1 Submittals due with execution of the Agreement:

1. General Liability insurance certificate with endorsement
2. Automobile Liability insurance certificate with endorsement
3. Executed Workers Compensation Certification
4. Signed Agreement
5. Fingerprinting Certifications

3.2 PRE-CONSTRUCTION SUBMITTALS

1. Drawings showing details of the equipment and installation.
2. Final Product specifications and Equipment Data Sheets
3. Certified warranty documentation.
4. Installation instructions and Operation and Maintenance manuals for all equipment.

GENERAL MATERIAL

1. GENERAL

- a. All components are to be new and direct from the manufacturer; no used or refurbished materials are permitted.
- b. Utilize available space appropriately.
- c. Materials shall be designed to withstand the temperatures to which they are exposed.
- d. Dissimilar materials should be isolated from one another using non-conductive shims, washers, or other methods.
- e. Electrical Metallic Tubing (EMT) is acceptable indoors.
- f. All electrical equipment shall be rated for the current and voltage ratings necessary for the application.
- g. All required over-current protection devices will be included in the system and accessible for maintenance. Each shall have trip ratings no greater than the de-rated amperage of the conductor it protects.
- h. System Installation shall conform to Manufacturers Installation Manual and approved project drawings and specifications.

2. BOILERS

- a. Contractor shall ensure that all ventilation standards, codes, and requirements are met.
- b. New equipment will be sized to meet the loads of the existing equipment.
- c. Minimum efficiency of 95%.
- d. Turndown ratio of 20:1 or better. Alternatively, smaller boilers can be installed in parallel to meet this requirement.
- e. Control motors to meet the match the demand for heating.

3. HVAC

- a. Bryant Evolution Extreme or equal.
- b. 3 Ton
- c. Minimum EER of 14
- d. Variable speed compressor
- e. Variable speed Fan

4. AIR HANDLER VFD

- a. Siemens or equal
- b. Install or repair modulating vents that are controlled on temperature.
- c. Modulate fans based on pressure

5. FURNACES

- a. Replace 9 Lennox G12RQ3E furnaces.
- b. Minimum 95% efficiency
- c. Controls
 - i. Provide new classroom thermostats comparable to those currently in places.
 - ii. Provide capability with each furnace to connect to the District's Energy Management System

6. TANKLESS WATER HEATERS

- a. Rheem RTE series of equal
- b. Ensure flow meets the requirements of the application.
- c. Install a local breaker.
- d. Ensure that electric supply is sufficient for the application.

7. Installation crews shall minimize disturbance (due to noise, dust, odors, moving of furniture and equipment) of building occupants and activities.

8. Sites shall be maintained and kept secure, free of excessive debris, and in safe condition during the construction period. Site should be left “broom clean” after work is complete at the end of each work day

INSTALLATION REQUIREMENTS & SPECIFICATION

PART 1 GENERAL INSTALLATION REQUIREMENTS

- 1.1 All safety, electric, building, and labor code requirements at the national, state, and local levels shall be met.
- 1.2 The installation shall be completed in a “workman like manner.” The area shall be kept clean and free of obstructions at all times.
- 1.3 The installation shall be completed per each manufacturer’s installation manual
- 1.4 All components shall be installed by manufacturer-approved installers.
- 1.5 The Contractor is responsible for installing any curbs or sleepers required to complete the installation.
- 1.6 The installation shall be completed without affecting existing piping and/or wires.
- 1.7 All electrical connections and terminations shall be fully tightened, secured, and strain relieved as appropriate.
- 1.8 All mounting equipment shall be installed to the manufacturer’s specifications.
- 1.9 All cables, conduit, exposed conductors, and electrical boxes should be secured and supported according to code requirements.
- 1.10 All applicable environmental regulations shall be met.
- 1.11 Ensure that all equipment and materials fit properly in their installations.
- 1.12 Perform any required work to correct improper installations at no additional expense to the Owner.
- 1.13 The District’s Engineer reserves the right to halt any work that is found to be substandard or being installed by unqualified personnel.
- 1.14 Patch and repair all roofs per the manufacturer’s approved methods. The installation shall not void the roofing system warranty.
- 1.15 Patch and repair walls, floors, and ceilings, as appropriate.

PART 2 WASTE DISPOSAL

- 2.1 Removal and proper disposal of existing equipment is included.

PART 3 COORDINATION

- 3.1 The Contractor shall coordinate the electrical work with the other trades, code authorities and District Engineer; with due regard to their work, towards promotion of a rapid completion of the project. If any cooperative work must be altered due to lack of proper supervision of such, or failure to make proper provisions, then the Contractor shall bear expense of such changes as necessary to be made in work of others.

- 3.2 Manufacturer's directions and instructions shall be followed in all cases where such is not shown on the Contract Drawings or herein specified or have stipulations in order to meet warranty requirements.
- 3.3 The Contractor shall cease work at any particular point, temporarily, and transfer his operations to such portions of work as directed, when in the judgment of the Engineer it is necessary to do so.

EXISTING CONDITIONS

The contractor has had sufficient access to the facility and the facility mechanical system to verify that the proposal includes all materials and labor for all replacements specified, and to verify the existing conditions to ensure the proper installation of the system. No additional payment will be made due to site conditions (excluding quantities) that were not accounted for by the Contractor, per the General Conditions.

CONTRACTOR USE OF PREMISES

1. All work shall be completed after hours, between 4:00 p.m. and 10:00 p.m., Monday through Friday, and on weekends and school holidays. The DISTRICT will accommodate work in unoccupied areas during operational hours. The facility must remain open and operational during normal business hours, Monday through Friday, 6:00 a.m. to 6:00 p.m. All access to and from the facility must be maintained during these hours
2. Work schedule shall accommodate special events that occur outside normal business hours; notice of these events will be communicated by the District.
3. Any utility shut-offs shall be scheduled through the Project Manager at least 72 hours ahead of time. Any shut-off that will impact the standard operation of the facility shall happen during off hours.

SCHEDULE

Date	Event
10/31/2018	RFP Issued
11/8/2018	Pre-Proposal Job Walk 1:00 PM. Meet at San Rafael High School in front of Admin. Building

11/16/2018	End of questions and information request period
11/20/2018	Last date for response to questions provided by Addenda
11/29/2018	4:00 pm Proposals due at DISTRICT Offices, 310 Nova Albion Way Room 505, San Rafael CA 94903
12/6/2018	Announcement of Best Value proposal
12/17/2018	Public Hearing and Board approval of Resolution supporting Best Value Selection
1/7/2019	Anticipated Start Date

ADDITIONAL INSTRUCTIONS TO BIDDERS

1. Final Payment will be available after a walk-through ensures completeness and functionality to DISTRICT satisfaction and all requirements for rebate processing and Prop 39 reporting has been met, and 30 days of uninterrupted operation.
2. Contractor is responsible for providing all designs, final product specifications, materials, labor and necessary equipment to complete the work according to the specifications provided.
3. Upon award of contract, Contractor shall submit appropriate documents of insurance (certificates of accord); Workers Compensation Statutory Limit, liability \$1,000,000 coverage pertaining to vehicles, property damage and public liabilities, personal injury, etc., and shall hold the DISTRICT harmless in any incident involving the contractor, his employees, his/her equipment, and vehicles.

4. Bidders shall visit the site areas and familiarize themselves with the scope of the project. A Pre-Proposal meeting and project walk-through will be held at 1:00 pm on November 8th, 2018.
 - a. Proposers may request additional opportunities to visit the work sites. Please contact Dan Zaich, dzaich@srcs.org
5. Following award of the contract, work may commence on or after January 7, 2019. All work must be completed on or before April 30, 2019.
6. The contractor shall clean their job area daily and dispose of all trash and debris leaving the area broom clean. At the end of each shift contractor shall restore space back to original state.
7. Contractor is responsible for moving furniture as they deem necessary and protect furniture from damage and/or dust and debris.
8. The DISTRICT dumpster is not to be used for contractor's trash.
9. It is the responsibility of the contractor / bidders to field verify all existing conditions.

QUALIFICATIONS

The DISTRICT may award a contract to the Contractor that, in its sole opinion, is the most capable of providing the range of services described in this RFP, and in the long-term best interest of the DISTRICT. The contractor shall be licensed in the state of California, hold a class B or C20 license, and shall be experienced completing similar types of work.

To be considered for this project a provider must demonstrate knowledge and experience in similar projects:

- California K-12 references that can attest to the quality of the Contractor's past work
- An established record of technical performance on typical projects within California
- A proven record of on-time and on-budget performance
- Excellent safety record
- Established records of the Contractor's ability to complete the work
- Credentialed, trained, and knowledgeable staff
- Competent management support at all levels
- Ability to effectively communicate with the DISTRICT, administration, staff, students, and community as needed

The DISTRICT reserves the right to investigate the qualifications of all Contractors under consideration and to confirm any part of the information furnished, or to require other evidence of managerial, financial, or technical capabilities that are considered necessary for the successful performance of the described energy efficiency project.

SUBMITTAL REQUIREMENTS

Address the following items as completely as possible; response to each item is mandatory:

- 1. COVER LETTER/LETTER OF INTEREST** Cover letter must include name of firm, address, telephone and fax numbers, and name of Principal to contact. Letter must be signed by representative of the firm with authorization to bind the firm by contract.

- 2. PROJECT PROPOSAL**
 - a) Identify the project schedule (timeline)
 - b) Proposed cost on a unit and total project basis, itemized budget, product quantity
 - c) Data sheets of all equipment including size and energy use, product life-cycle/warranty, maintenance and support provided
 - d) Energy and demand savings
 - e) Any measures requested but not included in the proposal should be itemized separately in the proposal and clearly marked as not included

- 3. DESCRIPTION OF FIRM**
 - a) History, number of years in business in California, staff size
 - b) Location of office which will perform the work
 - c) Size of staff if applicable one-person Contractors/firms may submit

- 4. RELEVANT EXPERIENCE**
 - a) List relevant K-12 and or Community College projects where your firm has completed projects and include:
 - i. Project name, type and location Ex: Classroom / Kitchen/ Library / Administration / Laboratory
 - ii. Year completed
 - iii. Project size, square feet and construction cost
 - b) List client names, contact person, and phone number for relevant project information.

- 5. FIRM TRACK RECORD**
 - a) Has your firm ever been let go by a client or replaced by another firm during any related project? If so, explain in detail.
 - b) Does your firm have any current or pending litigation on any projects? If so, please describe.

- c) Has your firm defaulted on a contract within the past five (5) years or declared bankruptcy, or been placed in receivership within the past five (5) years?
- d) Is or has your firm been a party to suits, claims, or similar actions related to:
 - i. Construction claims relating to performance or delay
 - ii. OSHA, labor relations, or similar issues affecting the progress of the work
 - iii. California State Contractor License suspensions or code violations
 - iv. If “yes” to any of the above, provide a summary and current status of the issue under separate attachment to the response to this RFP.

SUBMITTAL INFORMATION

Deadline for submission of three (3) copies of your submittal is 4:00 PM, November 29th, 2018. Submittals received after the deadline may be returned. All submittals become the sole property of the DISTRICT and the content will be held confidential until the selection of a firm is made. Any proprietary information must be designated clearly and should be bound separately and labeled with words “PROPRIETARY INFORMATION”. An entire submittal marked as such will not be accepted.

Submit sealed proposals clearly marked “RFP for SRCS – Prop. 39 Mechanical Equipment Replacement” to the following location:

Attn: Dan Zaich
Senior Director of Capital Facilities Program
San Rafael City School District
310 Nova Albion Way
Room 505
San Rafael, CA 94903

Questions or clarifications may be submitted in writing to Dan Zaich at the address listed above or e-mailed to (dzaich@srcs.org).

SUBMITTAL EVALUATION PROCESS

The DISTRICT Board will manage the selection process, review and evaluate the Proposals and make a recommendation regarding the selection of a successful Contractor by utilizing the DISTRICT’s bid recap spreadsheet which incorporates, Company, Sealed bids, Firms history, Relevant experience, Firm’s track record, DIR identification number, Subcontractor list, Non-Collusion affidavit, Worker’s Comp certificate, California contractor’s license number and base proposal cost. The review committee shall be comprised of individuals with experience, knowledge and program responsibility for the products and services of this Project. The evaluation, selection and recommendation time frame is expected to be approximately two weeks.

Selection will be conducted comprehensively, fairly and impartially. Structured, quantitative scoring techniques will be used to maximize objectivity. Selection will include an assessment of the Firms' proven ability to apply their experience and technical expertise to:

- Complete this energy savings project in an efficient and skilled manner.
- Provide quality components per contract documents.
- Collect, document and assemble in the approved format, all pre and post monitoring and verification data as required of a Prop 39 and PG&E energy savings project.

The DISTRICT will address the following criteria in evaluation of submittals in order to gauge the ability of the Provider. The same general criteria will be used to judge both the submittal and the interview, should the DISTRICT choose to conduct interviews with Providers.

1. Proposed contract price
2. Functions consistent with the Scope of Work attached and incorporated herein which shall consist of:
 - a. Meeting all scope of work criteria, without exception
 - b. Exceeding scope of work criteria
3. Features, other than core functions, which add tangible value expressed in the Proposal
4. Life-cycle costs which shall consist of:
 - a. Operational and maintenance costs
 - b. Replacement costs
 - c. Anticipated energy savings

The DISTRICT reserves the right to:

- Reject any or all submittals at its sole discretion.
- Cancel the Request for Proposals (RFP).
- Modify any requirements contained within the RFP and request a revised submission from all providers.
- Establish other evaluation criteria determined to be in the best interest of the DISTRICT.
- Contract with any of the firms responding to this RFP based solely upon its judgment of the qualifications and capabilities of the Contractor/firm.

A Selection Committee, as deemed necessary, will be formed to evaluate the submittals. Composition and creation of this committee, should one be formed, is at the sole discretion of the DISTRICT. The Selection Committee may review the submittals for format to ensure conformance with the requirements of the RFP and may select finalist to interview with the committee as part of the evaluation process. The DISTRICT does not guarantee that an interview will take place, thus reserving the right to select a Provider based solely on the information provided in the submittals received in response to the RFP. Should an interview take place, the key personnel responsible for fulfilling the requirements of the project shall be

required to be present for the interview. The DISTRICT will take all steps necessary to ensure that any discussions and interviews conducted in connection to this RFP will be done in a fair and impartial manner.

This RFP does not commit the DISTRICT to negotiate a contract. The DISTRICT will not be responsible for any expenses incurred by any firm in preparing and submitting a proposal or response to this RFP.

SPECIAL PROCEDURES

1. Emergency Evacuation: Review and coordinate emergency response procedures with the facility staff. Become familiar with evacuation procedures and coordinate response of workers in an emergency.
2. Contractor Superintendent: Contractor's superintendent shall have experience supervising projects of similar size and type. The superintendent must be qualified to supervise all phases of this project. The superintendent's resume must be submitted to the DISTRICT prior to beginning the construction.
3. Project Safety
 - a. Contractor shall comply with all applicable safety standards from the California Code of Regulations, Title 8, including but not limited to the Construction Safety orders. For the duration of the Contract work the contractor must have on-site and available for review a copy of their injury and Illness Prevention Program. In addition, the contractor will be required to have the following documents at the job-site per Cal OSHA, Title 8 Regulations:
 - i. Code of Safety Practices
 - ii. Cal-OSHA required permits
 - iii. All Cal-OSHA required training certifications
 - iv. Respiratory Protection Program for all work sited where respirators are mandatory.
 - v. Fall protection.
 - vi. Material Safety Data Sheets
 - b. The contractor will be required to post all required Cal-OSHA documents.
 - c. The contractor must designate a superintendent as the Competent Person per Title 8.
 - d. The contractor must take appropriate measures to ensure the security and safety of the work site, and materials and tools stored on premises. No tools are to be left unsecured after hours for any reason, within the secure areas around or in the building. Employees shall be directed to diligently police the construction areas for removal of debris, as well as tools and materials. Notify employees that

inappropriate behavior or language will be grounds for removal of that employee from the job site.

- e. Comply with all safety recommendations of the Material Safety Data Sheets and ensure that workers, staff, and public are not exposed to hazardous fumes or materials as a result of this work.
- f. Appropriate protective clothing shall be worn when handling the products. Clothing shall include hard hats, steel toe boots, and insulated gloves when working on an active system.

4. Project Meetings

- a. *Pre-construction Meeting:* The DISTRICT will schedule a pre-construction meeting with the Contractor, the contractor's Project Superintendent and affected DISTRICT department representatives and consultants, at DISTRICT facilities.
- b. *Project Progress Meetings:* The contractor will make arrangements for Project Progress Meetings at an agreed upon interval. Attendees shall include the Contractor's superintendent and the DISTRICT project manager. The agenda shall include, but not be limited to:
 - a. Review of work progress
 - b. Identification of problems that impede planned progress.
 - c. Maintenance of the Construction Schedule.
 - d. Corrective measures to maintain the Construction Schedule.
 - e. Planned progress in the succeeding work period.
 - f. Maintenance of quality of work standards.
 - g. Proposed changes to the schedule and project coordination, and the effect on the project.
- c. *Punch List Inspection:* The contractor will schedule a punch list inspection with the DISTRICT Project Manager. The inspection will allow the DISTRICT to identify problems that may impact the performance of the lighting system.
- d. *Final Inspection Meeting:* The Contractor will schedule a meeting that includes the DISTRICT Project Manager to walk-through and inspect the installation to ensure that all punch-list items have been addressed.

TEMPORARY FACILITIES

Telephone: The Contractor or supervisor on the job site must be able to be reached by phone at all times while work is in progress.

PROJECT CLOSEOUT

1. Clean all work areas, removing any debris.

2. Prepare three (3) copies of operating and maintenance manuals in hard cover binders and deliver to the DISTRICT. As a minimum the binders shall include:
 - i. A complete set of all approved submittals including shop drawings and product literature.
 - ii. Copies of all testing data and reports.

PROJECT SITES

San Rafael High School
185 Mission Avenue
San Rafael, CA 94901

Davidson Middle School
280 Woodland Avenue
San Rafael, CA 94901

Glenwood Elementary School
25 West Castlewood Drive
San Rafael, CA 94901

APPENDIX A: Excerpt of the Prop 39 Energy Management Audit Report

3.3 Boiler – Davidson Middle

Existing Conditions: Davidson Middle has an Ajax Boiler Company (Model WNG525) 525 MBtu/hr boiler unit with an estimated efficiency of 80%. The system also includes a 3

Proposition 39 Energy Management Study | San Rafael City Schools K-8

Page | 7

horsepower (Hp) fan that serve a 5-zone air handler for the library. The system is old and in need of upgrades.

Recommendations: Replace the existing 80% efficiency boiler with new unit that has an efficiency of 95% or greater such as the Laars NeoTherm 500 or equal (see Appendix F for sample specification sheet). Add variable frequency drives to the existing 5-zone air handler's fan.

Savings for the proposed project were calculated using the CEC Calculator v8.1:

Site	Energy Efficiency Measure
Dauids on	Upgrade 1 Boiler to AFUE 95-97 or greater unit
Dauids on	Install VFD on AH Fan

3.4 Furnaces – Glenwood Elementary

Existing Conditions: Glenwood Elementary has some standard efficiency furnaces that heat the facilities; nine units located in exterior mechanical closets outside of each classroom were identified as 80% efficient furnaces:

- One (1) Lennox Model G12RQ3E-110-4 110 MBtu/hr unit
- Eight (8) Heil NUGE050CG01 50 MBtu/hr units

Recommendations: Replace nine 80% efficient furnace units with AFUE 95%-97% or greater units such as a Lennox EL296V/EL296E or similar. See Appendix F for sample specification sheet.

Savings for the proposed project were calculated using the CEC Calculator v8.1:

Site	Energy Efficiency Measure
Glenwood	Upgrade 9 furnaces to AFUE 95-97 or greater efficiency

3.5 Water Heater – Glenwood Elementary

Existing Condition: The school has four low-efficiency electric 50-gallon storage hot water heaters:

- One (1) AO Smith ELJF 20-gal 2,500 watt storage water heater
- Two (2) AO Smith DEL 20-gal 4,500 watt storage water heater
- One (1) AO Smith 1,500 watt storage water heater

Recommendation: Replace the low-efficiency electric storage hot water heaters with high-efficiency tankless units, such as Rheem RTEX13 or RTEX18.

The CEC Calculator does not include calculations for existing electric water heaters so a custom calculation was used for this measure. Details on the calculation methodologies are included in Appendix D.

Site	Energy Efficiency Measure
Glenwood	Replace 4 electric storage water heater w/tankless units

3.3 Boiler – San Rafael High

Existing Conditions: San Rafael High has two (2) Parker 2,030 MBtu/hr boiler units with estimated efficiencies of 78% in the basement of the AD building. The units serve the liberal arts classrooms and the auditorium.

Recommendations: Replace the existing 78% efficiency boilers with new units that have an efficiency of 95% or greater such as the Lochivar SYNC SBN1500 or similar (see Appendix D). Ensure that replacement units are properly sized for need. Modify boiler pump control so that they only circulate through the boilers when the boiler is operating.

Savings for the proposed project were calculated using the CEC Calculator v8.1:

Site	Energy Efficiency Measure
SR High	AD Building Boilers (2)

3.4 Air Conditioner – San Rafael High

Existing Conditions: San Rafael High has a very large, old AC unit that serves the Transformer Room. It appears to be a Compu-Aire MKA-1532 unit and staff confirmed that it is very old unit and is in need of replacement.

Recommendations: Replace existing AC unit with a new 3-ton unit with a SEER 14, such as a Carrier 50LC or similar (see Appendix D).¹ The unit should also have a new air handler and condenser unit with a full economizer.

Savings for the proposed project were calculated using the CEC Calculator v8.1:

Site	Energy Efficiency Measure
SR High	Transformer Room AC

Contractor to Provide with Bid

1. Firms history
2. Relevant experience
3. Firm's track record
4. DIR identification number
5. Subcontractor list
6. Non-collusion affidavit
7. Worker's Comp certificate
8. California contractor's license number
9. Base Bid-

\$ _____

Dollars