

AMENDMENT TWO TO AGREEMENT FOR ENGINEERING DESIGN SERVICES
LAKE COUNTY COURTHOUSE HVAC SYSTEM

This Amendment Two to the Agreement for Engineering Design Services to the Lake County Courthouse HVAC System is made this _____ day of _____ 2024, by and between the County of Lake, hereinafter referred to as "COUNTY", and STRATA Architecture Planning Management, hereinafter referred to as "CONSULTANT".

WITNESSETH

WHEREAS, COUNTY and CONSULTANT have entered into an Agreement dated September 12, 2023, as amended by Amendment One dated November 6, 2023, to provide professional design services for the Lake County Courthouse HVAC System Project; and

WHEREAS, the parties hereto desire to amend said Agreement to include design development, construction document preparation, and other supplemental services to the scope of work for the project; and

WHEREAS, Article XIII, MODIFICATION, allows that matters concerning scope of services which affect the agreed price may only be modified by written amendment thereto.

NOW, THEREFORE, the parties hereto agree as follows:

1. ARTICLE I, SECTION A, of CONSULTANT'S RESPONSIBILITIES, is hereby modified to read as follows:

"Subject to the terms and conditions set forth in this Agreement, CONSULTANT shall provide to County the services described in CONSULTANT'S proposal for pre-design services dated May 25, 2023 (Exhibit A), and further as described in CONSULTANT'S proposal for architectural & engineering services dated March 15, 2024 (Exhibit B)."

2. ARTICLE I, SECTION C, of CONSULTANT'S RESPONSIBILITIES, is hereby modified to read as follows:

“CONSULTANT’s lead personnel and those of its subcontractors that will be associated with the services provided pursuant to this agreement shall be those designated in Exhibit “A” (CONSULTANT’s Proposal), and further described in CONSULTANT’s proposal for architectural & engineering services dated March 15, 2024 (Exhibit B).”

3. ARTICLE IV, SECTION A, of COMPENSATION AND TERMS OF PAYMENT, is hereby modified to read as follows:

“Basic Compensation Fee: Provided that the CONSULTANT is not in default under any provision of this Agreement, COUNTY will compensate CONSULTANT in accordance with the procedures set forth hereinafter, in an amount not to exceed the sum of Three Hundred Nineteen Thousand Nine Hundreds Twenty Dollars (\$319,920.00). Except as otherwise provided elsewhere in this Agreement, said compensation 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, subcontractors, travel expenses, telephone charges, copying and reproduction, computer time, and any and all other costs, expenses, fees and charges of CONSULTANT, its agents and employees

Total payments to CONSULTANT shall not exceed the sum without prior written authorization by COUNTY and formal Amendment to this Agreement.”

4. ARTICLE IV, SECTION B, of COMPENSATION AND TERMS OF PAYMENT, is hereby modified to read as follows:

“1. Services involving other Public Agencies: CONSULTANT may submit plans and related, or other, documents to public agencies for approval. However, it may be necessary, in order to serve County’s interests and needs, for CONSULTANT to perform special processing, such as attending meetings and conferences with different agencies, hand carrying plans or other documents from agency to agency, and other special services. These special services are not included in the basic

compensation fee and shall be performed as additional services, subject to County's preapproval, on an hourly fee basis in accordance with applicable hourly rates set forth in CONSULTANT's FEE PROPOSAL as incorporated in Exhibit A, and further described in Exhibit B.

2. Additional On-site Meetings: In addition to maximum of five on-site meetings provided by compensation set forth herein, CONSULTANT will attend additional on-site meetings that COUNTY or its representatives reasonably require, and additional on on-site meetings requested by public agencies that might be involved in the PROJECT. These additional on-site meetings are not included in the basic compensation fee and shall be performed as additional services, subject to County's preapproval, on an hourly fee basis in accordance with the applicable hourly and mileage rates set forth in Exhibit A, and further described in Exhibit B.

3. If CONSULTANT or anyone in its employ, is called upon to be deposed or to testify in a matter in which CONSULTANT is not a named party, that relates to the PROJECT, County agrees to compensate CONSULTANT for such services, subject to County's preapproval, in accordance with the hourly rates as set forth on CONSULTANT's Fee Proposal set forth in Exhibit A to this Agreement unless different rates are otherwise agreed in writing, except that CONSULTANT may unilaterally increase its hourly billing rates on each anniversary of the effective date of this Agreement by as much as five percent or the percentage increase in the CPI-W (U.S. Department of Labor Consumer Price Index- Washington), whichever is greater."

5. ARTICLE V, TERM, is hereby modified to read as follows:

"This Agreement shall commence on the date hereinabove entered into and shall terminate on December 31, 2026, unless earlier terminated as hereinafter provided. This term may be extended an appropriate period of time in case of unavoidable delays and for consideration of corresponding warranted adjustments in payment by modification of this agreement as hereafter provided."

Except as specifically modified herein, all other terms and conditions of the Agreement dated September 12, 2023 shall remain in full force and effect.

COUNTY and CONSULTANT have executed this Amendment Two to Agreement on the day and year first written above.

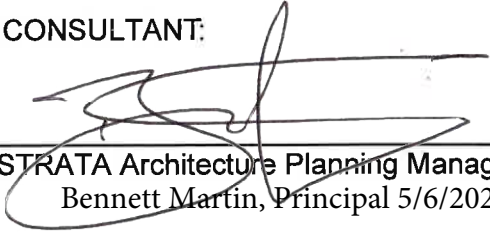
COUNTY OF LAKE

Chair, Board of Supervisors

ATTEST: SUSAN PARKER
Clerk of the Board
of Supervisors

By: _____

CONSULTANT:



STRATA Architecture Planning Management
Bennett Martin, Principal 5/6/2024

APPROVED AS TO FORM:
LLOYD GUINTIVANO
County Counsel

By:  _____

EXHIBIT "B"

CONSULTANT'S PROPOSAL AND FEE DATED MARCH 15, 2024



March 15, 2024

Lars Ewing
Lake County Public Services Director
County of Lake, Department of Public Services
333 Second Street
Lakeport, California 95453

Reference: Design & Engineering for HVAC – Lake County Courthouse
Subject: *Proposal for Architectural & Engineering Professional Services*

Dear Lars:

We are pleased to provide the proposal for architectural & engineering services for the HVAC modernization of the Lake County Courthouse. This proposal is based on previous discussions and multiple site visits with representatives of Lake County Public Services.

Scope of the Project:

The project is to provide architectural, structural, electrical, mechanical, and plumbing design and engineering to support the whole building HVAC modernization of the existing four-story courthouse. The project intent is to replace the existing built-up boiler/condenser/fan coil/package unit system array with VRV/VRF type of split system multizone solution with supplemental ventilation system utilizing ERV technologies for increased energy savings.

A previous HVAC Conditions Assessment & Recommendations Report was performed to analyze and provide recommendations for remediation and replacement and shall be used as part of the project basis of design. The project boundary is defined as the envelope of the combined original building and annex.

STRATAap proposes to provide the following Architectural and Engineer of Record services:

PRE-DESIGN SERVICES (PD)

- No scope of work within this phase.

SCHEMATIC DESIGN (SD)

- No scope of work within this phase.

DESIGN DEVELOPMENT (DD)

- Building energy calculations and modeling per *ASHRAE Standard 90.1-2022 Energy Standards* utilizing EnergyPro v9.0.1.0 (DOE-2) performance standards, as adopted by the State of California Energy Commission and the local jurisdiction.
 - *ASHRAE Standard 62.1-2022 Ventilation for Acceptable Indoor Air* calculations for acceptable indoor air quality quantities.
- Temperature zoning for all areas within Project Boundary and served by new and/or revised HVAC systems. Zones shall be established based upon similar thermal profiles, building orientation and staff input.
 - Coordinate with County of Lake Staff to confirm final zoning preferences prior to final equipment selections and make adjustments to energy model as required.



- Equipment selection sized in accordance with manufacturer's recommendations and energy model output. Equipment shall be sized to accommodate for cooling/heating for 97% of design degree days.
- Coordination of preliminary mechanical and/or plumbing equipment system selections with:
 - Structural engineer of record (SEOR) to verify weight/loading on structure.
 - Electrical engineer of record (EEOR) to verify, correlate and confirm power requirements.
 - Civil engineer of record (CEOR) to correlate and confirm sanitary sewer, domestic water, and roof drain lateral locations.
 - Architect of record (AOR) to verify and confirm preferred equipment locations.
- Development and issue of *VRV/VRF Equipment Options Matrix* to assist in system selection with user/owner. Options Matrix shall provide an overview and description of system indoor/outdoor components, manufacturer, and efficiencies.

CONSTRUCTION DOCUMENTS (CD)

- New and/or Revised HVAC systems for spaces within the Project Boundary, including:
 - Modifications to the building energy calculations and modeling per *ASHRAE Standard 90.1-2022 Energy Standards* utilizing EnergyPro v9.0.1.0 (DOE-2) based upon changes identified during the DD phase of work.
 - Modifications to the *ASHRAE Standard 62.1-2022 Ventilation for Acceptable Indoor Air* calculations for acceptable indoor air quality quantities based upon changes identified during the DD phase of work.
 - Final equipment selection sized in accordance with manufacturer's recommendations and energy model. Coordination of location, size, weight, and connected capacities with design-team and owner-identified consultants.
 - Cooling/Heating systems shall be designed on a preliminary basis as Variable Refrigerant Volume (VRV)/Variable Refrigerant Flow (VRF) type with outdoor heat recovery unit (HRU) and indoor fan coil unit array. The design intent is to provide a HRU to serve each floor to allow for phasing of equipment installation and add in diversity.
 - Cooling system shall be designed on a preliminary basis as electric fuel source, air-cooled, direct-expansion.
 - Heating system shall be designed on a preliminary basis as electric fuel source, heat pump operation.
 - Terminal space condition units shall consist of a combination of ducted and ductless style fan coils, coordinate with AOR and LC Staff.
 - Heat recovery/refrigerant metering systems shall be designed using either 2 or 3 pipe mode selection boxes with layout and capacity coordinated with LC Staff to assist with phasing and future buildout strategies.
 - Layout of refrigerant piping from rooftop heat recovery unit to refrigerant mode selection box, and from mode selection box to terminal fan coil units.
 - General building exhaust and pressure cascading (positively pressurized building) in accordance with CMC Table 403.7.
 - Design of curb mounted exhaust fans (downblast configuration).
 - Design of dedicated and/or ancillary outdoor air ventilation systems based upon ASHRAE 62.1-2022/CEC Table 120.1-A calculations as noted above.
 - Design of energy recovery ventilator (ERV) system, one per floor to pair with HRU design intent.



- ERV shall be designed on the basis as cross-core heat exchanger type, constant volume with the intent to be operational during the normally occupiable hours.
 - At the Counties request, ERV system can be adjusted to allow for multiple units per floor to supported added zoning/control/flexibility be should it be desired.
- Reutilize outside air and relief air ductwork bridging from the roof level intake to the first-floor mechanical room.
- Design of process cooling equipment to support IT room and elevator room function.
 - Equipment shall be designed on a preliminary basis as ductless wall mount.
- Design and engineering of proposed air distribution system and from HVAC equipment to air terminals.
- Selection, location, and coordination of air terminals for all new HVAC systems listed herein.
 - Coordination with LC Staff for terminal preferences (perforated, linear, throw pattern, etc.)
- Coordinate with controls manufacturer to provide complete controls system layout and schematic to support new mechanical systems with the ability for remote access/adjustment/visibility of system. Desired control points are to be coordinated with LC Staff.
- Design of CSFM approved fire dampers and/or fire smoke dampers to maintain rated wall classification.
- New and/or Revised Plumbing systems within the Project Boundary, including:
 - Condensate drainage system from condensate generating HVAC and plumbing equipment with termination to approved receptors.
- Review of contractor submittals for compliance to Contract Documents. Review shall include enforcement of specified materials and equipment only.

SUPPLEMENTARY SERVICES

ENERGY DOCUMENTATION (EA)

Building Energy Modelling & Compliance Documentation (basic services) in accordance with the 2022 California Energy Code, using the performance computation method for energy use for Non-Residential (NR) compliance.

Performance Certificates of Compliance shall be calculated and determined by building elements as selected and specified by the design team:

- NR form 2022-CEC-NRCC-MCH-E Mechanical systems documentation for NR Heating, Ventilation, and Air Conditioning (HVAC) systems equipment modeling.
- Non-Residential Acceptance Testing: Forms shall be completed by the field technician and/or Certified Acceptance Test Technician (ATT) and submitted to the Inspector of Record.
- The following information is **REQUIRED** of the design team in order to perform the Non-Residential Energy Calculations:
 - Thermal resistance values (R-Values) for roof and wall assemblies.
 - Solar Heat Gain Coefficient (SHGC) and U-Value for glazing.

COMMISSIONING (CX)

- Commissioning specifications will be provided as a part of the contract documents for bidding by general contractors. Commissioning tasks to be completed by the General Contractor and Commissioning Agent during construction.



AGENCY APPROVAL (AA)

- Compilation and submittal of documents (drawings, specification, and calculations) for delivery to Architect/Owner intended for submittal to local authority having jurisdiction for review and/or approval.
- Corrections to our documents and engineering support for one round of AHJ comments.
 - Project is intended to be submitted and bid as a single permit application and a single set of documents.

BIDDING SERVICES (BS)

- Compilation of Conform Set of documents to issue for contractor bidding.
- Attend mandatory pre-bid contractor job walk (**MT#01**).
- Address and respond to contractor pre-bid requests for information (RFI).

CONSTRUCTION OBSERVATION (CO)

- Review of contractor submittals for compliance to the contract documents with commentary.
- Provide responses to reasonable requests for information (RFI) from contractor.
- Provide field observation reports, issue to Client, at the following milestones:
 - Heat recovery unit installation (**MT#02**). Report issued.
 - Fan coil/mode selection box and ERV installation (**MT#03**). Report issued
 - Ductwork and condensate drain installation prior to close in (**MT#04**). Report issued.
 - Architectural review of existing rated assemblies.

POST PROJECT CLOSE-OUT SERVICES (CS)

- Post-Construction services shall include the following:
 - On site punch list to observe and document outstanding installation components and identify areas where installation deviates from Conform Set of construction documents (**MT#05**).
 - Integrate contractor markups into conform set to issue as-built record set for County of Lake record.

SPECIFICATIONS (SP)

- All systems shall be provided with long-form book specifications conforming to CSI MasterFormat 2020 standards.

MEETINGS (MT)

- Regularly schedule virtual meetings and/or conference calls prior to AHJ approval.
- On site meetings **MT#01** through **MT#05** (specific meetings).
- Weekly virtual and/or on site meetings during construction.

DELIVERABLES

- A single set of contract documents intended for bidding by multiple contractors. Agreed progress submittals shall be made at the following increments:
 - 100% Design Development (DD) Documents with outline specifications.
 - 50% Construction Documents (CD) with outline specifications.
 - 75% Construction Documents with written specifications.
 - 99% Construction Documents (Drawings, Specifications, and Calculations) for submittal by others to the Authority Having Jurisdiction (AHJ).



- 100% Bid Documents/Conform Set (BD) after AHJ approval (documents bid prior to this phase are deemed incomplete and are not authorized for estimating or use without AHJ approval)
- 100% Field Observation Report #1.
- 100% Field Observation Report #2
- 100% Field Observation Report #3
- 100% Pre-occupancy report/letter (PC) detailing any deficiencies between as-contracted work and work shown on the Contract Documents ("*punch list*"). All trades.
- 100% As-Built documentation (PC) incorporating contractor field notes for return to Owner.

Design Fee: \$261,620.00

If further services are requested by the Department of Public Services and agreed upon, additional services will be charged based on the attached 2024 rate sheet. If you find that this proposal is acceptable STRATA a|p is prepared to enter into a formal agreement for professional services.

Please contact me at STRATA a|p at (707) 935-7944, if you have any questions regarding this proposal, or would like to discuss your project further. We look forward to working with you and your representatives on this exciting new project.

Sincerely,

Bennett Martin, Assoc. AIA
Principal

Exclusions/Assumptions:

- Does not include materials testing or hazardous material assessment. County to identify any hazardous materials present in the building.
- Includes architecture, civil, plumbing, mechanical, electrical, and structural engineering.
- Travel expenses are included in the proposal.
- Reproduction expenses are included in the proposal.
- Permit fees will be paid for by the County.
- Changes/edits to previously prepared Contract Documents necessitated by the enactment or revision of codes, owner/architect changes, value engineering, laws, regulations, or official interpretations.
- Title 24 Energy compliance documentation relating to envelope and lighting compliance.
- Decommissioning of existing diesel tank and fuel system components serving boiler.
- Fire Protection design/engineering services.
- Third-party documentation including, but not limited to CalGreen, EnergyStar, SbD, AirPlus, GreenPoints, LEED, reports, rebates, reviews, life cycle analysis or cost estimating services.



Proposed Design Schedule:

Design Commencement Approval	April 15, 2024
Design Development	April 15, 2024 - May 31, 2024
Lake County Public Service Review	June 01, 2024 - June 07, 2024
50% Construction Documents	June 07, 2024 - July 12, 2024
Lake County Public Service Review	July 12, 2024 - Concurrent with Design
75% Construction Documents	July 12, 2024 - August 07, 2024
Lake County Public Service Review	August 07, 2024 - Concurrent with Design
99% Construction Documents – Permit Submittal	September 09, 2024 (or sooner)
100% Bid Set Available (fully Permitted) <i>Estimated pending permit review times.</i>	September 25, 2024 (or sooner)

Project/Staff	Principal	PM Sr Assoc - QAQC/CA	Project Manager	Project Arch	Job Captain	Intrmd Arch	Junior Designer	Draftsman	Clerical	Total	Comments
County of Lake	\$265	\$220	\$195	\$190	\$165	\$145	\$125	\$110	\$95		
HVAC Replacement @ Courthouse	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours		
Project Element											
Project Set Up & Design Development											
General Office	2									2	
(E) Conditions Investigation				4				16		20	
Programming Mtgs										0	
As-Built Plans/Dwgs/SetUp								80		80	
Code Review				4						4	
Materials and Products										0	
Preliminary Drawings										0	
Cost estimate										0	
Meetings	2			2				2		6	
Program Study										0	
Total Preliminary & DD	4	0	0	10	0	0	0	98	0	112	
Fee	\$1,060	\$0	\$0	\$1,900	\$0	\$0	\$0	\$10,780	\$0	\$13,740	
Design Development											
General Office										0	
Drawings										0	
Specifications										0	
Meetings										0	
Consultatnt Coordination										0	
Total DD	0	0	0	0	0	0	0	0	0	0	
Fee	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Constrction Documents											
General Office									2	2	
Drawings				40				120		160	
Specifications			40							40	
Code Confirmation				4							
Meetings	2		1	2				2			

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HOURLY RATES AND REIMBURSABLES as of January 1, 2024

Principal	\$275.00 Per hour
Senior Associate	\$225.00 Per hour
Project Manager	\$200.00 Per hour
Project Architect	\$195.00 Per hour
Construction Administrator	\$185.00 Per hour
Job Captain	\$165.00 Per hour
Intermediate Architect	\$155.00 Per hour
Designer	\$125.00 Per hour
Draftsman	\$115.00 Per hour
Clerical	\$95.00 Per hour

Reimbursables:

In-house plots	24"x36"	\$5.75 each
	30"x42"	\$8.50 each
In-house photo copying		
Letter size		\$0.18 each
11x17		\$0.40 each
Large format		\$4.50 each
Outside Blueprinting/Reproduction		Invoice plus 20%
Travel with prior approval		
Vehicle mileage		\$0.67 per mile.
Out of area		Direct cost plus 15%
Miscellaneous expenses		Invoice plus 20%

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