

CONTRACT

for the Construction of:
FIVE CITIES FIRE AUTHORITY
EMERGENCY GENERATOR REPLACEMENT PROJECT, PW 2021-09

THIS AGREEMENT (sometimes referred herein as “Agreement” or “Contract”), made and entered into this 20th day of March 2023, by and between the **CITY OF ARROYO GRANDE**, a municipal corporation of the State of California, hereinafter designated “City,” party of the first part, and **ELECTRICRAFT, INC.**, hereinafter designated as “Contractor,” party of the second part,

WITNESSETH: That the parties hereto do mutually agree as follows:

Recitals.

- A. The City does not have the personnel able and/or available to perform the services required under this agreement.
- B. The City desires to contract out for consulting services certain projects relating to the construction of an emergency generator replacement.
- C. The Contractor warrants to the City that it has the qualifications, experience and facilities to perform properly and timely the services under this Agreement.
- D. At its regular meeting on September 13, 2022, the City Council adopted Resolution No. 5219 declaring an emergency and authorizing the accelerated replacement of the emergency generator at the FCFA Station 1 by eliminating the formal bid process.
- E. On September 27, October 11 and 25, November 22, and December 13, 2022; and January 10 and 24, 2023; the City Council adopted Resolution Nos. 5225, 5231, 5239, 5243, 5250, 5253, and 5262 respectively, determining a need to continue work under emergency contracts to replace the emergency generator at the FCFA Station 1 consistent with Public Contract Code 22050.
- F. On January 25, 2023, two bids were received on the FCFA Station 1 Emergency Generator Replacement Project (“Project”). The bids were from Electricraft, Inc. for \$462,357 and Thoma Electric for \$561,889. There are sufficient funds in the Project budget to move forward on the Project with the lower apparent bidder.
- G. The City enters into this Agreement in compliance with Public Contract Code 22050.
- H. The City desires to contract with the Contractor to perform the services as described herein.

ARTICLE I. Scope of Work. For and in consideration of the payments and agreements described herein, Contractor agrees to furnish all materials, equipment and labor and

construct all necessary facilities for City required for Project, and to perform and complete in a good and workmanlike manner all the work pertaining thereto shown on the plans and described in the specifications incorporated by reference, and to furnish at his own proper cost and expense all tools, equipment, labor, and materials necessary therefore, except such materials as in the said specifications stipulated to be furnished by City, and to do everything required by this Contract and the said specifications and plans, and the requirements of the Engineer under them, to wit:

**BID ITEM LIST FOR
FIVE CITIES FIRE AUTHORITY
EMERGENCY GENERATOR REPLACEMENT PROJECT
SPECIFICATION NO. PW 2021-09**

Bid Item No.	SOV No	Item Description	Unit of Measure	Quantity	Item Price (in figures)	Total (in figures)
BASE BID						
1	1	New generator and sub-base fuel tank	LS	1	\$110,000.00	\$110,000.00
	2	ATS, MTS, Panels, Appleton connectors	LS	1	\$75,000.00	\$75,000.00
	3	New conduits, conductors, associated pull boxes for power and low voltage	LS	1	\$202,857.00	\$202,857.00
	4	Concrete pads for new equipment	LS	1	\$50,000.00	\$50,000.00
	5	Bollards – Material and installation	LS	1	\$13,000.00	\$13,000.00
	6	All demolition including removal and discard old generator	LS	1	\$10,000.00	\$10,000.00
	7	All permits	LS	1	\$1,500.00	\$1,500.00
Base Bid Total						\$462,357.00
Company Name: ELECTRICRAFT, INC.						

ARTICLE II. Compensation and Payment. For furnishing all said equipment, materials and labor, performing demolition as required, and doing all the work required by this Contract; and for all loss and damage arising out of the nature of the work aforesaid, or from the action of the elements or from any unforeseen difficulties which may arise or be encountered in the prosecution of the work until its acceptance by City, and for all risks of every description connected with the work; also for all expenses incurred by or in consequence of the suspension or discontinuance of work, except such as in the said specifications are expressly stipulated to be borne by City; and for well and faithfully

completing the work and the whole thereof, in the manner shown and described in the said plans and specifications and in accordance with the requirements of the City Engineer under them and this Contract, City will pay and Contractor shall receive as full compensation therefore the amounts for such work as installed for the unit prices bid therefore in accordance with the proposal of Contractor, memorialized by the Bid Item List above.

Final payment, constituting the entire unpaid balance of the Agreement Sum, shall be paid by the City to the Contractor no sooner than thirty-five (35) days after a Notice of Completion has been recorded, unless otherwise stipulated in the Notice of Completion, provided the work has then been completed, the Agreement fully performed, and a final Certificate for Payment has been issued by the City.

This Agreement is subject to the provisions of Article 1.7 (commencing at Section 20104.50) of Division 2, Part 3 of the Public Contract Code regarding prompt payment of contractors by local governments. Article 1.7 mandates certain procedures for the payment of undisputed and properly submitted payment requests within 30 days after receipt, for the review of payment requests, for notice to Contractor of improper payment requests, and provides for the payment of interest on progress payment requests which are not timely made in accordance with that Article. This Agreement hereby incorporates the provisions of Article 1.7 as though fully set forth herein.

ARTICLE III. Full Performance. City hereby promises and agrees with said Contractor to employ, and does hereby employ, said Contractor to provide the materials and to do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner and upon the conditions set forth in the specifications; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to full performance of the covenants herein contained.

ARTICLE IV. Contract Documents. Contract Documents shall consist of The Notice to Bidders, the Statement of Prevailing Wages, the Bid Requirements, the Contract Bid, the Bond for Faithful Performance, the Bond for Materials and Laborers, the Contract Agreement, the Standard Specifications & Engineering Standards, the Special Provisions and the Project Plans mentioned therein and titled **“FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR REPLACEMENT PROJECT, PW 2021-09”** all of which are either incorporated by reference into or attached to this Contract.

ARTICLE V. Bonds. Contractor shall forthwith furnish in triplicate, a faithful performance bond in an amount equal to 100% of the contract price and a labor and materials bond in an amount equal to 100% of the contract price, both bonds to be written by a surety company acceptable to City and in the form prescribed by law.

ARTICLE VI. Time for Completion and Term. All of Contractor's work on the Project shall be completed within durations established for the individual activities as set forth in the Project Schedule, attached hereto as Exhibit 1 (“Work shall commence ten (10)

working days from the start of "contract time," as shown in Notice to Proceed #1. Contractor shall refer to the invitations for bids, and Project Plans and Specifications, all of which, as set forth below, are incorporated herein by reference, for contractual obligations regarding individual activity durations. The aggregate sum total work of all individual Prime Contractors to the City comprises the entire "Project" and shall be commenced and completed in conformance with the Project Construction Schedule. The entire Project shall be completed within the dates and durations provided in the Project Schedule (Exhibit 1). If the Project is not completed within the timelines of this article, the Agreement shall automatically terminate, unless extended in writing by the parties.

ARTICLE VII. Liquidated Damages. Pursuant to Government Code Section 53069.85, if work is not completed within the contract time or in strict accordance with the Project Schedule, it is understood, acknowledged and agreed that the City will suffer damage. It is therefore agreed that the Contractor shall pay to the City the sum of one thousand and five hundred dollars (\$1,500.00) for each and every calendar day of delay beyond the Contract Time, or beyond any completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule, or beyond the time indicated in the Project Schedule for any individual Contract activity.

Contractor expressly understands, acknowledges and agrees that such liquidated damages can and shall be imposed if the Contractor does not meet each and every aspect of any activity schedule, completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule. If the City accepts work or makes any payment under this Agreement after a default by reason of delays, the acceptance of such work and/or payment(s) shall in no respect constitute a waiver or modification of any provisions regarding Contract Time, a completion schedule, the Project Schedule or the accrual of liquidated damages. In the event the same is not paid, the Contractor further agrees that the City may deduct the amount thereof from any money due or that may become due the Contractor under the Agreement. This paragraph does not exclude recovery of damages under provisions of the Contract Documents, and is expressly in addition to the City's ability to seek other damages.

Contractor is to refer to the Project Construction Schedule for duration of individual activities. Liquidated damages may be assessed if any individual activity duration exceeds the time indicated for that activity on the Project Construction Schedule.

ARTICLE IX. Insurance and Indemnity.

GENERAL

You must obtain and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the work by you, your agents, representatives, employees or subcontractors.

Contractor shall indemnify, defend with legal counsel approved by City, and hold harmless City, its officers, officials, employees and volunteers from and against all liability, loss, damage, expense, cost (including without limitation reasonable legal counsel fees, expert fees and all other costs and fees of litigation) of every nature arising out of or in connection with Contractor's negligence, recklessness or willful misconduct in the performance of work hereunder or its failure to comply with any of its obligations contained in this agreement, except such loss or damage which is caused by the sole or active negligence or willful misconduct of the City. Should conflict of interest principles preclude a single legal counsel from representing both City and Contractor, or should City otherwise find Contractor's legal counsel unacceptable, then Contractor shall reimburse the City its costs of defense, including without limitation reasonable legal counsels fees, expert fees and all other costs and fees of litigation. The Contractor shall promptly pay any final judgment rendered against the City (and its officers, officials, employees and volunteers) with respect to claims determined by a trier of fact to have been the result of the Contractor's negligent, reckless or wrongful performance. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this Agreement.

Contractor obligations under this section apply regardless of whether or not such claim, charge, damage, demand, action, proceeding, loss, stop notice, cost, expense, judgment, civil fine or penalty, or liability was caused in part or contributed to by an Indemnitee. However, without affecting the rights of City under any provision of this agreement, Contractor shall not be required to indemnify and hold harmless City for liability attributable to the active negligence of City, provided such active negligence is determined by agreement between the parties or by the findings of a court of competent jurisdiction. In instances where City is shown to have been actively negligent and where City active negligence accounts for only a percentage of the liability involved, the obligation of Contractor will be for that entire portion or percentage of liability not attributable to the active negligence of City.

CITY CONTRACT

Without limiting Contractor's indemnification of City, and prior to commencement of Work, Contractor shall obtain, provide and maintain at its own expense during the term of this Agreement, policies of insurance of the type and amounts described below and in a form satisfactory to City.

MINIMUM SCOPE OF INSURANCE

Coverage must be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage ("Occurrence," Form CG-0001).
2. Insurance Services Office Commercial General Liability Endorsement Form (ISO CG 20 10 85 OR CG 20 10 (ongoing operations) & CG 2037 (completed operations)).

3. Insurance Services Office Form Number CA-0001 (ED. 1/78), covering Automobile Liability, Code 1, "Any Auto," and endorsement CA-0025.
4. Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance;
5. Course of Construction insurance covering for all risks of loss.

MINIMUM LIMITS OF INSURANCE

Minimum limits of insurance must be no less than:

1. **General Liability:** Contractor shall maintain commercial general liability insurance with coverage at least as broad as Insurance Services Office form CG 00 01, in an amount not less than \$1,000,000 per occurrence, \$2,000,000 general aggregate, for bodily injury, personal injury, and property damage, and a \$2,000,000 completed operations aggregate. The policy must include contractual liability that has not been amended. Any endorsement restricting standard ISO "insured contract" language will not be accepted.
2. **Automobile Liability:** Contractor shall maintain automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Contractor arising out of or in connection with Work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than \$1,000,000 combined single limit for each accident.
3. **Umbrella or excess liability insurance:** Contractor shall obtain and maintain an umbrella or excess liability insurance policy that will provide bodily injury, personal injury and property damage liability coverage at least as broad as the primary coverages set forth above, including commercial general liability and employer's liability. Such policy or policies shall include the following terms and conditions:
 - A drop down feature requiring the policy to respond in the event that any primary insurance that would otherwise have applied proves to be uncollectable in whole or in part for any reason;
 - Pay on behalf of wording as opposed to reimbursement;
 - Concurrency of effective dates with primary policies; and
 - Policies shall "follow form" to the underlying primary policies.
 - Insureds under primary policies shall also be insureds under the umbrella or excess policies. As required by the State of California;
4. **Workers' compensation insurance.** Contractor shall maintain Workers' Compensation Insurance (Statutory Limits) and Employer's Liability Insurance (with limits of at least \$1,000,000) for Contractor's employees in accordance with the laws of the State of California, Section 3700 of the Labor Code. In addition, Contractor shall require each subcontractor to similarly maintain Workers' Compensation Insurance and Employer's Liability Insurance in accordance with the laws of the State of California, Section 3700 for all of the subcontractor's employees.

Contractor shall submit to City, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of City, its officers, agents, employees and volunteers.

If required by projects Special Provisions provide:

1. Builder's risk insurance. Upon commencement of construction and with approval of City, Contractor shall obtain and maintain builder's risk insurance for the entire duration of the Project until only the City has an insurable interest. The Builder's Risk coverage shall include the coverages as specified below.

The named insureds shall be Contractor and City, including its officers, officials, employees, and agents. All Subcontractors (excluding those solely responsible for design Work) of any tier and suppliers shall be included as additional insureds as their interests may appear. Contractor shall not be required to maintain property insurance for any portion of the Project following transfer of control thereof to City. The policy shall contain a provision that all proceeds from the builder's risk policy shall be made payable to the City. The City will act as a fiduciary for all other interests in the Project.

Policy shall be provided for replacement value on an "all risk" basis for the completed value of the project. There shall be no coinsurance penalty or provisional limit provision in any such policy. Policy must include: (1) coverage for any ensuing loss from faulty workmanship, Nonconforming Work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the Project; (4) Ordinance or law coverage for contingent rebuilding, demolition, and increased costs of construction; (5) transit coverage (unless insured by the supplier or receiving contractor), with sub-limits sufficient to insure the full replacement value of any key equipment item; (6) Ocean marine cargo coverage insuring any Project materials or supplies, if applicable; (7) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the Site or any staging area. Such insurance shall be on a form acceptable to City to ensure adequacy of terms and sublimits and shall be submitted to the City prior to commencement of construction.

OTHER INSURANCE PROVISIONS

Proof of insurance. Contractor shall provide certificates of insurance to City as evidence of the insurance coverage required herein, along with a waiver of subrogation endorsement for workers' compensation. Insurance certificates and endorsements must be approved by City's risk manager prior to commencement of performance. Current certification of insurance shall be kept on file with City at all times during the term of this contract. City reserves the right to require complete, certified copies of all required insurance policies, at any time.

Duration of coverage. Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Work hereunder by Contractor, his agents, representatives, employees or subcontractors. Contractor must

maintain general liability and umbrella or excess liability insurance for as long as there is a statutory exposure to completed operations claims. City and its officers, officials, employees, and agents shall continue as additional insureds under such policies.

Primary/noncontributing. Coverage provided by Contractor shall be primary and any insurance or self-insurance procured or maintained by City shall not be required to contribute with it. The limits of insurance required herein may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of City before the City's own insurance or self-insurance shall be called upon to protect it as a named insured.

City's rights of enforcement. In the event any policy of insurance required under this Agreement does not comply with these requirements or is canceled and not replaced, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Contractor or City will withhold amounts sufficient to pay premium from Contractor payments. In the alternative, City may cancel this Agreement.

Acceptable insurers. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance or is on the List of Approved Surplus Line Insurers in the State of California, with an assigned policyholders' Rating of A- (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the City's Risk Manager.

Waiver of subrogation. All insurance coverage maintained or procured pursuant to this agreement shall be endorsed to waive subrogation against City, its elected or appointed officers, agents, officials, employees and volunteers or shall specifically allow Contractor or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Contractor hereby waives its own right of recovery against City, and shall require similar written express waivers and insurance clauses from each of its subconsultants.

Enforcement of contract provisions (non estoppel). Contractor acknowledges and agrees that any actual or alleged failure on the part of the City to inform Contractor of non-compliance with any requirement imposes no additional obligations on the City nor does it waive any rights hereunder.

Requirements not limiting. Requirements of specific coverage features or limits contained in this Section are not intended as a limitation on coverage, limits or other requirements, or a waiver of any coverage normally provided by any insurance. Specific reference to a given coverage feature is for purposes of clarification only as it pertains to a given issue and is not intended by any party or insured to be all inclusive, or to the exclusion of other coverage, or a waiver of any type. If the Contractor maintains higher limits than the minimums shown above, the City requires and shall be entitled to coverage for the higher

limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Notice of cancellation. Contractor agrees to oblige its insurance agent or broker and insurers to provide to City with a thirty (30) day notice of cancellation (except for nonpayment for which a ten (10) day notice is required) or nonrenewal of coverage for each required coverage.

Additional insured status. General liability policies shall provide or be endorsed to provide that City and its officers, officials, employees, agents, and volunteers shall be additional insureds under such policies. This provision shall also apply to any excess/umbrella liability policies.

Prohibition of undisclosed coverage limitations. None of the coverages required herein will be in compliance with these requirements if they include any limiting endorsement of any kind that has not been first submitted to City and approved of in writing.

Separation of Insureds. A severability of interests provision must apply for all additional insureds ensuring that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the insurer's limits of liability. The policy(ies) shall not contain any cross-liability exclusions.

Pass Through Clause. Contractor agrees to ensure that its subconsultants, subcontractors, and any other party involved with the project who is brought onto or involved in the project by Contractor, provide the same minimum insurance coverage and endorsements required of Contractor. Contractor agrees to monitor and review all such coverage and assumes all responsibility for ensuring that such coverage is provided in conformity with the requirements of this section. Contractor agrees that upon request, all agreements with consultants, subcontractors, and others engaged in the project will be submitted to City for review.

City's right to revise requirements. The City reserves the right at any time during the term of the contract to change the amounts and types of insurance required by giving the Contractor a ninety (90)-day advance written notice of such change. If such change results in substantial additional cost to the Contractor, the City and Contractor may renegotiate Contractor's compensation.

Self-insured retentions. Any self-insured retentions must be declared to and approved by City. City reserves the right to require that self-insured retentions be eliminated, lowered, or replaced by a deductible. Self-insurance will not be considered to comply with these specifications unless approved by City.

Timely notice of claims. Contractor shall give City prompt and timely notice of claims made or suits instituted that arise out of or result from Contractor's performance under this Agreement, and that involve or may involve coverage under any of the required liability policies.

Additional insurance. Contractor shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the Work.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a Best Rating of no less than A: V, and who are admitted to write policies in the State of California and contribute to the state guaranty fund.

VERIFICATION OF COVERAGE

Contractors shall furnish the City with certificates of insurance and with original endorsements affecting coverage required by this Section (actual policy). The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms provided by the City and are to be received and approved in writing by the City before work commences. The City reserves the right to require complete, certified copies of all insurance policies, including endorsements affecting the coverage required by these Special Provisions at any time.

SUBCONTRACTORS

The Contractor shall include all Subcontractors as named insured under his policies, or shall furnish separate certificates and endorsements for each Subcontractor. All coverage for Subcontractors shall be subject to all of the requirements stated herein.

PRIVATE CONTRACT

A certificate of liability insurance with at least \$1 million in general liability coverage and a CG 2012 additional insured endorsement attached to it.

ARTICLE X. Governing Documents. It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and the bid or proposal therefore, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said bid or proposal conflicting herewith.

ARTICLE XI. Compliance with Statutes and Regulations. Contractor will be knowledgeable of and will comply with all applicable federal, state, county and city statutes, rules, regulations, ordinances and orders.

ARTICLE XII. Notice. All notices or other official correspondence relating to contractual matters between the parties hereto shall be made by personal service or by first class mail, postage prepaid, addressed to the parties as follows:

City: City Clerk

City of Arroyo Grande
300 East Branch Street
Arroyo Grande, California 93420

Contractor: Jacob P. Treder, Vice President/CFO
Electricraft, Inc.
200 Suburban Road, Suite A
San Luis Obispo, CA 93401

ARTICLE XIII. Severability. If any part of this Contract is held invalid by a court of competent jurisdiction, the balance shall retain its full force and effect.

ARTICLE XIV. Governing Law; Jurisdiction. This Contract will be administered and interpreted under the laws of the State of California. Jurisdiction of any litigation arising from the Contract will be in San Luis Obispo County, California.

ARTICLE XV. Authorization. All officers and individuals executing this and other documents on behalf of the respective parties hereby certify and warrant that they have the capacity and have been duly authorized to execute said documents on behalf of the entities indicated.

ARTICLE XVI. Provisions Required by Law. Each and every provision of law and clause required by law to be inserted in this Contract, including but not limited to the following statutorily required provisions, shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not currently inserted, then upon application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

ARTICLE XVII. Familiarity With Work. By executing this Agreement, Contractor represents that Contractor has (a) thoroughly investigated and considered the scope of services to be performed; (b) carefully considered how the services should be performed; and (c) understands the facilities, difficulties, and restrictions attending performance of the services under this Agreement.

ARTICLE XVIII. Key Personnel. Contractor's key person assigned to perform work under this Agreement is Jacob P. Treder. Contractor shall not assign another person to be in charge of the work contemplated by this Agreement without the prior written authorization of the City which shall not be unreasonably withheld.

ARTICLE XIX. Changes. City may order changes in the services within the general scope of this Agreement, consisting of additions, deletions, or other revisions, and the contract sum and the contract time will be adjusted accordingly. All such changes must be authorized in writing, executed by Contractor and City. The cost or credit to City

resulting from changes in the services will be determined in accordance with written agreement between the parties.

ARTICLE XX. Termination. Except as otherwise provided, City may terminate this Contract at any time with or without cause. Notice of termination shall be provided in writing.

In the event of such termination, the Contractor shall cease services as of the date of termination, all finished or unfinished documents, data, drawings, maps, and other materials prepared by Contractor shall, at City's option, become City's property, and Contractor will receive just and equitable compensation for any work satisfactorily completed up to the effective date of notice of termination. Any reuse of any document for other than their intended use shall be at the sole risk and liability of the City.

Should the Agreement be terminated pursuant to this Section, City may procure on its own terms services similar to those terminated.

ARTICLE XXI. Assignability. This Agreement is for Contractor's professional services. Contractor's attempts to assign the benefits or burdens of this Agreement without City's written approval are prohibited and will be null and void.

ARTICLE XXII. Permits and Licenses. Contractor will obtain and maintain during the term of this Agreement all necessary permits, licenses, and certificates that may be required in connection with the performance of services under this Agreement.

ARTICLE XXIII. Independent Contractor. City and Contractor agree that Contractor will act as an independent contractor and will have control of all work and the manner in which is it performed. Contractor will be free to contract for similar service to be performed for other employers while under contract with City. Contractor is not an agent or employee of City and is not entitled to participate in any pension plan, insurance, bonus or similar benefits City provides for its employees. Any provision in this Agreement that may appear to give City the right to direct Contractor as to the details of doing the work or to exercise a measure of control over the work means that Contractor will follow the direction of the City as to end results of the work only.

ARTICLE XXIV. Audit of Records. Contractor agrees that City, or designee, has the right to review, obtain, and copy all records pertaining to the performance of this Agreement. Contractor agrees to provide City, or designee, with any relevant information requested and will permit City, or designee, access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees and inspecting and copying such books, records, accounts, and other material that may be relevant to a matter under investigation for the purpose of determining compliance with this Agreement. Contractor further agrees to maintain such records for a period of three (3) years following final payment under this Agreement.

Contractor will keep all books, records, accounts and documents pertaining to this Agreement separate from other activities unrelated to this Agreement

ARTICLE XXV. Corrective Measures. Contractor will promptly implement any corrective measures required by City regarding the requirements and obligations of this Agreement. Contractor will be given a reasonable amount of time as determined by the City to implement said corrective measures. Failure of Contractor to implement required corrective measures shall result in immediate termination of this Agreement.

ARTICLE XXVI. Final Payment Acceptance Constitutes Release. The acceptance by the Contractor of the final payment made under this Agreement shall operate as and be a release of the City from all claims and liabilities for compensation to the Contractor for anything done, furnished or relating to the Contractor's work or services. However, approval or payment by the City shall not constitute, nor be deemed, a release of the responsibility and liability of the Contractor, its employees, sub-Contractors and agents for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by the City for any defect or error in the work prepared by the Contractor, its employees, sub-Contractors and agents.

ARTICLE XXVII. Rules of Construction. Each Party had the opportunity to independently review this Agreement with legal counsel. Accordingly, this Agreement will be construed simply, as a whole, and in accordance with its fair meaning; it will not be interpreted strictly for or against either Party.

ARTICLE XXVIII. Authority/Modification. The Parties represent and warrant that all necessary action has been taken by the Parties to authorize the undersigned to execute this Agreement and to engage in the actions described herein. This Agreement may be modified by written amendment with signatures of all parties to this Agreement. City Manager, or designee, may execute any such amendment on behalf of City.

ARTICLE XXIX. Force Majeure. Should performance of this Agreement be impossible due to fire, flood, explosion, war, embargo, government action, civil or military authority, the natural elements, or other similar causes beyond the Parties' control, then the Agreement will immediately terminate without obligation of either party to the other.

ARTICLE XXX. Time is of the Essence. Time is of the essence to comply with dates and schedules to be provided.

ARTICLE XXXI. Record Audit. In accordance with Government Code section 8546.7, records of both the City and the Contractor shall be subject to examination and audit by the Auditor General for a period of three (3) years after final payment.

ARTICLE XXXII. Retention of Securities. Public Contract Code Section 22300 permits the substitution of securities for any monies withheld by a public agency to ensure performance under a contract, at the request and expense of the Contractor.

ARTICLE XXXIII. Claims. In accordance with the requirements of Public Contract Code Section 9204(e), a copy of Public Contract Code Section 9204 is attached hereto and incorporated into this Agreement herein.

ARTICLE XXXIV. Prevailing Wages and DIR Registration. In accordance with California Labor Code Section 1725.5, Contractors and Subcontractors (as defined by California Labor Code Section 1722.1) bidding on or engaging in the performance of any Public Works contracts in California shall be registered with the Department of Industrial Relation.

In accordance with California Labor Code Section 1770 and 1773, the City has determined that prevailing wage rates apply to this project. Copies of the prevailing rates of per diem wages applicable to this Contract are available from the California Division of Labor Statistics and Research at www.dir.ca.gov/dslr/PWP/index.htm or 455 Golden Gate Ave. 9th Floor, San Francisco, CA 94102. Any employee whose type of work is not covered by any of the classified wage rates shall be paid not less than the rate of wage listed for the classification which most nearly corresponds to the type of work performed.

Pursuant to California Labor Code Section 1775, the Contractor shall forfeit no more than \$200 per calendar day, or portion of a day, for each worker paid less than the prevailing rates for such work or craft, and the penalty shall be imposed and distributed pursuant to Section 1775.

The following Labor Code sections are hereby referenced and incorporated into this Agreement herein:

1. Section 1775 - Penalty for Failure to Comply with Prevailing Wage Rates.
3. Section 1777.5 - Apprenticeship Requirements.
4. Section 1813 - Penalty for Failure to Pay Overtime.
5. Sections 1810 and 1811 - Working Hour Restrictions.
6. Section 1776 - Payroll Records.
7. Section 1773.8 - Travel and Subsistence Pay.

The City will not recognize any claims for additional compensation because of the payment of the wages set forth in the Contract.

In accordance with the requirements of Labor Code Section 1771.4(a)(1), this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.


In accordance with the provisions of the California Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who


is ineligible to perform work on a public project pursuant to Section 1777.1 or Section 1777.17 of the California Labor Code. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid or may have been paid to a debarred subcontractor by a contractor on the Project shall be returned to the Agency. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

IN WITNESS WHEREOF: The parties hereto have caused this Contract to be executed the day and year first above written.

CITY OF ARROYO GRANDE

CONTRACTOR

By: 
Whitney McDonald (Mar 22, 2023 13:38 PDT)
City Manager
Whitney McDonald

By: 
Jon W. Treder (Wes) President / CEO
Title

ATTEST:

Jessica Matson
Director of Legislative & Information
Services / City Clerk
Jessica Matson
APPROVED AS TO FORM:

Isaac Rosen
Isaac Rosen (Mar 22, 2023 15:30 PDT)
Interim City Attorney
Isaac Rosen

ATTACHMENTS

ATTACHMENT 1 –PROJECT SCHEDULE

ATTACHMENT 2 – BOND FOR MATERIALS AND LABORERS

ATTACHMENT 3 – BOND FOR FAITHFUL PERFORMANCE

ATTACHMENT 4 – NOTICE TO BIDDERS, SPECIAL PROVISIONS, TECHNICAL PROVISIONS, BID BOOK

ATTACHMENT 5 – PLANS

ATTACHMENT 6 – CONTRACTOR BID

ATTACHMENT 7 – PUBLIC CONTRACT CODE SECTION 9204

ATTACHMENT 1 – PROJECT SCHEDULE

CITY OF
ARROYO GRANDE
California

FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR REPLACEMENT PROJECT, PW 2021-09
EXHIBIT 1 - PROJECT SCHEDULE

1. This Project Schedule is outlines Contract dates and/or durations for the project.
2. Pursuant to the Standard Specifications Section 8-1.02B the Contractor shall, before or at the preconstruction conference, submit their own Critical Path Method (CPM) Baseline Schedule.

Contract Item	Date	Duration (Working Days)	Description
Contract Award	3/28/2023		Contract Award
Notice to Proceed #1	4/3/2023	350	Defines the start of "Contract Time", allowing the Contractor to commence with procurement of long lead items. Allows 70 weeks for procurement of generator.
Notice to Proceed #2	TBR	40	Defines the start of work onsite to prepare the FCFA facility for install of generator when it is delivered. Maximum duration for this work is 8 weeks (40 working days), Liquidated Damages will apply after this duration.
Notice to Proceed #3	TBR	15	Defines the start of final work, including installation of generator. Maximum duration for this work is 3 weeks (15 working days, Liquidated Damages will apply after this duration.
Date For Substantial Completion	TBD		15 consecutive working days after NTP #3, or 350 consecutive working days after NTP#1, whichever occurs first. Liquidated Damages will apply if Substantial Completion is not achieved by this date.
Date For Final Completion	TBD		10 working days after Date of Substantial Completion, Liquidated Damages will apply after this duration.

Note:

TBR = To Be Requested by the Contractor

TBD = To Be Determined by the City based on date for NTP#3, however the latest date for Substantial Completion is 350 working days after NTP#1.

ATTACHMENT 2 – BOND FOR MATERIALS AND LABORERS

PAYMENT BOND (FOR LABOR AND MATERIAL)

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and

_____ as Surety, are held and firmly bound unto the City of Arroyo Grande, in the sum of

_____ Dollars

(\$ _____) lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas said Principal has been awarded and is about to enter into a written contract with the City of Arroyo Grande for the work described in CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF, **“FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR REPLACEMENT PROJECT, PW 2021-09”**, which is attached hereto, and referenced, made a part hereof, and to which reference is hereby made for all particulars, and is required by said City to give this bond in connection with the execution of said contract;

NOW THEREFORE, if said Principal, as Contractor in said contract, or Principal's Subcontractor, fail to pay any of the persons referred to in Section 3181 of the Civil Code of the State of California for labor performed, skills or other necessary services bestowed, site improvement made, equipment leased, or appliances, equipment implements, machinery, materials, power, provender, provisions, teams, or trucks furnished or used in, upon, for, or about the performance of the work contracted to be done, or for amounts due under the employment Insurance Act with respect to work or labor performed by any such claimant, said Surety shall pay for the same. In an amount not exceeding the sum specified above; and if suit is brought upon this bond, a reasonable attorney's fee to be fixed by the court. This bond is pursuant to the provisions of Ch 7 Div 3, Pt 4, Tit 15, of the Civil Code of the State of California, and shall insure to the benefit of any of the persons referred to in said Civil Code Section 3181, as it now exists or may hereafter be amended, so as to give a right of action to such persons or their assigns in any suit brought upon this bond. No premature payment by said City to said Principal shall exonerate any Surety unless the City Council of said City shall have actual notice that such payment is premature at the time and it is ordered by said Council, and then only to the extent that such payment shall result in loss to such Surety, but in no event more than the amount of such premature payment.

It is agreed, that any alterations in the work to be done, or increase or decrease of the material to be furnished, which may be made pursuant to the terms of said contract shall not in any way release either the Principal or Surety hereunder, nor shall any extension of time granted under the provisions of said contract release either the Principal or Surety, and notice of such alterations or extensions of the contract is hereby waived by the surety.

WITNESS our hands this _____ day of _____, 2023.

Surety

Principal

ALL SIGNATURES MUST BE WITNESSED BY NOTARY (Attach appropriate jurats)

-- END OF PAYMENT BOND --

ATTACHMENT 3 – BOND FOR FAITHFUL PERFORMANCE

FAITHFUL PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and

_____ as Surety, are held and firmly bound unto the City of Arroyo Grande, in the sum of

_____ Dollars

(\$ _____) lawful money of the United States, for the payment of which sum,

well and truly to be made, has been awarded and is about to enter into a written contract with the City of Arroyo Grande for the work described in the CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF THE **“FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR REPLACEMENT PROJECT, PW 2021-09”** which is attached hereto and referenced, made a part hereof, and to which reference is hereby made for all particulars, and is required by said City to give this bond in connection with the execution of said contract;

NOW, THEREFORE, if said Principal shall well and truly do and perform all of the covenants and obligations of said contract on Principal's part to be done and performed at the times and in the manner specified therein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect. No premature payment by said City to said Principal shall exonerate any Surety unless the City Council of said City shall have actual notice that such payment is premature at the time it is ordered by said Council, and then only to the extent that such payment shall result in loss to such Surety, but in no event more than the amount of such premature payment.

It is agreed, that any alterations in the work to be done, or increase or decrease of the material to be furnished, which may be made pursuant to the terms of said contract shall not in any way release either the Principal or Surety hereunder, nor shall any extensions of time granted under the provisions of said contract release either the principal or surety, and notice of such alterations or extensions of the contract is hereby waived by the Surety.

WITNESS our hands this _____ day of _____, 2023.

Surety

Principal

ALL SIGNATURES MUST BE WITNESSED BY NOTARY (Attach appropriate jurats)

-- END OF FAITHFUL PERFORMANCE BOND --

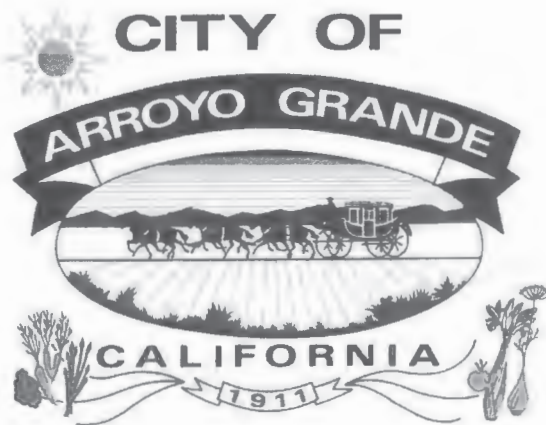
**ATTACHMENT 4 - NOTICE TO BIDDERS, SPECIAL PROVISIONS, TECHNICAL
PROVISIONS, BID BOOK**

**NOTICE TO BIDDERS
SPECIAL PROVISIONS
TECHNICAL PROVISIONS
BID BOOK**

FOR

**FIVE CITIES FIRE AUTHORITY
EMERGENCY GENERATOR REPLACEMENT PROJECT**

**SPECIFICATION NO. PW 2021-09
APPROVAL DATE: SEPTEMBER 13, 2022
ENGINEERING STANDARDS AND SPECIFICATIONS DATED: APRIL 2016**



**PUBLIC WORKS DEPARTMENT
1375 ASH STREET
ARROYO GRANDE, CA 93420**

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**FIVE CITIES FIRE AUTHORITY
EMERGENCY GENERATOR REPLACEMENT PROJECT**

Specification No. PW 2021-09

Approval Date: SEPTEMBER 13, 2022



Jeffry Gosal
<<Engineer of Record Signature>>

09/30/2022
<<Signature Date>>

Recommended for Approval:

Capital Improvement Project Manager

Date

Approved for Construction:

Director of Public Works

Date

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NOTICE TO BIDDERS

BID SUBMISSION

CITY OF ARROYO GRANDE, CALIFORNIA

Sealed bids will be received by the City of Arroyo Grande at the Public Works Administration Office located at 1375 Ash Street, Arroyo Grande California 93420, until

2:00 p.m on October 14, 2022

at which time they will be publicly opened and read aloud. Submit bid in a sealed envelope plainly marked:

**FIVE CITIES FIRE AUTHORITY
EMERGENCY GENERATOR REPLACEMENT PROJECT
SPECIFICATION NO. PW 2021-09**

Any bid received after the time and date specified will not be considered and will be returned to the bidder unopened. Bids received by Fax or Email will not be considered.

By submission of bid you agree to comply with all instructions and requirements in this notice and the contract documents.

All bids must be submitted on the Bid Item List form(s) provided and submitted with all other Bid Forms included in these Special Provisions.

Each bid must be accompanied by either a:

1. certified check
2. cashier's check
3. bidder's bond

made payable to the City of Arroyo Grande for an amount equal to ten percent of the bid amount as a guaranty. Guaranty will be forfeited to the City Arroyo Grande if the bidder, to whom the contract is awarded, fails to enter into the contract.

The City of Arroyo Grande reserves the right to accept or reject any or all bids or waive any informality in a bid.

All bids are to be compared on the basis of the Public Works Director's estimate of the quantities of work to be done, as shown on the Bid Item List.

Bids will only be accepted from bidders that are licensed in compliance with the provisions of Chapter 9, Division III of Business and Professions Code.

The award of the contract, if awarded, will be to the lowest responsive bid submitted by a responsible contractor whose bid complies with the requirements prescribed herein. If the contract is awarded, the contract will be awarded within 60 calendar days after the opening of the bids.

NOTICE TO BIDDERS

Failure to raise defects in the notice to bidders or bid forms prior to bid opening constitute a waiver of those defects.

BID DOCUMENTS

A copy of the plans and specifications may be downloaded, free of charge, from the City's website at: <http://www.arroyogrande.org/Bids.aspx>. Plans and specifications are available for viewing at the following plan rooms:

1. Central California Builders Exchange
2. Santa Maria Valley Contractors Association
3. Central Coast Builders Association
4. San Luis Obispo County Builders Exchange

A printed copy of the plans and specifications may be obtained by contacting:

Crisp Imaging
618 East Grand Avenue
Arroyo Grande, CA 93420
(805) 481-1655

for a non-refundable fee of the cost of duplication.

Standard Specifications and Engineering Standards referenced in the Special Provisions may be downloaded, free of charge, from the City's website at: <http://www.arroyogrande.org/DocumentCenter/Home/View/3151>.

A printed copy of the Standard Specifications and Engineering Standards may be obtained by contacting:

Crisp Imaging
618 East Grand Avenue
Arroyo Grande, CA 93420
(805) 481-1655

for a non-refundable fee of the cost of duplication.

You are responsible to obtain all issued addenda prior to bid opening. Addenda will be available to download at the City's website listed above or at the office of the Public Works Director. Contact the Capital Improvement Project Manager, Jill McPeek at (805) 473-5444 or the Public Works Department at (805) 473-5460 prior to bid opening to verify the number of addenda issued.

You are responsible to verify your contact information is correct on the plan holders list located on the City's website at: <http://www.arroyogrande.org/Bids.aspx>.

PROJECT INFORMATION

In general the project consists of removing existing non-working diesel generator and install new 60kW, tier 3 diesel generator with sub-base fuel tank and associated equipment to support building.

The project estimated construction cost is \$ 646,500

NOTICE TO BIDDERS

Contract time is established as 30 working days.

PREVAILING WAGES

In accordance with the provisions of California Labor Code Sections 1770,1773, 1773.1, 1773.6 and 1773.7 as amended, the Director of the Department of Industrial Relations has determined the general prevailing rate of per diem wages in accordance with the standards set forth in Section 1773 for the locality in which the work is to be performed. A copy of said wage rates is on file at the office of the Owner. It shall be mandatory upon the contractor to whom the work is awarded and upon any subcontractor under the contractor to pay not less than said specified rates to all workmen employed by them in the execution of the work.

Contractor Registration with Department of Industrial Relations

In accordance with California Labor Code Section 1725.5, Contractors and Subcontractors (as defined by California Labor Code Section 1722.1) bidding on Public Works contracts in California shall be registered with the Department of Industrial Relations prior to bidding. Failure to provide proof of Contractor's registration as part of the Bid shall deem the Bid as non-responsive and will therefore be rejected by Owner.

Compliance Monitoring and Enforcement

In accordance with the requirements of Labor Code Section 1771.4(a)(1), Bidders are hereby notified that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relation.

QUALIFICATIONS

In accordance with the provisions of California Public Contract Code Section 3300, the City has determined that the contractor shall possess a valid Class A, B, or C-10 license at the time of bid issuance. Failure to possess the specified license shall render the Bid as non-responsive and shall act as a bar to award of the Contract to any bidder not possessing said license at the time of award. In the event of dispute over classification of the license required, the opinion of the Contractor's State License Board shall prevail.

You must have experience constructing projects similar to the work specified for this project. Provide three similar reference projects completed as either the prime or subcontractor. One of the three reference projects must have been completed under contract with a City, County, State or Federal Government agency as the prime contractor. All referenced projects must be completed within the last five years from this project's bid opening date.

All referenced projects must be for emergency generator replacement. Failure to provide reference projects as specified in this section and as required on the qualification form may be cause to reject a bid as being non-responsive.

NOTICE TO BIDDERS

Failure to provide reference projects as specified in this section and as required on the qualification form may be cause to reject a bid as being non-responsive.

It is the City of Arroyo Grande's intent to award the contract to the lowest responsive bid submitted by a responsible bidder. If in the bidder's opinion the contract has been or may be improperly awarded, the bidder may protest the contract award.

Protests must be filed no later than five working days after either:

1. bid opening date
2. notification of rejected bid.

Protest must be in writing and received by the project manager located at:

1375 Ash Street
Arroyo Grande, CA 93420.

Valid protests must contain the following information:

1. the reasons for the protest
2. any supporting documentation
3. the ruling expected by the City to remedy the protest.

Any protest not containing all required information will be deemed invalid and rejected.

The City will consider additional documentation or other supporting information regarding the protest if submitted in compliance with the specified time limits. Anything submitted after the specified time limit will be rejected and not be considered.

The Director of Public Works or Designee may request additional information to be submitted within three days of the request, unless otherwise specified, and will notify the protester of ruling within ten days of determination.

Pursuant to the Public Records Act (Government Code, §6250, et seq.), the City will make public records available upon request.

AWARD

The lowest bidder will be determined using the BASE BID.

The City intends to award a contract to the responsive and responsible bidder with the lowest base bid price. All bids submitted shall be in accordance with the provisions of the contract documents. The City specifically reserves the right, in its sole discretion, to reject any or all bids, to re-bid, or to waive inconsequential defects in bidding not involving time, price or quality of the work. City may waive any minor irregularities in the bids. Any bid may be withdrawn prior to bid opening but not afterward.

As a condition to executing a contract with the City, two bonds each equal to one hundred percent of the total contract price are required in compliance with Section 3-1.05 of the Standard Specifications.

NOTICE TO BIDDERS

Deposit of Securities in Lieu of Retainage.

The Contractor may elect to receive 100 percent of payment due under the Contract Documents from time to time, without retention of any portion of the payment by the City, by depositing securities of equivalent value with the City in accordance with the provisions of Section 22300 of the California Public Contract Code. Such securities, if deposited by the Contractor, shall be valued by the City, whose decision on valuation of the securities shall be final. Securities eligible for investment under this provision shall be limited to those listed in Section 16430 of the California Government Code or bank or savings and loan certificates of deposit.

Agreement to Assign.

In accordance with Section 4552 of the California Government Code, the bidder shall conform to the following requirements: In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act 15 U.S.C. 15, or under the Cartwright Act, Chapter 2.

ACCOMMODATION

If any accommodations are needed to participate in the bid process, please contact the Public Works Department at (805) 473-5460. Requests should be made as soon as possible to allow time for accommodation.

NOTICE TO BIDDERS

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BID BOOK

All bid forms must be completed and submitted with your bid. Failure to submit these forms and required bid bond will be cause to reject the bid as nonresponsive. Staple all bid forms together.

THE UNDERSIGNED, agrees that they have carefully examined:

1. the location of the proposed work
2. the plans and specifications
3. read the accompanying instructions to bidders
4. any supplemental project information

and propose to furnish all:

5. materials
6. labor

to complete all the required work satisfactorily in compliance with

7. plans
8. specifications
9. special provisions

for the prices set forth in the bid item list:

**BID ITEM LIST FOR
FIVE CITIES FIRE AUTHORITY
EMERGENCY GENERATOR REPLACEMENT PROJECT
SPECIFICATION NO. PW 2021-09**

Item No.	Item Description	Unit of Measure	Estimated Quantity	Item Price (in figures)	Total (in figures)
BID					
1	REPLACEMENT GENERATOR	LS	1		
				Bid Total	\$
Company Name:					

The Bidder shall break down the lump sum price per the following **Schedule of Values**:
Prices listed below shall total the lump sum price above.

1.	New generator and sub-base fuel tank.	\$	_____
2.	ATS, MTS, Panels, Appleton connectors.	\$	_____
3.	New conduits, conductors, associated pull boxes for power and low voltage.	\$	_____
4.	Concrete pads for new equipment.	\$	_____
5.	Bollards – Material and installation.	\$	_____
6.	All demolition including removal and discard old generator.	\$	_____
7.	All permits.	\$	_____

BID BOOK

NONCOLLUSION DECLARATION

I, _____, declare that I am _____ of _____, the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone refrained from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Executed on _____, 20____, in _____

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

(SEAL)

(Signature and Title of Declarant)

Subscribed and sworn to before me
this _____ day of _____, 20_____

Notary Public

Company Name: _____

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

PROJECT: FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR
REPLACEMENT PROJECT, PW 2021-09

I, _____ the _____ of
(Name) (Title)

_____, declare, state and certify that:
(Contractor Name)

1. I am aware that California Labor Code §3700(a) and (b) provides:

“Every employer except the state shall secure the payment of compensation in one or more of the following ways:

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees.”

2. I am aware that the provisions of California Labor Code §3700 require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this Contract.

(Contractor Name)

By: _____
(Signature)

(Typed or Printed Name)

BID BOOK

Business Address _____

City, State, Zip Code _____

Mailing Address _____

City, State, Zip Code _____

Phone Number _____

Fax Number _____

Email Address _____

DIR Number _____

Date _____

BID BOOK

ATTACH BIDDER'S BOND TO ACCOMPANY BID

Know all men by these presents:

That we _____, AS PRINCIPAL,
and _____, AS SURETY,
are held and firmly bound unto the City of Arroyo Grande in the sum of:

_____ Dollars

(_____) to be paid to said City or its certain attorney, its successors and assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents:

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the certain bid of the
above bounden _____

to construct _____
(insert name of street and limits to be improved or project)

dated _____ is accepted by the City of Arroyo Grande, and if the
above bounden _____, his heirs,
executors, administrators, successors, and assigns shall duly enter into and execute a
contract for such construction and shall execute and deliver the two bonds described within
ten (10) days (not including Saturdays, Sundays, or legal holidays) after the above
bounden, _____, has received
notice by and from the said City of Arroyo Grande that said contract is ready for execution,
then this obligation shall become null and void; otherwise, it shall be and remain in full force
and virtue.

IN WITNESS WHEREOF, we hereunto set our hands and seals this _____ day of
_____, 20____.

BID BOOK

Bidder Principal:

Signature

Date

Printed Name:

Title:

Surety:

By: _____

Bidder's signature is not required to be notarized. Surety's signature must be notarized.
Equivalent form may be substituted

SPECIAL PROVISIONS

ORGANIZATION

Special provisions are under headings that correspond with the main section heading of the Standard Specifications. Each special provision begins with a revision clause that describes or introduces a revision to the Standard Specifications. Any paragraph added or deleted by a revision clause does not change the paragraph number of the Standard Specifications for any other reference to a paragraph of the Standard Specifications.

DIVISION I GENERAL PROVISIONS

1 GENERAL

Add to Section 1-1.01 General

The work must be done in compliance with the City of Arroyo Grande, Department of Public Works:

1. Five Cities Fire Authority Emergency Generator Replacement Project, PW 2021-09 Special Provisions
2. City of Arroyo Grande Engineering Standards and Standard Specifications – 2016 edition
3. State of California, Department of Transportation Standard Specifications and Standard Plans – 2015 edition

In case of conflict between documents, governing ranking must comply with section 5-1.02 of the City of Arroyo Grande's Standard Specifications.

Failure to comply with the provisions of these sections is a material breach of contract:

1. Sections 6 through 8 of the Standard Specifications
2. Section 12 through 15 of the Standard Specifications
3. Section 77-1 of the Standard Specifications
4. Section 81 of the Standard Specifications
5. authorized working hours
6. OSHA compliance

Replace Holiday in Section 1-1.07B Glossary with:

Holiday: Holiday shown in the following table for 2022:

SPECIAL PROVISIONS

2022 Holidays

Holiday	Date Observed
New Year's Day	January 3 rd
Martin Luther King, Jr. Day	January 17 th
Lincoln's Birthday	February 11 th
President's Day	February 21 st
Memorial Day	May 30 th
Independence Day	July 4 th
Labor Day	September 5 th
Veterans Day	November 11 th
Thanksgiving Day	November 24 th
Day Following Thanksgiving	November 25 th
Day Before Christmas	December 23 rd
Christmas	December 26 th
New Year's Eve	December 30 th

Replace Section 1-1.12 with:

1-1.12 MISCELLANY

Make checks and bonds payable to the City of Arroyo Grande.

4 SCOPE OF WORK

Add to Section 4-1.03 Work Description

The work should be in compliance with the City Standards and the special provision for general, material, construction, and payment specifics. The reference to specific sections does not relieve the Contractor from compliance with State and local statutes, City Standards and the Contract Documents.

5 CONTROL OF WORK

Add to Section 5-1.36D Nonhighway Facilities

Existing third party (non City-owned) utilities are shown on project plans for information purposes only. It is your responsibility to contact "Underground Service Alert USA" and have site marked prior to start of excavation or sawcutting. The City of Arroyo Grande is not responsible for any:

1. damages
2. costs
3. delay
4. expenses

resulting from a third party underground facility operator's failure to comply with stipulations as set forth in 4216.7.(c) of California Government Code.

Add to Section 5-1.43A Potential Claims and Dispute Resolution General

Potential claim forms are located on the Caltrans' website:

<http://www.dot.ca.gov/hq/construc/forms.htm>

SPECIAL PROVISIONS

Effective January 1, 2017, the provisions of Public Contract Code Section 9204 govern claims by the Contractor to the City.

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Delete from 6th paragraph of Section 7-1.03 Public Convenience

Delete “in Arroyo Grande” from the phrase, “Of two individuals in Arroyo Grande,”.

Add to Section 7-1.03B Traffic Control Plan

Traffic control plans are not required for this Work.

DIVISION II GENERAL CONSTRUCTION

13 WATER POLLUTION CONTROL

Add to 2nd paragraph in Section 13-1.01A Summary

A minor WPCP plan form may be obtained on the City’s website:

<https://www.arroyogrande.org/DocumentCenter/View/3155/Water-Pollution-Control-Plan-for-Minor-Projects-PDF?bidId=>

SPECIAL PROVISIONS

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TECHNICAL PROVISIONS

The following Technical Specifications are included as part of this Project Manual:

Section 26 0505	Selective Demolition for Electrical
Section 26 0510	Electrical General Provisions
Section 26 0512	Basic Material and Methods
Section 26 0526	Grounding and Bonding for Electrical Systems
Section 26 2416	Panelboards
Section 26 2816.13	Enclosed Circuit Breakers
Section 26 3213	Engine Generators
Section 26 3600	Transfer Switches

SECTION 26 0505
SELECTIVE DEMOLITION FOR ELECTRICAL

PART 3 EXECUTION

1.01 EXAMINATION

- A. Verify field measurements and circuiting arrangements are as indicated.
- B. Verify that abandoned wiring and equipment serve only abandoned facilities.
- C. Demolition drawings are based on casual field observation and existing record documents.
- D. Report discrepancies to Owner before disturbing existing installation.
- E. Report discrepancies to Architect/Engineer before disturbing existing installation.
- F. Beginning of demolition means installer accepts existing conditions.

1.02 PREPARATION

- A. Disconnect electrical systems in walls, floors, and ceilings to be removed.
- B. Coordinate utility service outages with utility company.
- C. Provide temporary wiring and connections to maintain existing systems in service during construction. When work must be performed on energized equipment or circuits, use personnel experienced in such operations.
- D. Existing Electrical Service: Maintain existing system in service until new system is complete and ready for service. Disable system only to make switchovers and connections. Minimize outage duration.
 - 1. Obtain permission from Owner at least 24 hours before partially or completely disabling system.
 - 2. Make temporary connections to maintain service in areas adjacent to work area.

1.03 DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK

- A. Perform work for removal and disposal of equipment and materials containing toxic substances regulated under the Federal Toxic Substances Control Act (TSCA) in accordance with applicable federal, state, and local regulations. Applicable equipment and materials include, but are not limited to:
- B. Remove, relocate, and extend existing installations to accommodate new construction.
- C. Remove abandoned wiring to source of supply.
- D. Remove exposed abandoned conduit, including abandoned conduit above accessible ceiling finishes. Cut conduit flush with walls and floors, and patch surfaces.
- E. Disconnect abandoned outlets and remove devices. Remove abandoned outlets if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlets that are not removed.
- F. Disconnect and remove abandoned panelboards and distribution equipment.
- G. Disconnect and remove electrical devices and equipment serving utilization equipment that has been removed.
- H. Repair adjacent construction and finishes damaged during demolition and extension work.
- I. Maintain access to existing electrical installations that remain active. Modify installation or provide access panel as appropriate.
- J. Extend existing installations using materials and methods compatible with existing electrical installations, or as specified.

1.04 CLEANING AND REPAIR

- A. Clean and repair existing materials and equipment that remain or that are to be reused.

- B. Panelboards: Clean exposed surfaces and check tightness of electrical connections. Replace damaged circuit breakers and provide closure plates for vacant positions. Provide typed circuit directory showing revised circuiting arrangement.

END OF SECTION

SECTION 26 0510
ELECTRICAL GENERAL PROVISIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Furnish all labor, materials, apparatus, tools, equipment, transportation, temporary construction and special or occasional services as required to make a complete working electrical installation, as shown on the drawings or described in these specifications.
- B. Installation of new fused disconnects, fuses, receptacles, grounding, connection to packaged mechanical units furnished under other sections, and power to other services and devices as shown on the contract drawings.

1.02 RELATED SECTIONS

- A. Perform following work, in accordance with appropriate sections of the specifications cited, where and as necessary to furnish a complete, working electrical installation.
 - 1. Miscellaneous Metal Work: Include fittings, brackets, supports, welding and pipe as required for raceway and disconnect switch support.

1.03 REFERENCES

- A. Reference to codes, standards, specifications and recommendations of technical societies, trade organizations and governmental agencies shall mean the latest edition of such publications adopted and published prior to submittal of the bid proposed. Such codes or standards shall be considered a part of this specification as though fully repeated herein.
- B. When codes, standards, regulations, etc., allow work of lesser quality or extent than is specified under this Division, nothing in said codes shall be construed or inferred as reducing the quality, requirements or extent of the drawings and specifications.
- C. California Code of Regulations (CCR) Title 24, Part 3, Basic Electrical Requirements, State Building Standards Electrical Code
- D. National Fire Protection Association (NFPA).
- E. Equipment and materials specified under this Division shall conform to the following standards where applicable:
 - 1. UL Underwriters' Laboratories
 - 2. ASTM American Society for Testing Materials
 - 3. CMB Certified Ballast Manufacturers
 - 4. IPCEA Insulated Power Cable Engineer Assoc.
 - 5. NEMA National Electrical Manufacturer's Assn.
 - 6. ANSI American National Standards Institute
 - 7. ETL Electrical Testing Laboratories
- F. All base material shall be ASTM and/or ANSI standards.
- G. All electrical apparatus furnished under this Section shall conform to National Electrical Manufacturers Association (NEMA) standards and the NEC and bear the Underwriters' Laboratories (UL) label where such label is applicable.

1.04 SUBMITTALS

- A. Where items are noted as "or equal" a product of equal design, construction and performance will be considered. Contractor must submit all pertinent test data, catalog cuts and product information required to substantiate that the product is in fact equal. Only one substitution will be considered for each product specified.
- B. Submittals shall consist of detailed shop drawings, specifications, "catalog cuts" and data sheets containing physical and dimensioned information, performance data, electrical characteristics, material used in fabrication, material finish and shall clearly indicate those optional accessories which are included and those which are excluded. Furnish one reproducible and 4 prints of each shop drawing.

1.05 CUTTING, PAINTING AND PATCHING

- A. Structural members shall in no case be drilled, bored or notched in such a manner that will impair their structural value. Cutting of holes, if required, shall be done with core drill and only with the approval of the Architect.
- B. Cutting and digging shall be under the direct supervision of the General Contractor. Include as necessary for the work in this section.
- C. The contractor shall be responsible for returning any surface from which he has removed equipment or devices to the condition and finish of the adjacent surfaces.

1.06 SUPERVISION

- A. Contractor shall personally or through an authorized and competent representative constantly supervise the work from beginning to completion and, within reason, keep the same workmen and foreman on the project throughout the project duration.

1.07 PROTECTION

- A. Keep conduits, junction boxes, and outlet boxes, and other openings closed to prevent entry of foreign matter: cover fixtures, equipment, and apparatus and protect against dirt, paint, water, chemical, or mechanical damage, before and during construction period. Restore to original condition any fixture, apparatus, or equipment damaged prior to final acceptance, including restoration of damaged shop coats of paint, before final acceptance. Protect bright finished surfaces and similar items until in service. No rust or damage will be permitted.

1.08 EXAMINATION OF SITE

- A. The Contractor shall visit the site and determine the locale, working conditions, conflicting utilities, and the conditions in which the electrical work will take place. No allowances will be made subsequently for any costs which may be incurred because of any error or omission due to failure to examine the site and to notify the Engineer of any discrepancies between drawings and specifications and actual site conditions. Schedule visits at least 1 week in advance with Owner's Maintenance staff.

1.09 ENVIRONMENTAL REQUIREMENTS

- A. After other work such as sanding, painting etc. has been completed, clean lighting fixtures, panelboards, switchboards, and other electrical equipment to remove dust, dirt, and grease, or other marks, and leave work in clean condition.

1.10 VOLTAGE CHECK

- A. At completion of job, check voltage at several points of utilization on the system which has been installed under this contract. During test, energize all loads installed. Measure 3-Phase voltages and note percentage differences. Submit report to Engineer. Include copy in O&M Manual.

1.11 TESTS

- A. Perform tests as specified to prove installation is in accordance with contract requirements. Perform tests in the presence of the Engineer and furnish test equipment, facilities, and technical personnel required to perform tests. Tests shall be conducted during the construction period and at completion to determine conformity with applicable codes and with these Specifications. Tests, in addition to specific system test described elsewhere, shall include:
 - 1. Insulation Resistance: All 600 volt insulation shall be tested at 1,000 volts D.C for one minute on all feeder and branch circuit conductors including the neutral, and make a typed record of all readings to be included in the maintenance instructions. The direct current amperes shall be recorded at start and at one minute. The value shall be declining and not more than one microampere.
 - 2. Circuit Continuity: Test all feeder and branch circuits for continuity. Test all neutrals for improper ground.
- B. Equipment Operations: Test motors for correct operation and rotation.

- C. Product Failure: Any products which fail during the tests or are ruled unsatisfactory by the Engineer shall be replaced, repaired, or corrected as prescribed by the Engineer at the expense of the Contractor. Tests shall be performed after repairs, replacements, or corrections until satisfactory performance is demonstrated.
- D. Miscellaneous: Include all test results in the maintenance manual. Cost, if any, for all tests shall be paid by the Contractor.

1.12 DRAWINGS

- A. Layout: General layout shown on the drawing shall be followed except where other work may conflict with the drawings.
- B. Accuracy:
 - 1. Drawings for the work under this section are diagrammatic.
 - 2. Contractor shall verify lines, levels, and dimensions shown on the drawings and shall be responsible for the accuracy of the setting out of work and for its strict conformance with existing conditions at the site.
 - 3. Contractor shall insure reconnection of existing equipment and circuits affected by contract demolition whether or not reconnection is specifically shown on the contract documents.

1.13 PROJECT RECORD DRAWINGS

- A. Refer to General Conditions for contractual requirements. Provide project record drawings as required by the General Provisions of the specifications and as required herein. Such drawings shall fully represent installed conditions including actual locations of outlets, true panelboard connections following phase balancing routines, correct conduit and wire sizing as well as routing, revised fixture schedule listing the manufacturer and products actually installed and revised panel schedule. All changes to drawings shall be made by qualified draftspersons to match existing linework and lettering as close as possible. When all the changes have been made to the trade drawings, contractor shall produce one (1) full size (E-Size) updated set of trade drawing(s) utilizing AutoCad 2008 or newer and supply one (1) set of Compact Discs (CD's) reflecting same.

1.14 MAINTENANCE AND OPERATING INSTRUCTIONS

- A. Furnish to the Engineer four (4) hard back 3-ring binders containing all bulletins, operating and maintenance instructions and part lists and other pertinent information for each and every piece of equipment furnished under this specification. Include service telephone numbers. Each binder shall be indexed into sections and labeled for easy reference. Bulletins containing more information than the equipment concerned shall be properly stripped and assembled.
- B. At the time of completion, a period of not less than eight hours shall be allotted by the Contractor for instruction of building operating and maintenance personnel in the use of all systems. All personnel shall be instructed at one time, the Contractor making all necessary arrangements with manufacturer's representative. The equipment manufacturer shall be requested to provide product literature and application guides for the user's reference. Costs, if any for the above services shall be paid by the Contractor.

1.15 WARRANTIES

- A. Furnish to the Engineer four (4) hard back 3-ring binders containing all warranties of every piece of equipment furnished under this specification. Include terms and limitations of warranties, contact names, addresses, and telephone numbers of manufacturer. Each binder shall be indexed into sections and labeled for easy reference for each equipment warranty.

1.16 EXTRA MATERIALS

- A. All special tools for proper operation and maintenance of the equipment provided under this Section shall be delivered to the District's representative

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 WORKMANSHIP

- A. Preparation, handling, and installation shall be in accordance with manufacturer's written instructions and technical data particular to the product specified and/or accepted equal except as otherwise specified. Coordinate work and cooperate with others in furnishing and placing this work. Work to reviewed shop drawings for work done by others and to field measurements as necessary to properly fit the work.
- B. Conform to the National Electrical Contractor's Association "Standard of Installation" for general installation practice.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

END OF SECTION

SECTION 26 0512
BASIC MATERIAL AND METHODS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Conduit, raceways and fittings.
- B. Wires and Cables for 600 Volts and less.
- C. Wire connections.
- D. Outlet boxes.
- E. Pull and junction boxes.
- F. Disconnect Switches.
- G. Fuses.
- H. Supporting Devices.
- I. Identifying Devices.
- J. Grounding and Bonding

1.02 SUBMITTALS

- A. Submit the following items:
 - 1. A list of conduit types indicating where each type of conduit will be used. Indicate conduit manufacturers and fittings to be used.
 - 2. Wires and Cables.
 - 3. Wiring Devices and Plates
 - 4. Nameplates, including engraving schedules where engraved plates are specified.
 - 5. Fused disconnect switches.
 - 6. Fuse Manufacture

1.03 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Products: Listed and classified by Underwriters Laboratories, Inc. as suitable for the purpose specified and indicated.

1.04 REFERENCES

- A. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated - latest edition.
- B. ANSI C80.3 - Electrical Metallic Tubing, Zinc Coated - latest edition.
- C. ANSI C80.5 - Rigid Aluminum Conduit - latest edition.
- D. NECA (INST) - Standard of Installation; National Electrical Contractors Association - latest edition.
- E. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies; latest edition.
- F. NEMA RN 1 - Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit - latest edition.
- G. NEMA TC 2 - Electrical Plastic Tubing (EPT) and Conduit (EPC-40 and EPC-80) - latest edition.
- H. NEMA TC 3 - PVC Fittings for Use with Rigid PVC Conduit and Tubing - latest edition.
- I. NFPA 70 - National Electrical Code - latest edition.

PART 2 PRODUCTS

2.01 CONDUIT, RACEWAYS AND FITTINGS

- A. Rigid Steel Conduit
 - 1. Rigid steel conduit shall be full weight, pipe size, finished inside and out by hot-dip galvanizing after fabrication, and shall conform with ANSI C80.1 and UL.

2. Couplings shall be electroplated steel.
 3. Insulating Bushings: Threaded polypropylene or thermo-setting phenolic rated 150°C minimum.
 4. Insulated grounding Bushings: Threaded cast malleable iron body with insulated throat and steel "lay-in" ground lug with compression screw.
 5. Insulated Metallic Bushings: Threaded cast malleable iron body with plastic insulated throat rated 150°C.
 6. Running threads are not acceptable.
- B. Electrical Metallic Tubing (EMT):
1. Conduit: Conduit shall be formed of cold rolled strip steel, and shall comply with ANSI C80.3 and UL requirements.
 2. Couplings: Electroplated steel, UL listed rain and concrete tight through 1-1/4" trade size. All EMT fittings shall be compression type.
 3. Connectors: Steel, gland compression type with insulated plastic throat, 150°C temperature rated. All EMT fittings shall be compression type.
- C. Liquid Tight Flexible Metal Conduit:
1. Conduit: Conduit shall be fabricated in continuous lengths from galvanized steel strip, spirally wound. Flexible conduit, except where installed in concealed dry locations, shall be liquid tight with plastic jacket extruded over the outer zinc coating. No aluminum substitute will be accepted.
 2. Fittings: Connectors shall be the screw clamp on screw-in (Jake) variety with cast malleable iron bodies and threaded male hubs with insulated throat or insulated bushings. Set screw type connectors are not acceptable. Liquid tight fittings shall be of cadmium plated cast malleable iron, with insulated throat.
- D. Rigid Non-Metallic Conduit:
1. Conduit and fittings shall be homogeneous plastic material free from visible cracks, holes or foreign inclusions. The conduit bore shall be smooth and free of blisters, nicks or other imperfections which could damage conductors or cables.
 2. Materials: Polyvinyl Chloride (PVC) schedule 40. Material shall comply with NEMA TC-2 for conduit and NEMA TC-3 for fittings.

2.02 WIRING AND CABLES

- A. Acceptable manufacturers: Southwire, or approved equal.
- B. Conductor material: All wire and cable shall be insulated, stranded copper conductors. Soft drawn annealed copper wire 98% conductivity, bearing the UL label.
- C. Minimum conductor size: AWG No. 12 for all power and lighting branch circuits. AWG No. 14 for all signal and control circuits.
- D. Color Coding: System conductors shall be identified as to voltage and phase connections by means of color impregnated insulation or approved colored marking tape as follows:
- E. For 120/208 volt, 3 phase, 4 wire systems.
1. Phase A - Black
 2. Phase B - Red
 3. Phase C - Blue
 4. Neutral - White
 5. Ground - Green
- F. for 277/480 Volt, 3 phase, 4 wire system
1. Phase A - Brown
 2. Phase B - Orange
 3. Phase C - Yellow
 4. Neutral - Grey
 5. Ground - Green
- G. Secondary Wire and Cable, 0 to 600 Volts;

1. NEC Type THWN, or Type XHHW for feeders and branch circuits in wet or dry locations.
NEC type THHN for branch circuits in dry locations.

2.03 WIRE CONNECTION

- A. Wire Joints: Wires in sizes from #18 to #8 AWG, stranded conductor, with insulation rated 105 degrees C. or less shall be joined with electrical spring connectors of three part construction incorporating a non-restricted, zinc coated steel spring enclosed in a steel shell with an outer jacket of vinyl plastic with a flexible insulating skirt.
- B. Mechanical Compression Connectors and Taps: Stranded conductors from #6 AWG to 750 Kcmil shall be joined or tapped using bolted pressure connectors having cast bronze compression bolts. Fittings shall be wide range-taking and designed to facilitate the making of parallel taps, tees, crosses or end-to-end connections. Split-bolt connectors will not be acceptable.
- C. Fixture Connections: Splice fixture wire to circuit wiring with solderless connectors as specified above in paragraph A.
- D. Terminating Lugs: Conductors from size No. 6 AWG to 750 Kcmil, copper, shall be terminated using tin plated hydraulically operated crimping tools and dies as stipulated by the lug manufacturer. Lugs shall be 3M "Scotchlok" series 30000, Burndy Type Ya-L series, or equal.
- E. Splicing and Insulating Tape (600 volts and below): General purpose electrical tape shall be suitable for temperatures from minus 18 degrees C to 105 degrees C, shall be black, ultraviolet proof, self-extinguishing, 7 mil thick vinyl with a dielectric strength of 10,000 volts. Apply 4 layers half-lap with 2" over-lap on each conductor.
- F. Insulating Putty (600 volts and below): Pads or rolls of non-corrosive, self-fusing, one eight inch thick rubber putty with PVC backing sheet. Putty shall be suitable for temperatures from minus 17.8 degrees C to 37.8 degrees C and shall have a dielectric strength of 570 volts/mil minimum.
- G. Insulating Resin: Two Part liquid epoxy resin with resin and catalyst in pre measured, sealed mixing pouch. Resin shall have a set up time of approximately 30 minutes at 21.1 degrees C, and shall have thermal and dielectric properties equal to the insulation properties of the cables immersed in the resin.
- H. Terminal Strip Connectors: Terminate wire in locking tongue style, pressure type, solderless lug where applicable.

2.04 OUTLET BOXES

- A. Standard outlet boxes: Galvanized, die formed or drawn steel, knock-out type of size and configuration best suited to the application indicated on the plans. Minimum box size, 4 inch square by 1-1/2 inch deep, indoor use. FS cast boxes are required for outdoor use.
- B. Cast Metal Outlet Boxes: FS/FD cast boxes are required for outdoor use. Malleable iron alloy with threaded hubs and mounting lugs as required. Boxes shall be furnished with cast cover plates of the same material as the box and neoprene cover gaskets. Thomas and Betts, Crouse-Hinds, Appleton or equal.
- C. Conduit Outlet Bodies: Cadmium plated, cast iron alloy. Obround conduit outlet bodies with threaded conduit hubs and neoprene gasketed, cast iron covers. Outlet bodies shall be used to facilitate pulling of conductors or to make changes in conduit direction only. Splices are not permitted in conduit outlet bodies. Thomas and Betts, Crouse Hinds Form 8 Condulets, Appleton form 35 Unilets, or equal.

2.05 PULL AND JUNCTION

- A. Sheet Metal Boxes: Use standard outlet or concrete ring boxes wherever possible; otherwise use minimum 15 gauge get metal, NEMA 1 boxes, sized to code requirements with covers secured by cadmium plated machine screws located 6 inches on centers. Circle AW Products, Hoffman Engineering Co., or equal.
- B. Cast Metal Boxes: Use standard cast malleable iron outlet or device boxes wherever possible; otherwise use cadmium plated, cast malleable iron junction boxes with bolt-on, interchangeable

conduit hub plates with neoprene gaskets. Appleton FS/FD series; Crouse Hinds FS/FD series, or equal.

2.06 DISCONNECT SWITCHES

- A. All disconnect switches shall be heavy-duty type and have the number of poles, voltage rating, and horsepower rating as required by the motor or equipment. Disconnect switches shall be in enclosures to suit conditions, NEMA 3R for outdoor and NEMA 1 for indoor. Disconnect switches shall be fused unless otherwise noted on the drawings. As manufactured by: Square D - Class 3110, ITE Seimens, or equal.

2.07 FUSES

- A. Dual Element, Time Delay, UL Class RK5. Rejection type. Size and Voltage as indicated on equipment. Bussman, Little Fuse, or approved equal.

2.08 ELECTRICAL SUPPORTING DEVICES

- A. Concrete Fasteners: Hilti Kwik Bolt TZ or equal, self drilling expansion type concrete anchor.
- B. Conduit Straps: Hot-dip galvanized, cast malleable iron, two hole type strap with cast clamp-backs and spacers as required. OZ/Gedney, Thomas & Betts, or equal.
- C. Construction Channel: 1-1/2 inch by 1-1/2 inch 12 gauge galvanized steel channel with 17/32 inch diameter bolt holes, 1-1/2 inch on center, in the base of the channel. Kindorf 905 series, Unistrut P-1000-HS or equal.
- D. Cable Ties and Clamps: Thomas and Betts Co. "Ty-Raps" Panduit "Pan-Ty" or equal one piece, nylon, reusable type lashing ties.
- E. Fasteners (General) : Wood screws for fastening to wood. Machine screws for fastening to steel. Toggle bolts for fastening to hollow concrete block, gypsum board, or plaster walls. Expansion anchors for attachments to pre-poured concrete.

2.09 IDENTIFYING DEVICES

- A. Nameplates: Type NP: Engraved black bakelite, 1 inch by 3-1/2 inch, 1/8 inch high white letters, machine screw retained. For permanent identification of all switchboards, panelboards, circuit breakers in separate enclosures, motor starters, relays, time switches, disconnect switches and other cabinet-enclosed apparatus including terminal cabinets or match existing as closely as possible.
- B. Legend Plates: Type LP: Die-stamped metal legend plate with mounting hole and positioning key for attachment to panel mounted operators' devices. Engraved paint-filled characters as specified.
- C. Wire & Terminal Markers: Self-adhering, pre-printed vinyl with self-laminating wrap around strip. Markers shall be legible after termination. Brady B191 series, Thomas & Betts WSL series or equal.
- D. Conductor Phase Markers: Thomas & Betts WCPHAS series or similar in addition to colored marking as specified under this section of the specifications.

2.10 GROUNDING AND BONDING

- A. Ground Rods
 1. Manufacturer: Blackburn, Erico, or approved Equal
 2. Size: 3/4" x 10' Ground Rods
- B. Grounding Electrode Conductor, 2/0 for foundation foets, and per NEC.
- C. Grounding Well - Christy Box, G5 Traffic Valve Box.

PART 3 EXECUTION

3.01 CONDUIT AND RACEWAY APPLICATIONS

- A. Rigid Steel Conduit: Use rigid steel conduit for the following locations or conditions:
 1. All exterior applications
 2. All conduits larger than 2" trade diameter.

3. All conduits indoor below eight (8) feet above finished floor.
- B. Electrical Metallic Tubing (EMT): EMT is allowed for the following conditions:
 1. Interior only and above eight (8) feet from finished floor.
 2. Interior only and when entering a panel from above.
- C. Liquidtight Flexible Metallic Conduit: Use Liquidtight for the following conditions:
 1. In damp and wet locations for connections to motors, transformers, vibrating equipment and machinery.
 2. Connections to all pump motors, flow switches, and similar devices.
- D. Rigid Non-Metallic Conduit, Polyvinyl Chloride (PVC) Schedule 40:
 1. Underground installation.

3.02 CONDUIT INSTALLATION

- A. General
 1. All conduit runs shown on the plans are sized based on the use of rigid steel conduit and THWN copper conductors. If conductor type is changed the contractor shall be responsible for resizing conduits to meet code. In no case is conduit to be sized smaller than 3/4" trade diameter.
 2. Low voltage wiring shall be installed in conduit, minimum 3/4" trade diameter.
 3. Conduits shall be tightly covered and well protected during construction using metallic bushings and bushing "pennies" to seal open ends.
 4. In making joints in rigid steel conduit, ream conduit smooth after cutting and threading.
 5. Clean any conduit in which moisture or any foreign matter has collected before pulling in conductors. Paint all field threaded joints to prevent corrosion.
 6. In all empty conduits or ducts, install an 1100 pound tensile strength polyethylene pulling rope.
 7. Conduit systems shall be electrically continuous throughout. Install code size, uninsulated, copper grounding conductors in all conduit runs, grounding conductor shall be bonded to conduit, equipment frames and properly grounded.
- B. Layout:
 1. All new conduits shall be concealed. Any field conditions that does not allow concealment of conduits shall be reviewed with the Architect prior to rough-in.
 2. Locations of conduit runs shall be planned in advance of the installation and coordinated with concrete work, plumbing and framing.
 3. Where practical install conduits in groups in parallel vertical or horizontal runs and at elevations that avoid unnecessary off-sets.
 4. Low voltage conduit shall be grouped separately and labelled every 10 ft interval as to system (i.e. fire, control, etc)
 5. Exposed conduit shall be run parallel or at right angles to the centerlines of the columns and beams.
 6. Conduits shall not be placed closer than 12 inches from a parallel hot water or steam line or three inches from such lines crossing perpendicular to the runs.
 7. In long runs of conduit, provide sufficient pull boxes per NEC inside buildings to facilitate pulling wires and cables. Support pull boxes from structure independent of conduit supports. These pull boxes are not shown on the plans.
- C. Supports:
 1. All raceway systems shall be secured to building structures using specified fasteners, clamps and hangers spaced according to Code.
 2. Support single runs of conduit using two hole pipe straps. Where run horizontally on walls in damp or wet locations, install "clamp blocks" to space conduit off the surface.
 3. Multiple conduit runs shall be supported using "trapeze" hangers fabricated from 3/8 inch diameter, threaded steel rods secured to building structures. Fasten conduit to construction channel with standard two hole pipe clamps. Provide lateral seismic bracing for hangers.
 4. Installation

- a. Locate and install anchors, fasteners, and supports in accordance with NECA "Standard of Installation".
 - 1) Do not fasten supports to pipes, ducts, mechanical equipment, or conduit.
 - 2) Do not drill or cut structural members.
 - 3) Obtain permission from Structural Architect before drilling or cutting structural members.
 - b. Rigidly weld support members or use hexagon-head bolts to present neat appearance with adequate strength and rigidity. Use spring lock washers under all nuts.
 - c. Install surface-mounted cabinets and panelboards with minimum of four anchors.
 - d. In wet and damp locations use steel channel supports to stand cabinets and panelboards 1 inch (25 mm) off wall.
 - e. Use sheet metal channel to bridge studs above and below cabinets and panelboards recessed in hollow partitions.
- D. Terminations and Joints:
- 1. Raceways shall be joined using specified couplings or transition couplings where dissimilar raceway systems are joined.
 - 2. Rigid conduit connection to enclosures shall be made by Myers type grounding hubs only. EMT connections to enclosures shall be made with compression connector with grounding lock-nuts or bushings.
 - 3. Conduit terminations exposed at weatherproof enclosures and cast outlet boxes shall be made watertight using appropriate connectors and hubs.
 - 4. Install expansion couplings where any conduit crosses a building separation or expansion joint.
 - 5. Install cable sealing bushings on all conduits originating outside the building walls and terminating in switchgear, cabinets or gutters inside the building. Install cable sealing bushings or caulk conduit terminations in all grade level or below grade exterior pull, junction or outlet boxes.
- E. Penetrations:
- 1. Furnish and install metal sleeves for all exposed interior conduit runs passing through concrete floors or walls. Following conduit installation, seal all penetrations using non-iron bearing, chloride free, non-shrinking, dry-pack, grouting compound.
 - 2. Install specified watertight conduit entrance seals and membrane clamps at all below grade wall and floor penetrations. Conduits penetrating exterior building walls and building floor slab shall be insulated rigid steel.
 - 3. Conduits penetrating rated walls, floors, etc. shall be fireproofed.

3.03 CABLE AND WIRE INSTALLATION

- A. Examination
- 1. Verify that interior of building has been protected from weather.
 - 2. Verify that mechanical work likely to damage wire and cable has been completed.
 - 3. Verify that raceway installation is complete and supported.
 - 4. Verify that field measurements are as indicated.
- B. Preparation
- 1. In existing conduits that will be reused, pull out existing conductors.
 - 2. Completely and thoroughly swab raceway before installing wire.
 - 3. Use 50/50 solution of Simple Green. Use CO2 to blow water and soap into conduit - let soak to break up dried out pulling compounds, then pull conductors. Pull one conductor at a time if will not pull all out together.
- C. General:
- 1. Conductors shall not be in conduit until all work of any nature that may cause injury is completed. Care should be taken in pulling conductors that insulation is not damaged. U.L. approved non-petroleum base and insulating type pulling compound shall be used as needed.

2. All cables shall be installed and tested in accordance with manufacturer's requirements and warranty.
 3. Block and tackle, power driven winch or other mechanical means shall not be used in pulling conductors of size smaller than AWG # 1.
- D. Splicing and Terminating:
1. All aspects of splicing and terminating shall be in accordance with cable manufacturer's published procedures.
 2. Make up all splices in outlet boxes with connectors as specified herein with separate tails of correct color to be made up to splice. Provide at least six (6) inches of tails packed in box after splice is made up.
 3. All wire and cable in panels, control centers and equipment enclosures shall be bundled and clamped.
 4. Encapsulate splices in exterior outlet, junction and pull boxes using insulating resin kits. All splices for exterior equipment in pump rooms shall be made up watertight.
 5. Insulate mechanical compression taps AWG #1/0 and larger using pre-molded heat shrink tubing ITCSN Heaving Wall rated to 600V. Heating process should start from the middle of the heat shrink tubing and move to its ends.
- E. Identification:
1. Securely tag all branch circuits, noting the purpose of each. Mark conductors with vinyl wrap-around markers. Where more than two conductors run through a single outlet, mark each circuit with the corresponding circuit number at the panelboard.
 2. Color code conductors size #6 and larger using specified phase color markers and identification tags.
 3. All terminal strips are to have each individual terminal identified with specified vinyl markers.
 4. All identification shall be legible and readable after completion of installation.
 5. Provide labeling for all switches and receptacle outlets. Self-adhering machine clear tape with black letters.

3.04 INSTALLATION:

- A. Route wire and cable as required to meet project conditions.
 1. Wire and cable routing indicated is approximate unless dimensioned.
 2. Where wire and cable destination is indicated and routing is not shown, determine exact routing and lengths required.
 3. Include wire and cable of lengths required to install connected devices within 10 ft (3000 mm) of location shown.
- B. Install wire and cable in accordance with the NECA "Standard of Installation."
- C. Use wiring methods indicated.
- D. Pull all conductors into raceway at same time.
- E. Use suitable wire pulling lubricant for building wire 4 AWG and larger.
- F. Protect exposed cable from damage.
- G. Support cables above accessible ceiling, using spring metal clips or metal cable ties to support cables from structure or ceiling suspension system. Do not rest cable on ceiling panels.
- H. Use suitable cable fittings and connectors.
- I. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- J. Clean conductor surfaces before installing lugs and connectors.
- K. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.
- L. Terminate aluminum conductors with tin-plated aluminum-bodied compression connectors only. Fill with anti-oxidant compound before installing conductor.

- M. Use suitable reducing connectors or mechanical connector adaptors for connecting aluminum conductors to copper conductors.
- N. Use split bolt connectors for copper conductor splices and taps, 6 AWG and larger. Tape uninsulated conductors and connector with electrical tape to 150 percent of insulation rating of conductor.
- O. Use solderless pressure connectors with insulating covers for copper conductor splices and taps, 8 AWG and smaller.
- P. Use insulated spring wire connectors with plastic caps for copper conductor splices and taps, 10 AWG and smaller.
- Q. Trench and backfill for direct burial cable installation as specified in Underground Structure Section. Install warning tape along entire length of direct burial cable.
- R. Identify and color code wire and cable. Identify each conductor with its circuit number or other designation indicated.

3.05 ELECTRICAL CONNECTIONS

- A. Make electrical connections in accordance with equipment manufacturer's instructions.
- B. Make conduit connections to equipment using flexible conduit. Use liquidtight flexible conduit with watertight connectors in damp or wet locations.
- C. Connect heat producing equipment using wire and cable with insulation suitable for temperatures encountered.
- D. Provide receptacle outlet to accommodate connection with attachment plug.
- E. Provide cord and cap where field-supplied attachment plug is required.
- F. Install suitable strain-relief clamps and fittings for cord connections at outlet boxes and equipment connection boxes.
- G. Install disconnect switches, controllers, control stations, and control devices to complete equipment wiring requirements.
- H. Install terminal block jumpers to complete equipment wiring requirements.
- I. Install interconnecting conduit and wiring between devices and equipment to complete equipment wiring requirements.

3.06 INSTALLATION OF BOXES

- A. General:
 - 1. Leave no un-used openings in any box. Install close-up plugs as required to seal openings.
 - 2. Exposed outlet boxes and boxes in damp or wet locations shall be cast metal with gasketed cast metal cover plates.
- B. Box Layout:
 - 1. Outlet boxes shall be installed at the locations and elevations shown on the drawings or specified herein. Make adjustments to locations as required by structural conditions and to suit coordination requirements of other trades.
 - 2. Install junction or pullboxes where required to limit bends in conduit runs to not more than 360 degrees or where pulling tension achieved would exceed the maximum allowable for the cable to be installed. Consult wire and cable manufacturer.

3.07 INSTALLATION OF WIRING DEVICES

- A. General
 - 1. Install all devices flushmounted unless otherwise noted on the drawings. Comply with layout drawings for general locations. Consult Architect or Owner's Representative for locations that have conflict with other devices or manner not suitable for installation. Avoid placing devices behind open doors.
 - 2. Align devices horizontally and vertically. Device plates shall be aligned vertically with tolerance of 1/16". All four edges of device plates shall be in contact with the wall surface.

3. Mounting height as indicated on the drawings and according to ADA requirements.
 4. Install device plates on all outlet boxes. Provide blank plates for all empty, spare, and boxes for future use.
 5. Securely fasten devices into boxes and attach appropriate cover plates.
 6. Caulk around edges or outdoor device plates and boxes when rough wall surfaces prevent raintight seal. Use caulking materials approved by Architect. Fireproof around opening of devices located or penetrating fire-rated construction assemblies.
 7. Fireproof around opening of devices located or penetrating fire-rated construction assemblies.
- B. Switches
1. Where switches are indicated to be installed near doors, corner walls, etc. mount not less than 2 inches and not more than 18" from trim. Verify exact location with Architect or Engineer prior to rough-in.
 2. Coordinate the location of switches to insure locations at the strike side of doors.
 3. Furnish and install engraved legend of each switch that controls exhaust fans, motors, equipment systems, etc. not located within sight of the controlling switch.
 4. Ganging of Switches - provide barriers for switches of difference phases and voltages. Otherwise switches shall be gauged in one faceplate.
- C. Receptacles
1. Mount receptacles vertically with U-shaped ground position on bottom.
 2. Do not combine GFCI protected circuits with other circuits in the same raceway. Limit number of GFI protect circuits in any one raceway to a maximum of one (1) circuit.
- D. Identification
1. Label all outlets and switches. Mark each wiring device where circuits and panel supply is derived from.
 2. All identification shall be legible and readable after completion of installation

3.08 INSTALLATION OF FUSES AND DISCONNECT SWITCHES

- A. Fuses shall be installed where noted on plans. Sizes are based on design data provided by equipment mfg. Listed or labeled equipment must be in accordance with instructions included in the listing or labeling. Be sure to observe maximum branch circuit fuse size labels.
- B. Disconnect switches shall be mounted on the equipment, where possible. Coordinate with mechanical contractor to ensure switches are not mounted on a removable access panel.
- C. Label each disconnect fuse with equipment tag as indicated in the single line diagram, or as directed.

3.09 ELECTRICAL EQUIPMENT GROUNDING

- A. Ground non-current carrying metal parts of electrical equipment enclosures, frames, conductor raceways or cable trays to provide a low impedance path for line-to-ground fault current and to bond all non-current carrying metal parts together. Install a ground conductor in each raceway system in addition to conductors shown. Equipment ground conductor shall be electrically and mechanically continuous from the electrical circuit source to the equipment to be grounded. Size ground conductors per NEC 250 unless larger conductors are shown on the drawings.
- B. Grounding conductors shall be identified with green insulation, except where a bare ground conductor is specified. Where green insulation is not available, on larger sizes, black insulation shall be used and suitably identified with green tape at each junction box or device enclosure.
- C. Install metal raceway couplings, fittings and terminations secure and tight to insure good ground continuity. Provide insulated grounding bushing and bonding jumper where metal raceway is not directly attached to equipment metal enclosure and at concentric knock-outs.
- D. Motors shall be connected to equipment ground conductors with a conduit grounding bushing and with a bolted solderless lug connection on the metal frame.

- E. Conduit terminating in concentric knockouts at panelboards, cabinets and gutters shall have insulated grounding bushings and bonding jumpers installed interconnecting all such conduits and the panelboard cabinet, gutter, etc.
- F. Performance:
 - 1. Measure the resistance to ground of each ground rod before connection to the other ground rods. The resistance shall not exceed 25 ohms.
 - a. A single electrode which does not have a resistance to ground of 25 ohms or less shall be augmented by additional electrode(s).
 - 2. Measure the resistance to ground of the total ground system with all connections completed. The resistance shall not exceed 2 ohms for primary services or 5 ohms for secondary services.
 - 3. Tests of the resistance to ground shall be made using either the three point method or the fall-of-potential method.
 - 4. Perform a continuity check from equipment ground bus bars and ground lugs to the ground system.

3.10 BONDING

- A. Bonding shall be provided to assure electrical continuity and the capacity to conduct safely any fault current likely to be imposed.
- B. Bonding shall be in accordance with NEC Article 250, Part V.

3.11 WORKMANSHIP

- A. Preparation, handling, and installation shall be in accordance with manufacturer's written instructions and technical data particular to the product specified and/or accepted equal except as otherwise specified. Coordinate work and cooperate with others in furnishing and placing this work. Work to reviewed shop drawings for work done by others and to field measurements as necessary to properly fit the work.
- B. Conform to the National Electrical Contractor's Association "Standard of Installation" for general installation practice.

3.12 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

END OF SECTION

SECTION 26 0526

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 2 PRODUCTS

1.01 GROUNDING AND BONDING REQUIREMENTS

- A. Do not use products for applications other than as permitted by NFPA 70 and product listing.
- B. Unless specifically indicated to be excluded, provide all required components, conductors, connectors, conduit, boxes, fittings, supports, accessories, etc. as necessary for a complete grounding and bonding system.
- C. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
- D. Grounding Electrode System:
 - 1. Provide connection to required and supplemental grounding electrodes indicated to form grounding electrode system.
 - a. Provide continuous grounding electrode conductors without splice or joint.
 - b. Install grounding electrode conductors in raceway where exposed to physical damage. Bond grounding electrode conductor to metallic raceways at each end with bonding jumper.
- E. Separately Derived System Grounding:
 - 1. Provide grounding electrode conductor to connect derived system grounded conductor to nearest effectively grounded metal building frame. Unless otherwise indicated, make connection at neutral (grounded) bus in source enclosure.
 - 2. Provide bonding jumper to connect derived system grounded conductor to nearest metal building frame and nearest metal water piping in the area served by the derived system, where not already used as a grounding electrode for the derived system. Make connection at same location as grounding electrode conductor connection.
 - 3. Provide system bonding jumper to connect system grounded conductor to equipment ground bus. Make connection at same location as grounding electrode conductor connection. Do not make any other connections between neutral (grounded) conductors and ground on load side of separately derived system disconnect.
 - 4. Where the source and first disconnecting means are in separate enclosures, provide supply-side bonding jumper between source and first disconnecting means.
- F. Bonding and Equipment Grounding:
 - 1. Provide bonding for equipment grounding conductors, equipment ground busses, metallic equipment enclosures, metallic raceways and boxes, device grounding terminals, and other normally non-current-carrying conductive materials enclosing electrical conductors/equipment or likely to become energized as indicated and in accordance with NFPA 70.
 - 2. Provide insulated equipment grounding conductor in each feeder and branch circuit raceway. Do not use raceways as sole equipment grounding conductor.
 - 3. Where circuit conductor sizes are increased for voltage drop, increase size of equipment grounding conductor proportionally in accordance with NFPA 70.
 - 4. Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper.
 - 5. Terminate branch circuit equipment grounding conductors on solidly bonded equipment ground bus only. Do not terminate on neutral (grounded) or isolated/insulated ground bus.
 - 6. Provide bonding jumper across expansion or expansion/deflection fittings provided to accommodate conduit movement.

1.02 GROUNDING AND BONDING COMPONENTS

- A. General Requirements:
 - 1. Provide products listed, classified, and labeled as suitable for the purpose intended.
 - 2. Provide products listed and labeled as complying with UL 467 where applicable.

- B. Conductors for Grounding and Bonding, in Addition to Requirements of Section 26 0526:
 - 1. Use insulated copper conductors unless otherwise indicated.
 - a. Exceptions:
 - 1) Use bare copper conductors where installed underground in direct contact with earth.
 - 2) Use bare copper conductors where directly encased in concrete (not in raceway).
- C. Connectors for Grounding and Bonding:
 - 1. Description: Connectors appropriate for the application and suitable for the conductors and items to be connected; listed and labeled as complying with UL 467.
 - 2. Unless otherwise indicated, use mechanical connectors, compression connectors, or exothermic welded connections for accessible connections.

PART 3 EXECUTION

2.01 EXAMINATION

- A. Verify that work likely to damage grounding and bonding system components has been completed.
- B. Verify that field measurements are as indicated.
- C. Verify that conditions are satisfactory for installation prior to starting work.

2.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Perform work in accordance with NECA 1 (general workmanship).
- C. Make grounding and bonding connections using specified connectors.
 - 1. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors. Do not remove conductor strands to facilitate insertion into connector.
 - 2. Remove nonconductive paint, enamel, or similar coating at threads, contact points, and contact surfaces.
 - 3. Exothermic Welds: Make connections using molds and weld material suitable for the items to be connected in accordance with manufacturer's recommendations.
 - 4. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
 - 5. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.
- D. Identify grounding and bonding system components in accordance with Section 26 0553.

2.03 FIELD QUALITY CONTROL

- A. Inspect and test in accordance with NETA ATS except Section 4.
- B. Perform inspections and tests listed in NETA ATS, Section 7.13.
- C. Perform ground electrode resistance tests under normally dry conditions. Precipitation within the previous 48 hours does not constitute normally dry conditions.
- D. Investigate and correct deficiencies where measured ground resistances do not comply with specified requirements.

END OF SECTION

SECTION 26 2416
PANELBOARDS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Power distribution panelboards.
- B. Overcurrent protective devices for panelboards.

1.02 RELATED REQUIREMENTS

- A. Section 26 0526 - Grounding and Bonding for Electrical Systems.
- B. Section 26 4300 - Surge Protective Devices.

1.03 REFERENCE STANDARDS

- A. NECA 407 - Standard for Installing and Maintaining Panelboards; 2015.
- B. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2020.
- C. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- D. UL 50 - Enclosures for Electrical Equipment, Non-Environmental Considerations; Current Edition, Including All Revisions.
- E. UL 50E - Enclosures for Electrical Equipment, Environmental Considerations; Current Edition, Including All Revisions.
- F. UL 67 - Panelboards; Current Edition, Including All Revisions.
- G. UL 489 - Molded-Case Circuit Breakers, Molded-Case Switches and Circuit Breaker Enclosures; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Verify with manufacturer that conductor terminations are suitable for use with the conductors to be installed.
 - 2. Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

1.05 SUBMITTALS

- A. Product Data: Provide manufacturer's standard catalog pages and data sheets for panelboards, enclosures, overcurrent protective devices, and other installed components and accessories.
 - 1. Include characteristic trip curves for each type and rating of overcurrent protective device upon request.
- B. Shop Drawings: Indicate outline and support point dimensions, voltage, main bus ampacity, overcurrent protective device arrangement and sizes, short circuit current ratings, conduit entry locations, conductor terminal information, and installed features and accessories.
 - 1. Include dimensioned plan and elevation views of panelboards and adjacent equipment with all required clearances indicated.
 - 2. Include wiring diagrams showing all factory and field connections.
 - 3. Clearly indicate whether proposed short circuit current ratings are fully rated or, where acceptable, series rated systems.
 - 4. Identify mounting conditions required for equipment seismic qualification.
- C. Manufacturer's equipment seismic qualification certification.
- D. Field Quality Control Test Reports.
- E. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

- F. Project Record Documents: Record actual installed locations of panelboards and actual installed circuiting arrangements.
- G. Maintenance Data: Include information on replacement parts and recommended maintenance procedures and intervals.
- H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 - 1. Panelboard Keys: Two of each different key.

1.06 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store panelboards in accordance with manufacturer's instructions and NECA 407.
- B. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.
- C. Handle carefully in accordance with manufacturer's written instructions to avoid damage to panelboard internal components, enclosure, and finish.

1.08 FIELD CONDITIONS

- A. Maintain ambient temperature within the following limits during and after installation of panelboards:

PART 2 PRODUCTS

2.01 PANELBOARDS - GENERAL REQUIREMENTS

- A. Provide products listed, classified, and labeled as suitable for the purpose intended.
- B. Unless otherwise indicated, provide products suitable for continuous operation under the following service conditions:
 - 1. Altitude: Less than 6,600 feet (2,000 m).
 - 2. Ambient Temperature:
- C. Short Circuit Current Rating:
 - 1. Provide panelboards with listed short circuit current rating not less than the available fault current at the installed location as indicated on the drawings.
- D. Mains: Configure for top or bottom incoming feed as indicated or as required for the installation.
- E. Branch Overcurrent Protective Devices: Replaceable without disturbing adjacent devices.
- F. Bussing: Sized in accordance with UL 67 temperature rise requirements.
 - 1. Provide fully rated neutral bus unless otherwise indicated, with a suitable lug for each feeder or branch circuit requiring a neutral connection.
 - 2. Provide solidly bonded equipment ground bus in each panelboard, with a suitable lug for each feeder and branch circuit equipment grounding conductor.
- G. Conductor Terminations: Suitable for use with the conductors to be installed.
- H. Enclosures: Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E.
 - 1. Environment Type per NEMA 250: Unless otherwise indicated, as specified for the following installation locations:
 - a. Outdoor Locations: Type 3R.
 - 2. Boxes: Galvanized steel unless otherwise indicated.
 - a. Provide wiring gutters sized to accommodate the conductors to be installed.
 - 3. Lockable Doors: All locks keyed alike unless otherwise indicated.
- I. Future Provisions: Prepare all unused spaces for future installation of devices including bussing, connectors, mounting hardware and all other required provisions.

- J. Surge Protective Devices: Where factory-installed, internally mounted surge protective devices are provided in accordance with Section 26 4300, list and label panelboards as a complete assembly including surge protective device.

2.02 OVERCURRENT PROTECTIVE DEVICES

- A. Molded Case Circuit Breakers:
 - 1. Description: Quick-make, quick-break, over center toggle, trip-free, trip-indicating circuit breakers listed and labeled as complying with UL 489, and complying with FS W-C-375 where applicable; ratings, configurations, and features as indicated on the drawings.
 - 2. Interrupting Capacity:
 - a. Fully Rated Systems: Provide circuit breakers with interrupting capacity not less than the short circuit current rating indicated.
 - 3. Conductor Terminations:
 - a. Lug Material: Aluminum, suitable for terminating aluminum or copper conductors.
 - 4. Multi-Pole Circuit Breakers: Furnish with common trip for all poles.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that the ratings and configurations of the panelboards and associated components are consistent with the indicated requirements.
- C. Verify that mounting surfaces are ready to receive panelboards.
- D. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
- C. Mount panelboards such that the highest position of any operating handle for circuit breakers or switches does not exceed 79 inches (2000 mm) above the floor or working platform.
- D. Provide grounding and bonding in accordance with Section 26 0526.
- E. Install all field-installed branch devices, components, and accessories.
- F. Provide filler plates to cover unused spaces in panelboards.

END OF SECTION

SECTION 26 2816.13
ENCLOSED CIRCUIT BREAKERS

PART 1 GENERAL

1.01 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate arrangement of electrical equipment with the dimensions and clearance requirements of the actual equipment to be installed.
 - 2. Verify with manufacturer that conductor terminations are suitable for use with the conductors to be installed.
 - 3. Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

1.02 SUBMITTALS

- A. Product Data: Provide manufacturer's standard catalog pages and data sheets for circuit breakers, enclosures, and other installed components and accessories.
 - 1. Include characteristic trip curves for each type and rating of circuit breaker upon request.
- B. Shop Drawings: Indicate outline and support point dimensions, voltage and current ratings, short circuit current ratings, conduit entry locations, conductor terminal information, and installed features and accessories.
 - 1. Include dimensioned plan and elevation views of enclosed circuit breakers and adjacent equipment with all required clearances indicated.
 - 2. Include wiring diagrams showing all factory and field connections.
 - 3. Clearly indicate whether proposed short circuit current ratings are fully rated or, where acceptable, series rated systems.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of product.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.
- B. Handle carefully in accordance with manufacturer's written instructions to avoid damage to enclosed circuit breaker internal components, enclosure, and finish.

1.04 FIELD CONDITIONS

- A. Maintain ambient temperature between 23 degrees F (-5 degrees C) and 104 degrees F (40 degrees C) during and after installation of enclosed circuit breakers.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Schneider Electric; Square D Products; _____: www.schneider-electric.us/#sle.
- B. Source Limitations: Furnish enclosed circuit breakers and associated components produced by the same manufacturer as the other electrical distribution equipment used for this project and obtained from a single supplier.

2.02 ENCLOSED CIRCUIT BREAKERS

- A. Description: Units consisting of molded case circuit breakers individually mounted in enclosures.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. Unless otherwise indicated, provide products suitable for continuous operation under the following service conditions:
 - 1. Altitude: Less than 6,600 feet (2,000 m).

2. Ambient Temperature: Between 23 degrees F (-5 degrees C) and 104 degrees F (40 degrees C).
- D. Short Circuit Current Rating:
 1. Provide enclosed circuit breakers with listed short circuit current rating not less than the available fault current at the installed location indicated on the drawings.
- E. Conductor Terminations: Suitable for use with the conductors to be installed.
- F. Provide thermal magnetic circuit breakers unless otherwise indicated.
- G. Provide electronic trip circuit breakers where indicated.
- H. Provide solidly bonded equipment ground bus in each enclosed circuit breaker, with a suitable lug for terminating each equipment grounding conductor.
- I. Enclosures: Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E.
 1. Environment Type per NEMA 250: Unless otherwise indicated, as specified for the following installation locations:
 - a. Outdoor Locations: Type 3R.
 2. Finish for Painted Steel Enclosures: Manufacturer's standard, factory applied grey unless otherwise indicated.
 3. Provide surface-mounted enclosures unless otherwise indicated.
- J. Provide externally operable handle with means for locking in the OFF position.

2.03 MOLDED CASE CIRCUIT BREAKERS

- A. Description: Quick-make, quick-break, over center toggle, trip-free, trip-indicating circuit breakers listed and labeled as complying with UL 489, and complying with FS W-C-375 where applicable; ratings, configurations, and features as indicated on the drawings.
- B. Interrupting Capacity:
 1. Provide circuit breakers with interrupting capacity as required to provide the short circuit current rating indicated.
 2. Fully Rated Systems: Provide circuit breakers with interrupting capacity not less than the short circuit current rating indicated.
- C. Conductor Terminations:
 1. Lug Material: Aluminum, suitable for terminating aluminum or copper conductors.
- D. Thermal Magnetic Circuit Breakers: For each pole, furnish thermal inverse time tripping element for overload protection and magnetic instantaneous tripping element for short circuit protection.
 1. Provide field-adjustable magnetic instantaneous trip setting for circuit breaker frame sizes 225 amperes and larger.
- E. Electronic Trip Circuit Breakers: Furnish solid state, microprocessor-based, true rms sensing trip units.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that the ratings of the enclosed circuit breakers are consistent with the indicated requirements.
- C. Verify that mounting surfaces are ready to receive enclosed circuit breakers.
- D. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Perform work in accordance with NECA 1 (general workmanship).
- C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.

- D. Except where indicated to be mounted adjacent to the equipment they supply, mount enclosed circuit breakers such that the highest position of the operating handle does not exceed 79 inches (2000 mm) above the floor or working platform.

3.03 ADJUSTING

- A. Adjust tightness of mechanical and electrical connections to manufacturer's recommended torque settings.

3.04 CLEANING

- A. Clean dirt and debris from circuit breaker enclosures and components according to manufacturer's instructions.
- B. Repair scratched or marred exterior surfaces to match original factory finish.

END OF SECTION

SECTION 26 3213
ENGINE GENERATORS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Packaged engine generator system and associated components and accessories:
 - 1. Engine and engine accessory equipment.
 - 2. Alternator (generator).
 - 3. Generator set control system.
 - 4. Generator set enclosure.

1.02 RELATED REQUIREMENTS

- A. Section 26 0548 - Vibration and Seismic Controls for Electrical Systems.
 - 1. Includes requirements for the seismic qualification of equipment specified in this section.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate compatibility of generator sets to be installed with work provided under other sections or by others.
 - 2. Coordinate the work with other trades to avoid placement of ductwork, piping, equipment or other potential obstructions within the spaces dedicated for engine generator system.
 - 3. Coordinate arrangement of equipment with the dimensions and clearance requirements of the actual equipment to be installed.
 - 4. Coordinate the work to provide electrical circuits suitable for the power requirements of the actual auxiliary equipment and accessories to be installed.
 - 5. Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for each product, including ratings, configurations, dimensions, finishes, weights, service condition requirements, and installed features. Include alternator starting capabilities, engine fuel consumption rates, and cooling, combustion air, and exhaust requirements.
 - 1. Include generator set sound level test data.
 - 2. Include characteristic trip curves for overcurrent protective devices upon request.
 - 3. Include alternator thermal damage curve upon request.
- C. Shop Drawings: Include dimensioned plan views and sections indicating locations of system components, required clearances, and field connection locations. Include system interconnection schematic diagrams showing all factory and field connections.
 - 1. Identify mounting conditions required for equipment seismic qualification.
- D. Manufacturer's equipment seismic qualification certification.
- E. Fuel Storage Tank Calculations: Indicate maximum running time for generator set configuration provided.
- F. Specimen Warranty: Submit sample of manufacturer's warranty.
- G. Evidence of qualifications for installer.
- H. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and operation of product.
- I. Manufacturer's factory emissions certification.
- J. Manufacturer's certification that products meet or exceed specified requirements.
- K. Source quality control test reports.

- L. Provide NFPA 110 required documentation from manufacturer where requested by authorities having jurisdiction, including but not limited to:
 - 1. Certified prototype tests.
 - 2. Torsional vibration compatibility certification.
 - 3. NFPA 110 compliance certification.
 - 4. Certified rated load test at rated power factor.
- M. Manufacturer's detailed field testing procedures.
- N. Field quality control test reports.
- O. Operation and Maintenance Data: Include detailed information on system operation, equipment programming and setup, replacement parts, and recommended maintenance procedures and intervals.
 - 1. Include contact information for entity that will be providing contract maintenance and trouble call-back service.
- P. Executed Warranty: Submit documentation of final executed warranty completed in Owner's name and registered with manufacturer.
- Q. Maintenance contracts.
- R. Project Record Documents: Record actual locations of system components, installed circuiting arrangements and routing, and final equipment settings.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store generator sets in accordance with manufacturer's instructions and NECA/EGSA 404.
- B. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.
- C. Handle carefully in accordance with manufacturer's instructions to avoid damage to generator set components, enclosure, and finish.

1.06 FIELD CONDITIONS

- A. Maintain field conditions within manufacturer's required service conditions during and after installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Packaged Engine Generator Set - Basis of Design: KOHLER.
- B. Products other than basis of design are subject to compliance with specified requirements and prior approval of Engineer. By using products other than basis of design, Contractor accepts responsibility for costs associated with any necessary modifications to related work, including any design fees.
- C. Source Limitations: Furnish engine generator sets and associated components and accessories produced by a single manufacturer and obtained from a single supplier.

2.02 PACKAGED ENGINE GENERATOR SYSTEM

- A. Provide new engine generator system consisting of all required equipment, sensors, conduit, boxes, wiring, piping, supports, accessories, system programming, etc. as necessary for a complete operating system that provides the functional intent indicated.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. System Description:
 - 1. Application: Emergency/standby.
 - 2. Configuration: Single packaged engine generator set operated independently (not in parallel).
- D. Packaged Engine Generator Set:
 - 1. Type: Diesel (compression ignition).

2. Power Rating: 60 kW, standby.
 3. Voltage: As indicated on drawings.
 4. Main Line Circuit Breaker:
 - a. Type: Thermal magnetic.
 - b. Trip Rating: Select according to generator set rating.
- E. Generator Set General Requirements:
1. Prototype tested in accordance with NFPA 110 for Level 1 systems.
 2. Factory-assembled, with components mounted on suitable base.
 3. List and label engine generator assembly as complying with UL 2200.
 4. Power Factor: Unless otherwise indicated, specified power ratings are at 0.8 power factor for three phase voltages and 1.0 power factor for single phase voltages.
 5. Provide suitable guards to protect personnel from accidental contact with rotating parts, hot piping, and other potential sources of injury.
 6. Main Line Circuit Breakers: Provide factory-installed line side connections with suitable lugs for load side connections.
- F. Seismic Qualification: Provide engine generator assemblies and associated components suitable for application under the seismic design criteria specified in Section 26 0548 where required. Include certification of compliance with submittals.
- G. Service Conditions: Provide engine generator system and associated components suitable for operation under the service conditions at the installed location.
- H. Starting and Load Acceptance Requirements:
1. Cranking Method: Cycle cranking complying with NFPA 110 (15 second crank period, followed by 15 second rest period, with cranking limiter time-out after 3 cycles), unless otherwise required.
 2. Cranking Limiter Time-Out: If generator set fails to start after specified cranking period, indicate overcrank alarm condition and lock-out generator set from further cranking until manually reset.
 3. Start Time: Capable of starting and achieving conditions necessary for load acceptance within 10 seconds (NFPA 110, Type 10).
 4. Maximum Load Step: Supports 100 percent of rated load in one step.
- I. Exhaust Emissions Requirements:
1. Comply with federal (Tier 3 EPA), state, and local regulations applicable at the time of commissioning; include factory emissions certification with submittals.
 2. Do not make modifications affecting generator set factory emissions certification without approval of manufacturer and Engineer. Where such modifications are made, provide field emissions testing as necessary for certification.
- J. Sound Level Requirements:
1. Do not exceed 75 dBA when measured at 23 feet (7 m) from generator set in free field (no sound barriers) while operating at full load; include manufacturer's sound data with submittals.

2.03 ENGINE AND ENGINE ACCESSORY EQUIPMENT

- A. Provide engine with adequate horsepower to achieve specified power output at rated speed, accounting for alternator efficiency and parasitic loads.
- B. Engine Fuel System - Diesel (Compression Ignition):
1. Fuel Source: Diesel, ASTM D975 No. 2-D or approved cold weather diesel blends.
 2. Fuel Storage: Sub-base fuel tank.
 3. Engine Fuel Supply: Provide engine-driven, positive displacement fuel pump with replaceable fuel filter(s), water separator, check valve to secure prime, manual fuel priming pump, and relief-bypass valve. Provide fuel cooler where recommended by manufacturer.
 4. Engine Fuel Connections: Provide suitable, approved flexible fuel lines for coupling engine to fuel source.

5. Sub-Base Fuel Tank:
 - a. Provide sub-base mounted, double-wall fuel tank with secondary containment; listed and labeled as complying with UL 142.
 - b. Tank Capacity: Size for minimum of 72 hours of continuous engine generator operation at 100 percent rated load, but not larger than permissible by applicable codes.
 - c. Features:
 - 1) Direct reading fuel level gauge.
 - 2) Normal atmospheric vent.
 - 3) Emergency pressure relief vent.
 - 4) Fuel fill opening with lockable cap.
 - 5) Dedicated electrical conduit stub-up area.
 - 6) Low fuel level switch.
 - 7) Leak detection switch; located within secondary containment interstitial space for detection of primary tank fuel leak.
- C. Engine Starting System:
 1. System Type: Electric, with DC solenoid-activated starting motor(s).
 2. Battery(s):
 - a. Battery Type: Lead-acid.
 - b. Battery Capacity: Size according to manufacturer's recommendations for achieving starting and load acceptance requirements under worst case ambient temperature; capable of providing cranking through two complete periods of cranking limiter time-outs without recharging.
 - c. Provide battery rack, cables, and connectors suitable for the supplied battery(s); size battery cables according to manufacturer's recommendations for cable length to be installed.
 3. Battery-Charging Alternator: Engine-driven, with integral solid-state voltage regulation.
 4. Battery Charger:
 - a. Provide dual rate battery charger with automatic float and equalize charging modes and minimum rating of 10 amps; suitable for maintaining the supplied battery(s) at full charge without manual intervention.
 - b. Capable of returning supplied battery(s) from fully discharged to fully charged condition within 24 hours, as required by NFPA 110 for Level 1 applications while carrying normal loads.
 - c. Recognized as complying with UL 1236.
 - d. Furnished with integral overcurrent protection; current limited to protect charger during engine cranking; reverse polarity protection.
 - e. Provide integral DC output ammeter and voltmeter with five percent accuracy.
 - f. Provide alarm output contacts as necessary for alarm indications.
 5. Battery Heater: Provide thermostatically controlled battery heater to improve starting under cold ambient conditions.
- D. Engine Speed Control System (Governor):
 1. Single Engine Generator Sets (Not Operated in Parallel): Provide electronic isochronous governor for controlling engine speed/alternator frequency.
 2. Frequency Regulation, Electronic Isochronous Governors: No change in frequency from no load to full load; plus/minus 0.25 percent at steady state.
- E. Engine Lubrication System:
 1. System Type: Full pressure, with engine-driven, positive displacement lubrication oil pump, replaceable full-flow oil filter(s), and dip-stick for oil level indication. Provide oil cooler where recommended by manufacturer.
 2. Oil Heater: Provide thermostatically controlled oil heater to improve starting under cold ambient conditions.
- F. Engine Cooling System:

1. System Type: Closed-loop, liquid-cooled, with unit-mounted radiator/fan and engine-driven coolant pump; suitable for providing adequate cooling while operating at full load under worst case ambient temperature.
 2. Fan Guard: Provide suitable guard to protect personnel from accidental contact with fan.
 3. Coolant Heater: Provide thermostatically controlled coolant heater to improve starting under cold ambient conditions; size according to manufacturer's recommendations for achieving starting and load acceptance requirements under worst case ambient temperature.
- G. Engine Air Intake and Exhaust System:
1. Air Intake Filtration: Provide engine-mounted, replaceable, dry element filter.
 2. Engine Exhaust Connection: Provide suitable, approved flexible connector for coupling engine to exhaust system.
 3. Exhaust Silencer: Provide critical grade or better exhaust silencer with sound attenuation not less than basis of design; select according to manufacturer's recommendations to meet sound performance requirements, where specified.

2.04 ALTERNATOR (GENERATOR)

- A. Alternator: 4-pole, 1800 rpm (60 Hz output) revolving field, synchronous generator complying with NEMA MG 1; connected to engine with flexible coupling; voltage output configuration as indicated, with reconnectable leads for 3 phase alternators.
- B. Exciter:
1. Exciter Type: Brushless; provide permanent magnet generator (PMG) excitation system; self-excited (shunt) systems are not permitted.
 2. PMG Excitation Short-Circuit Current Support: Capable of sustaining 300 percent of rated output current for 10 seconds.
 3. Voltage Regulation (with PMG excitation): Plus/minus 0.5 percent for any constant load from no load to full load.
- C. Temperature Rise: Comply with UL 2200.
- D. Insulation System: NEMA MG 1, Class H; suitable for alternator temperature rise.
- E. Enclosure: NEMA MG 1, drip-proof.
- F. Total Harmonic Distortion: Not greater than five percent.
- G. Alternator Heater: Provide strip heater to prevent moisture condensation on alternator windings.

2.05 GENERATOR SET CONTROL SYSTEM

- A. Provide microprocessor-based control system for automatic control, monitoring, and protection of generator set. Include sensors, wiring, and connections necessary for functions/indications specified.
- B. Control Panel:
1. Control Panel Mounting: Unit-mounted unless otherwise indicated; vibration isolated.
 2. Generator Set Control Functions:
 - a. Automatic Mode: Initiates generator set start/shutdown upon receiving corresponding signal from remote device (e.g. automatic transfer switch).
 - b. Manual Mode: Initiates generator set start/shutdown upon direction from operator.
 - c. Reset Mode: Clears all faults, allowing generator set restart after a shutdown.
 - d. Emergency Stop: Immediately shuts down generator set (without time delay) and prevents automatic restarting until manually reset.
 - e. Cycle Cranking: Programmable crank time, rest time, and number of cycles.
 - f. Time Delay: Programmable for shutdown (engine cooldown) and start (engine warmup).
 - g. Voltage Adjustment: Adjustable through range of plus/minus 5 percent.
 3. Generator Set Status Indications:
 - a. Voltage (Volts AC): Line-to-line, line-to-neutral for each phase.
 - b. Current (Amps): For each phase.

- c. Frequency (Hz).
 - d. Real power (W/kW).
 - e. Reactive power (VAR/kVAR).
 - f. Apparent power (VA/kVA).
 - g. Power factor.
 - h. Duty Level: Actual load as percentage of rated power.
 - i. Engine speed (RPM).
 - j. Battery voltage (Volts DC).
 - k. Engine oil pressure.
 - l. Engine coolant temperature.
 - m. Engine run time.
 - n. Generator powering load (position signal from transfer switch).
4. Generator Set Protection and Warning/Shutdown Indications:
- a. Comply with NFPA 110; configurable for NFPA 110 Level 1 or Level 2, or NFPA 99 systems including but not limited to the following protections/indications:
 - 1) Overcrank (shutdown).
 - 2) Low coolant temperature (warning).
 - 3) High coolant temperature (warning).
 - 4) High coolant temperature (shutdown).
 - 5) Low oil pressure (shutdown).
 - 6) Overspeed (shutdown).
 - 7) Low fuel level (warning).
 - 8) Low coolant level (warning/shutdown).
 - 9) Generator control not in automatic mode (warning).
 - 10) High battery voltage (warning).
 - 11) Low cranking voltage (warning).
 - 12) Low battery voltage (warning).
 - 13) Battery charger failure (warning).
 - b. In addition to NFPA 110 requirements, provide the following protections/indications:
 - 1) High AC voltage (shutdown).
 - 2) Low AC voltage (shutdown).
 - 3) High frequency (shutdown).
 - 4) Low frequency (shutdown).
 - 5) Overcurrent (shutdown).
 - 6) Fuel tank leak (warning), where applicable.
 - c. Provide contacts for local and remote common alarm.
 - d. Provide lamp test function that illuminates all indicator lamps.
5. Other Control Panel Features:
- a. Event log.
- C. Remote Annunciator:
- 1. Remote Annunciator Mounting: Wall-mounted; Provide flush-mounted annunciator for finished areas and surface-mounted annunciator for non-finished areas unless otherwise indicated.
 - 2. Generator Set Status Indications:
 - a. Generator powering load (via position signal from transfer switch).
 - b. Communication functional.
 - 3. Generator Set Warning/Shutdown Indications:
 - a. Comply with NFPA 110; configurable for NFPA 110 Level 1 or Level 2, or NFPA 99 systems including but not limited to the following indications:
 - 1) Overcrank (shutdown).
 - 2) Low coolant temperature (warning).
 - 3) High coolant temperature (warning).
 - 4) High coolant temperature (shutdown).
 - 5) Low oil pressure (shutdown).

- 6) Overspeed (shutdown).
- 7) Low fuel level (warning).
- 8) Low coolant level (warning/shutdown).
- 9) Generator control not in automatic mode (warning).
- 10) High battery voltage (warning).
- 11) Low cranking voltage (warning).
- 12) Low battery voltage (warning).
- 13) Battery charger failure (warning).
- b. Provide audible alarm with silence function.
- c. Provide lamp test function that illuminates all indicator lamps.
- D. Remote Emergency Stop: Provide approved red, mushroom style remote emergency stop button where indicated or required by authorities having jurisdiction.

2.06 GENERATOR SET ENCLOSURE

- A. Enclosure Type: Sound attenuating, weather protective.
- B. Enclosure Material: Steel or aluminum.
- C. Hardware Material: Stainless steel.
- D. Color: Manufacturer's standard.
- E. Access Doors: Lockable, with all locks keyed alike.
- F. Openings: Designed to prevent bird/rodent entry.
- G. External Drains: Extend oil and coolant drain lines to exterior of enclosure for maintenance service.
- H. Sound Attenuating Enclosures: Line enclosure with non-hydroscopic, self-extinguishing sound-attenuating material.
- I. Exhaust Silencers: Where exhaust silencers are mounted within enclosure in main engine compartment, insulate silencer to minimize heat dissipation as necessary for operation at rated load under worst case ambient temperature.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that the ratings and configurations of generator sets and auxiliary equipment are consistent with the indicated requirements.
- C. Verify that rough-ins for field connections are in the proper locations.
- D. Verify that mounting surfaces are ready to receive equipment.
- E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Perform work in accordance with NECA 1 (general workmanship).
- B. Install products in accordance with manufacturer's instructions.
- C. Install generator sets and associated accessories in accordance with NECA/EGSA 404.
- D. Arrange equipment to provide minimum clearances and required maintenance access.
- E. Use manufacturer's recommended oil and coolant, suitable for the worst case ambient temperatures.

3.03 FIELD QUALITY CONTROL

- A. Provide services of a manufacturer's authorized representative to prepare and start systems and perform inspection and testing. Include manufacturer's detailed testing procedures and field reports with submittals.
- B. Notify Owner and Architect at least two weeks prior to scheduled inspections and tests.

- C. Notify authorities having jurisdiction and comply with their requirements for scheduling inspections and tests and for observation by their personnel.
- D. Provide all equipment, tools, and supplies required to accomplish inspection and testing, including load bank and fuel.
- E. Preliminary inspection and testing to include, at a minimum:
 - 1. Inspect each system component for damage and defects.
 - 2. Verify tightness of mechanical and electrical connections are according to manufacturer's recommended torque settings.
 - 3. Check for proper oil and coolant levels.
- F. Prepare and start system in accordance with manufacturer's instructions.
- G. Provide field emissions testing where necessary for certification.
- H. Correct defective work, adjust for proper operation, and retest until entire system complies with Contract Documents.
- I. Submit detailed reports indicating inspection and testing results and corrective actions taken.

3.04 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate proper operation of system to Owner, and correct deficiencies or make adjustments as directed.
- B. Training: Train Owner's personnel on operation, adjustment, and maintenance of system.
 - 1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
 - 2. Provide minimum of four hours of training.
 - 3. Instructor: Manufacturer's authorized representative.
 - 4. Location: At project site.
- C. After successful acceptance test and just prior to Substantial Completion, replace air, oil, and fuel filters and fill fuel storage tank.

3.05 PROTECTION

- A. Protect installed engine generator system from subsequent construction operations.

3.06 MAINTENANCE

- A. Provide to Owner a proposal as an alternate to the base bid, a separate maintenance contract for the service and maintenance of engine generator system for two years from date of Substantial Completion; Include a complete description of preventive maintenance, systematic examination, adjustment, inspection, and testing, with a detailed schedule.
- B. Provide trouble call-back service upon notification by Owner:
 - 1. Provide on-site response within 4 hours of notification.
 - 2. Include allowance for call-back service during normal working hours at no extra cost to Owner.
 - 3. Owner will pay for call-back service outside of normal working hours on an hourly basis, based on actual time spent at site and not including travel time; include hourly rate and definition of normal working hours in maintenance contract.
- C. Maintain an on-site log listing the date and time of each inspection and call-back visit, the condition of the system, nature of the trouble, correction performed, and parts replaced.

END OF SECTION

SECTION 26 3600 TRANSFER SWITCHES

PART 1 GENERAL

1.01 Scope

- A.** Furnish and install automatic transfer & bypass-isolation switch (ATS/BPS) system(s) with number of poles, amperage, voltage, withstand and close-on ratings as shown on the plans. Each automatic transfer shall consist of an inherently double throw power transfer switch mechanism and a microprocessor controller to provide automatic operation. All automatic transfer & bypass-isolation switches and controllers shall be the products of the same manufacturer.

1.02 Codes and Standards

The automatic transfer switches and controls shall conform to the requirements of:

- A.** UL 1008 - Standard for Transfer Switch Equipment
- B.** CSA certified to CSA 22.2 No 178 – 1978 Automatic Transfer Switches
- C.** IEC 60947-6-1 Low-voltage Switchgear and Controlgear; Multifunction equipment; Automatic Transfer Switching Equipment
- D.** NFPA 70 - National Electrical Code
- E.** NFPA 99 - Essential Electrical Systems for Health Care Facilities
- F.** NFPA 110 - Emergency and Standby Power Systems
- G.** IEEE Standard 446 - IEEE Recommended Practice for Emergency and Standby Power Systems for Commercial and Industrial Applications
- H.** NEMA Standard ICS10-1993 (formerly ICS2-447) - AC Automatic Transfer Switches
- I.** International Standards Organization ISO 9001:2008
- J.** UL 508 Industrial Control Equipment

1.03 Acceptable Manufacturers

Automatic transfer & bypass-isolation switches shall be ASCO 7000 Series. Any alternate shall be submitted for approval to the consulting engineer at least 10 days prior to bid. Alternate bids must list any deviations from this specification.

PART 2 PRODUCTS

2.01 Mechanically Held Transfer Switch

- A.** The transfer switch shall be electrically operated and mechanically held. The electrical operator shall be a momentarily energized, single-solenoid mechanism. Main operators which include overcurrent disconnect devices, linear motors or gears shall not be acceptable. The switch shall be mechanically interlocked to ensure only two possible positions, normal or emergency.
- B.** All transfer switch sizes shall use only one type of main operator for ease of maintenance and commality of parts.
- C.** The switch shall be positively locked and unaffected by momentary outages, so that contact pressure is maintained at a constant value and contact temperature rise is minimized for maximum reliability and operating life.
- D.** All main contacts shall be silver composition. Switches rated 800 amperes and above shall have segmented, blow-on construction for high withstand and close-on capability and be protected by separate arcing contacts.
- E.** Inspection of all contacts shall be possible from the front of the switch without disassembly of operating linkages and without disconnection of power conductors. Switches rated 800 amps and higher shall have front removable and replaceable contacts. All stationary and moveable contacts shall be replaceable without removing power conductors and/or bus bars.
- F.** Designs utilizing components of molded-case circuit breakers, contactors, or parts thereof, which are not intended for continuous duty, repetitive switching or transfer between two active power sources are not acceptable.
- G.** Where neutral conductors must be switched as shown on the plans, the AS shall be provided with fully rated overlapping neutral transfer contacts. The neutrals of the normal and emergency power sources shall be connected together only during the transfer and retransfer operation and remain connected together until power source contacts close on the source to which the transfer is being made. The overlapping neutral contacts shall not overlap for a period greater than 100 milliseconds. Neutral switching contacts which do not overlap are not acceptable.
- H.** Where neutral conductors are to be solidly connected as shown on the plans, a neutral conductor plate with fully rated AL-CU pressure connectors shall be provided.

2.02 Bypass-Isolation Switch

- A. A two-way bypass-isolation switch shall provide manual bypass of the load to either source and permit isolation of the automatic transfer switch from all source and load power conductors. All main contacts shall be manually driven.
- B. Power interconnections shall be silver-plated copper bus bar. The only field installed power connections shall be at the service and load terminals of the bypass-isolation switch. All control inter-wiring shall be provided with disconnect plugs.
- C. Separate bypass and isolation handles shall be utilized to provide clear distinction between the functions. Handles shall be permanently affixed and operable without opening the enclosure door. Designs requiring insertion of loose operating handles or opening of the enclosure door to operate are not acceptable.
- D. Bypass to the load-carrying source shall be accomplished with no interruption of power to the load (make before break contacts). Designs which disconnect the load when bypassing are not acceptable. The bypass handle shall have three operating modes: "Bypass to Normal," "Automatic," and "Bypass to Emergency." The operating speed of the bypass contacts shall be the same as the associated transfer switch and shall be independent of the speed at which the manual handle is operated. In the "Automatic" mode, the bypass contacts shall be out of the power circuit so that they will not be subjected to fault currents to which the system may be subjected.
- E. The isolation handle shall provide three operating modes: "Closed," "Test," and "Open." The "Test" mode shall permit testing of the entire emergency power system, including the automatic transfer switches with no interruption of power to the load. The "Open" mode shall completely isolate the automatic transfer switch from all source and load power conductors. When in the "Open" mode, it shall be possible to completely withdraw the automatic transfer switch for inspection or maintenance to conform to code requirements without removal of power conductors or the use of any tools.
- F. When the isolation switch is in the "Test" or "Open" mode, the bypass switch shall function as a manual transfer switch.
- G. Designs requiring operation of key interlocks for bypass isolation or ATSS which cannot be completely withdrawn when isolated are not acceptable.

2.03 Microprocessor Controller

- A. The controller's sensing and logic shall be provided by a single built-in microprocessor for maximum reliability, minimum maintenance, and the ability to communicate serially through an optional serial communication module.
- B. A single controller shall provide twelve selectable nominal voltages for maximum application flexibility and minimal spare part requirements. Voltage sensing shall be true RMS type and shall be accurate to $\pm 1\%$ of nominal voltage. Frequency sensing shall be accurate to $\pm 0.2\%$. The panel shall be capable of operating over a temperature range of -20 to +60 degrees C and storage from -55 to +85 degrees C.
- C. The controller shall be connected to the transfer switch by an interconnecting wiring harness. The harness shall include a keyed disconnect plug to enable the controller to be disconnected from the transfer switch for routine maintenance. Sensing and control logic shall be provided on multi-layer printed circuit boards. Interfacing relays shall be industrial grade plug-in type with dust covers. The panel shall be enclosed with a protective cover and be mounted separately from the transfer switch unit for safety and ease of maintenance. The protective cover shall include a built-in pocket for storage of the operator's manuals.
- D. All customer connections shall be wired to a common terminal block to simplify field-wiring connections.
- E. The controller shall meet or exceed the requirements for Electromagnetic Compatibility (EMC) as follows:
 - 1. EN 55011:1991 Emission standard - Group 1, Class A
 - 2. EN 50082-2:1995 Generic immunity standard, from which:
 - EN 61000-4-2:1995 Electrostatic discharge (ESD) immunity
 - ENV 50140:1993 Radiated Electro-Magnetic field immunity
 - EN 61000-4-4:1995 Electrical fast transient (EFT) immunity
 - EN 61000-4-5:1995 Surge transient immunity
 - EN 61000-4-6:1996 Conducted Radio-Frequency field immunity

2.04 Enclosure

- A. The ATS/BPS shall be furnished in a Type 3R enclosure unless otherwise shown on the plans.
- B. All standard and optional door-mounted switches and pilot lights shall be 16-mm industrial grade type or equivalent for easy viewing & replacement. Door controls shall be provided on a separate removable plate, which can be supplied loose for open type units.

PART 3 OPERATION

3.01 Controller Display and Keypad

A. A four line, 20 character LCD display and keypad shall be an integral part of the controller for viewing all available data and setting desired operational parameters. Operational parameters shall also be available for viewing and limited control through the serial communications input port. The following parameters shall only be adjustable via DIP switches on the controller:

1. Nominal line voltage and frequency
2. Single or three phase sensing
3. Operating parameter protection
4. Transfer operating mode configuration
(Open transition, Closed transition or Delayed transition)

All instructions and controller settings shall be easily accessible, readable and accomplished without the use of codes, calculations, or instruction manuals.

3.02 Voltage, Frequency and Phase Rotation Sensing

A. Voltage and frequency on both the normal and emergency sources (as noted below) shall be continuously monitored, with the following pickup, dropout and trip setting capabilities (values shown as % of nominal unless otherwise specified):

<u>Parameter</u>	<u>Sources</u>	<u>Dropout / Trip</u>	<u>Pickup / Reset</u>
Undervoltage	N&E, 3 ϕ	70 to 98%	85 to 100%
Overvoltage	N&E, 3 ϕ	102 to 115%	2% below trip
Underfrequency	N&E	85 to 98%	90 to 100%
Overfrequency	N&E	102 to 110%	2% below trip
Voltage unbalance	N&E	5 to 20%	1% below dropout

- B. Repetitive accuracy of all settings shall be within $\pm 0.5\%$ over an operating temperature range of -20°C to 60°C .
- C. Voltage and frequency settings shall be field adjustable in 1% increments either locally with the display and keypad or remotely via serial communications port access.
- D. The controller shall be capable (when activated by the keypad or through the serial port) of sensing the phase rotation of both the normal and emergency sources. The source shall be considered unacceptable if the phase rotation is not the preferred rotation selected (ABC or CBA).
- E. Source status screens shall be provided for both normal & emergency to provide digital readout of voltage on all 3 phases, frequency, and phase rotation.
- F. The controller shall include a user selectable algorithm to prevent repeated transfer cycling to a source on an installation which experiences primary side, single phase failures on a Grounded Wye – Grounded Wye transformer which regenerates voltage when unloaded. The algorithm shall also inhibit retransfer to the normal (utility) source upon detection of a single phasing condition until a dedicated timer expires, the alternate source fails, or the normal source fails completely and is restored during this time delay period. The time delays associated with this feature shall be adjustable by the user through the controller keypad and LCD.

3.03 Time Delays

- A. An adjustable time delay of 0 to 6 seconds shall be provided to override momentary normal source outages and delay all transfer and engine starting signals. Capability shall be provided to extend this time delay to 60 minutes by providing an external 24 VDC power supply.
- B. A time delay shall be provided on transfer to emergency, adjustable from 0 to 60 minutes, for controlled timing of transfer of loads to emergency.
- C. Two time delay modes (which are independently adjustable) shall be provided on re-transfer to normal. One time delay shall be for actual normal power failures and the other for the test mode function. The time delays shall be adjustable from 0 to 60 minutes. Time delay shall be automatically bypassed if the emergency source fails and the normal source is acceptable.
- D. A time delay shall be provided on shut down of engine generator for cool down, adjustable from 0 to 60 minutes.
- E. A time delay activated output signal shall also be provided to drive an external relay(s) for selective load disconnect control. The controller shall have the ability to activate an adjustable 0 to 5 minute time delay in any of the following modes:
 - 1. Prior to transfer only.
 - 2. Prior to and after transfer.
 - 3. Normal to emergency only.
 - 4. Emergency to normal only.
 - 5. Normal to emergency and emergency to normal.
 - 6. All transfer conditions or only when both sources are available.
- F. The controller shall also include the following built-in time delays for optional Closed Transition and Delayed Transition operation:
 - 1. 1 to 5 minute time delay on failure to synchronize normal and emergency sources prior to closed transition transfer.
 - 2. 0.1 to 9.99 second time delay on an extended parallel condition of both power sources during closed transition operation.
 - 3. 0 to 5 minute time delay for the load disconnect position for delayed transition operation.
- G. All time delays shall be adjustable in 1 second increments, except the extended parallel time, which shall be adjustable in .01 second increments.
- H. All time delays shall be adjustable by using the LCD display and keypad or with a remote device connected to the serial communications port.

3.04 Additional Features

- A. A three position momentary-type test switch shall be provided for the **test / automatic / reset** modes. The test position will simulate a normal source failure. The reset position shall bypass the time delays on either transfer to emergency or retransfer to normal.
- B. A SPDT contact, rated 5 amps at 30 VDC, shall be provided for a low-voltage engine start signal. The start signal shall prevent dry cranking of the engine by requiring the generator set to reach proper output, and run for the duration of the cool down setting, regardless of whether the normal source restores before the load is transferred.
- C. Auxiliary contacts, rated 10 amps, 250 VAC shall be provided consisting of one contact, closed when the ATS is connected to the normal source and one contact closed, when the ATS is connected to the emergency source.
- D. LED indicating lights (16 mm industrial grade, type 12) shall be provided; one to indicate when the ATS is connected to the normal source (green) and one to indicate when the ATS is connected to the emergency source (red).
- E. LED indicating lights (16 mm industrial grade, type 12) shall be provided and energized by controller outputs. The lights shall provide true source availability of the normal and emergency sources, as determined by the voltage sensing trip and reset settings for each source.

The following features shall be built-in to the controller, but capable of being activated through keypad programming or the serial port only when required by the user:

- F. Provide the ability to select “commit/no commit to transfer” to determine whether the load should be transferred to the emergency generator if the normal source restores before the generator is ready to accept the load.
- G. An Inphase monitor shall be provided in the controller. The monitor shall control transfer so that motor load inrush currents do not exceed normal starting currents, and shall not require external control of power sources. The inphase monitor shall be specifically designed for and be the product of the ATS manufacturer. The inphase monitor shall be equal to ASCO Feature 27.
- H. The controller shall be capable of accepting a normally open contact that will allow the transfer switch to function in a non-automatic mode using an external control device.
- I. **Engine Exerciser** - The controller shall provide an internal engine exerciser. The engine exerciser shall allow the user to program up to seven different exercise routines. For each routine, the user shall be able to:
 - 1. Enable or disable the routine.
 - 2. Enable or disable transfer of the load during routine.
 - 3. Set the start time, .
 - time of day
 - day of week
 - week of month (1st, 2nd, 3rd, 4th, alternate or every)
 - 4. Set the duration of the run.

At the end of the specified duration the switch shall transfer the load back to normal and run the generator for the specified cool down period. A 10-year life battery that supplies power to the real time clock in the event of a power loss will maintain all time and date information.

The following feature shall be built - into the controller, but capable of being activated through keypad programming or the communications interface port.

Note: The transfer switch will operate in a non-automatic mode with this feature activated.

J. Terminals shall be provided for a remote contact which opens to signal the ATS to transfer to emergency and for remote contacts which open to inhibit transfer to emergency and/or retransfer to normal. Both of these inhibit signals can be activated through the keypad or serial port.

K. System Status - The controller LCD display shall include a "System Status" screen which shall be readily accessible from any point in the menu by depressing the "ESC" key a maximum of two times. This screen shall display a clear description of the active operating sequence and switch position. For example,

***Normal Failed
Load on Normal
TD Normal to Emerg
2min15s***

Controllers that require multiple screens to determine system status or display "coded" system status messages, which must be explained by references in the operator's manual, are not permissible.

L. Self Diagnostics - The controller shall contain a diagnostic screen for the purpose of detecting system errors. This screen shall provide information on the status input signals to the controller which may be preventing load transfer commands from being completed.

M. Data Logging - The controller shall have the ability to log data and to maintain the last 99 events, even in the event of total power loss. The following events shall be time and date stamped and maintained in a non-volatile memory:

1. Event Logging

1. Data and time and reason for transfer normal to emergency.
2. Data and time and reason for transfer emergency to normal.
3. Data and time and reason for engine start.
4. Data and time engine stopped.
5. Data and time emergency source available.
6. Data and time emergency source not available.

2. Statistical Data

1. Total number of transfers.
2. Total number of transfers due to source failure.
3. Total number of days controller is energized.
4. Total number of hours both normal and emergency sources are available.

- N. Communications Module** – Shall provide remote interface module to support monitoring of vendor’s transfer switch, controller and optional power meter. Module shall provide status, analog parameters, event logs, equipment settings & configurations over embedded webpage and open protocol. Features shall include:
1. Email notifications and SNMP traps of selectable events and alarms may be sent to a mobile device or PC.
 2. Modbus TCP/IP, SNMP, HTTP, SMTP open protocols shall be simultaneously supported.
 3. Web app interface requiring user credentials to monitor and control the transfer switch supporting modern smart phones, tablets and PC browsers. User will be able to view the dynamic one-line; ATS controls status, alarms, metering, event logging as well as settings.
 4. Secure access shall be provided by requiring credentials for a minimum of 3 user privilege levels to the web app, monitor (view only), control (view and control) and administrator (view, control and change settings). 128-Bit AES encryption standard shall be supported for all means of connectivity.
 5. Shall allow for the initiating of transfers, retransfers, bypassing of active timers and the activating/deactivating of engine start signal shall be available over the embedded webpage and to the transfer switch vendor’s monitoring equipment.
 6. An event log displaying a minimum of ninety-nine (300) events shall be viewable and printable from the embedded webpages and accessible from supported open protocols.
 7. Four (4) 100 Mbps Ethernet copper RJ-45 ports, five (2) serial ports, Termination dip-switches and LEDs for diagnostics.
 8. DIN rail mountable.

This option shall be equivalent to ASCO accessory 72EE2

- O. External DC Power Supply** – An optional provision shall be available to connect an external 24 VDC power supply to allow the LCD and the door mounted control indicators to remain functional when both power sources are dead. This option shall be equivalent to ASCO accessory 1G.

***Note Spec Writer:** *The following section is optional and should be deleted if not required.*

- P. Power Meter** – (This feature shall be equal to ASCO accessory 135L, or feature bundle accessory 150*).

The Power Meter shall conform to the requirements of:

1. UL 3111-1-Electrical Measuring and Testing Equipment
2. CAN/CSA-C22.2 No. 23-M89-CSA Safety Requirements for Electrical and Electronic Measuring and Test Equipment
3. The Power Meter shall be capable of operating without modification at a nominal frequency of 45 to 66Hz.
4. The Power Meter shall be rated for an operating temperature of -4°F to 158°F and a storage temperature of -22°F to 176°F. and shall be rated for an 85% non-condensing, relative humidity.

5. The Power Meter shall accept inputs from industry standard instrument transformers (120 VAC secondary PT's and 5A secondary CT's). Direct phase voltage connections, 0 to 600VAC nominal, shall be possible without the use of PT's.
6. The Power Meter shall accept single, 3 phase, or three & four wire circuits. A fourth CT input shall be available to measure neutral or ground current.
7. The Power Meter shall contain a built-in discrete contact to wire an ATS 14A auxiliary contact to indicate switch position.
8. The Power Meter shall accept AC voltage from the sensing lines for operation. Additional provisions shall be provided for external DC voltage input range 9-36 VDC with a nominal of 24 VDC.
9. The Power Meter shall be equipped with a continuous duty, long –life, 4 line x 20 character green backlit LCD
10. All setup parameters required by the Power Meter shall be stored in non- volatile memory and retained in the event of a control power interruption.
11. The Power Meter shall be flush mountable on a surface.
12. The Power Meter enclosure shall be sealed to IP-51 (NEMA 1) and The faceplate shall be sealed to IP-65 (NEMA 4). All push buttons shall be sealed tact switches.
13. The Power Meter shall send, when prompted, information to a central location equipped with a manufacturer supplied critical power management system or 3rd party monitor through manufacturer supplied communication modules. All 3rd party monitor must utilize industry standard open protocols Modbus/RTU.Modbus/TCP or SNMP.
14. An embedded RS-485 port will be provided which will enable communication at 9600, 19.2K, 38.4K, or 57.6K baud. DIP switches will be provided on the RS-485 port allowing a user to select 2-wire or 4-wire communication as well as the option to activate a terminating resistor on the port.
15. The Power Meter shall help facilities comply with NEC 220. It shall provide Maximum Demand calculations for the past 24 months, as per standards with 15 minutes average.
16. The following data will be available on the display and Modbus registers of the Power Meter:
 - Line-to-neutral voltages (V_{AN} , V_{BN} , and V_{CN})
 - Line-to-neutral voltage average (V_{AVE})

- Line-to-line voltages (V_{AB} , V_{BC} , and V_{CA})
 - Line-Line voltage average (V_{LAVE})
 - Current on each phase (I_A , I_B , and I_C)
 - Current on the neutral conductor (I_N)
 - Average current (I_{AVE})
 - Active power, KW per phase and total (W_A , W_B , W_C , and W_T)
 - Apparent power, KVA per phase and total (V_{AA} , V_{AB} , V_{AC} , and V_{AT})
 - KWHours importing, exporting and net (KWH_{IMP} , KWH_{EXP} , and KWH_{NET})
 - KVARHours leading, lagging and net ($KVARH_{LEAD}$, $KVARLAG$, and $KVARH_{NET}$)
 - Power factor (PF)
 - Signal Frequency (Hz)
 - Digital Input
- 17.** The Power Meter shall offer an LCD which can display no less than nine different languages.
- 18.** Displaying each of the metered values shall be done through the use of menu scroll buttons. There will be an escape button which will be used to take the user back to the previous page or to cancel a setting change. Pressing escape no more than three times will return the user to the home screen.
- 19.** For ease of operator viewing, the display can be configured to remain on continuously, with no detrimental effect on the life of the Power Meter.
- 20.** The display's contrast shall be configurable in intervals of 10% (ranging 0%-100%).
- 21.** Setup of a system requirements shall be allowed from the front of the Power Meter.

***Note Spec Writer:** *The following section is optional and should be deleted if not required.*

4.01 ATS Remote Annunciator

General

Provide and install ATS Remote Annunciators for monitoring and control of automatic transfer switches remotely over Ethernet.

A. Hardware Specifications

The ATS Remote Annunciator shall be listed to cUL-60950-1 and UL 1008 and include the following features and ratings:

- *User-configured labels with ATS names and power sources*
- *Dual 10/100 Base-T auto sensing and auto crossover Ethernet ports*
- *LED indication of source acceptability, switch position, common alarm, time delay and Ethernet link activity*
- *Push button for transfer/retransfer control operations and time delay bypass*
- *Push buttons for Alarm Silence and Lamp Test*
- *Key lock to enable and disable the transfer push button*
- *Audible and visual alarm to indicate Communication Error ATS Locked Out Failure to Synchronize Extended Parallel and any of the 8 user-configured discrete inputs*
- *Programmable watchdog timer that can generate a system reset upon timeout (minimum 1 sec)*
- *Factory reset capability*
- *100 ms power ride-through*

B. Software Specification

The ATS Remote Annunciator shall contain embedded web pages accessible via various web browsers with the following capabilities:

- *Configuration for protocol and communications management with the ability of auto discovering transfer switches on network*
- *Ability to create and print customized labels for ATS names and power sources*
- *The ability to choose a continuous or periodic audible alarm with customizable interval time*
- *View detailed packet status counters i.e. transmitted received and dropped packets with the ability to reset counters*
- *ATS source name configuration page which allows users to configure power source names and print labels*
- *Upgrade firmware from Ethernet network without interrupting equipment operation*

C. Communications

Dual 10/100 Base-T (RJ-45) Ethernet ports are provided to support TCP/IP communications for up to eight automatic transfer switches via individual remote connectivity modules or daisy-chained serial modules into a single Connectivity Module. Additional features include:

- *Supports Full Duplex Flow Control (IEEE 802.3x)*

- 3.3V power supply with 5V I/O tolerance
- Supports 3 LEDs to indicate traffic link speed and collision

D. Mounting

The ATS Remote Annunciator is suitable for:

- Surface mounting using mounting screws studs
- Flush Mount from behind a cutout section (Enclosure Door Mounting)
- Flush Mount from the front of a cutout section (Enclosure Door Mounting)

E. Power Supply

The ATS Remote Annunciator shall be capable of accepting 24VDC, 120 VAC or 240 VAC power source.

F. Environmental

The ATS Remote Annunciator shall have an Ambient Operating Temperature range of -4 ° to 158 ° F (-20 ° to +70 ° C) @ 5~85% humidity and Ambient Storage Temperature of -40 ° to 185 ° F (-40 ° to 85 ° C).

PART 5: ADDITIONAL REQUIREMENTS

5.01 Withstand and Closing Ratings

- A. The ATS/BPS shall be rated to close on and withstand the available RMS symmetrical short circuit current at the ATS/BPS terminals with the type of overcurrent protection shown on the plans.
- B. The ATS/BPS shall be UL listed in accordance with UL 1008 and be labeled in accordance with .025 and .050 seconds, time based ratings, or appropriate short time rating(s) as applicable. ATS/BPSs which are not tested and labeled with .025 and .050 seconds time based rating(s) or appropriate short time rating(s) and have series, or specific breaker ratings only, are not acceptable.

5.02 Tests and Certification

- A. The complete ATS/BPS shall be factory tested to ensure proper operation of the individual components and correct overall sequence of operation and to ensure that the operating transfer time, voltage, frequency and time delay settings are in compliance with the specification requirements.
- B. The ATS/BPS manufacturer shall be certified to ISO 9001:2008 International Quality Standard and the manufacturer shall have third party certification verifying quality assurance in design/development, production, installation and servicing in accordance with ISO 9001:2008

5.03 Service Representation

- A. The ATS/BPS manufacturer shall maintain a national service organization of company-employed personnel located throughout the contiguous United States. The service center's personnel must be factory trained and must be on call 24 hours a day, 365 days a year.
- B. The manufacturer shall maintain records of each switch, by serial number, for a minimum of 20 years.

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APPENDIX A - FORM OF AGREEMENT

CONTRACT

for the Construction of:
**FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR
REPLACEMENT PROJECT, PW 2021-09**

THIS AGREEMENT, made and entered into this _____ day of _____, 2022, by and between the **CITY OF ARROYO GRANDE**, a municipal corporation of the State of California, hereinafter designated City, party of the first part, and **<CONTRACTORS NAME>**, hereinafter designated as Contractor, party of the second part,

WITNESSETH: That the parties hereto do mutually agree as follows:

ARTICLE I. Scope of Work. For and in consideration of the payments and agreements hereinafter mentioned to be made and performed by City, Contractor agrees with City to furnish all materials, equipment and labor and construct facilities for City, and to perform and complete in a good and workmanlike manner all the work pertaining thereto shown on the plans and described in the specifications hereto attached, and to furnish at his own proper cost and expense all tools, equipment, labor, and materials necessary therefore, except such materials as in the said specifications are stipulated to be furnished by City, and to do everything required by this Contract and the said specifications and plans, and the requirements of the Engineer under them, to wit:

<INSERT BID SCHEDULE>

ARTICLE II. Compensation and Payment. For furnishing all said equipment, materials and labor, performing demolition as required, and doing all the work contemplated and embraced in this Contract; and for all loss and damage arising out of the nature of the work aforesaid, or from the action of the elements or from any unforeseen difficulties which may arise or be encountered in the prosecution of the work until its acceptance by City, and for all risks of every description connected with the work; also for all expenses incurred by or in consequence of the suspension or discontinuance of work, except such as in the said specifications are expressly stipulated to be borne by City; and for well and faithfully completing the work and the whole thereof, in the manner shown and described in the said plans and specifications and in accordance with the requirements of the City Engineer under them, City will pay and Contractor shall receive as full compensation therefore the amounts for such work as installed for the unit prices bid therefore in accordance with the proposal of Contractor.

Final payment, constituting the entire unpaid balance of the Agreement Sum, shall be paid by the City to the Contractor no sooner than thirty-five (35) days after a Notice of Completion has been recorded, unless otherwise stipulated in the Notice of Completion, provided the

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work has then been completed, the Agreement fully performed, and a final Certificate for Payment has been issued by the City.

This Agreement is subject to the provisions of Article 1.7 (commencing at Section 20104.50) of Division 2, Part 3 of the Public Contract Code regarding prompt payment of contractors by local governments. Article 1.7 mandates certain procedures for the payment of undisputed and properly submitted payment requests within 30 days after receipt, for the review of payment requests, for notice to Contractor of improper payment requests, and provides for the payment of interest on progress payment requests which are not timely made in accordance with that Article. This Agreement hereby incorporates the provisions of Article 1.7 as though fully set forth herein.

ARTICLE III. Full Performance. City hereby promises and agrees with said Contractor to employ, and does hereby employ, said Contractor to provide the materials and to do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and hereby contracts to pay the same at the time, in the manner and upon the conditions set forth in the specifications; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to full performance of the covenants herein contained.

ARTICLE IV. Contract Documents. Contract Documents shall consist of The Notice to Contractors, the Statement of Prevailing Wages, the Bid Requirements, the Contract Bid, the Bond for Faithful Performance, the Bond for Materials and Laborers, the Contract Agreement, the Standard Specifications & Engineering Standards, the Special Provisions and the Project Plans mentioned therein and titled “**FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR REPLACEMENT PROJECT, PW 2021-09**” all of which are hereto attached and are hereby incorporated in and made a part of this Contract.

ARTICLE V. Bonds. Contractor shall forthwith furnish in triplicate, a faithful performance bond in an amount equal to 100% of the contract price and a labor and materials bond in an amount equal to 100% of the contract price, both bonds to be written by a surety company acceptable to City and in the form prescribed by law.

ARTICLE VI. Time for Completion. All of Contractor’s work on the Project shall be completed within durations established for the individual activities as set forth in the Project Construction Schedule. All work shall commence ten (10) working days from the start of contract time. Contractor shall refer to the invitations for bids, and Project Plans and Specifications, all of which, as set forth below, are incorporated herein by reference, for contractual obligations regarding individual activity durations. The aggregate sum total work of all individual Prime Contractors to the City comprises the entire “Project” and shall be commenced and completed in conformance with the Project Construction Schedule. The entire Project shall be completed within 30 consecutive working days.

ARTICLE VII. Liquidated Damages. Pursuant to Government Code Section 53069.85, if work is not completed within the contract time or in strict accordance with the Project Schedule, it is understood, acknowledged and agreed that the City will suffer damage. It is therefore agreed that the Contractor shall pay to the City the sum of fifteen hundred

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dollars (\$1,500.00) for each and every calendar day of delay beyond the Contract Time, or beyond any completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule, or beyond the time indicated in the Project Schedule for any individual Contract activity.

Contractor expressly understands, acknowledges and agrees that such liquidated damages can and shall be imposed if the Contractor does not meet each and every aspect of any activity schedule, completion schedule, construction schedule or Project milestones established in or pursuant to the Project Schedule. If the City accepts work or makes any payment under this Agreement after a default by reason of delays, the acceptance of such work and/or payment(s) shall in no respect constitute a waiver or modification of any provisions regarding Contract Time, a completion schedule, the Project Schedule or the accrual of liquidated damages. In the event the same is not paid, the Contractor further agrees that the City may deduct the amount thereof from any money due or that may become due the Contractor under the Agreement. This paragraph does not exclude recovery of damages under provisions of the Contract Documents, and is expressly in addition to the City's ability to seek other damages.

Contractor is to refer to the Project Construction Schedule for duration of individual activities. Liquidated damages may be assessed if any individual activity duration exceeds the time indicated for that activity on the Project Construction Schedule.

ARTICLE VIII. Indemnification. Contractor shall indemnify the City as set forth in Section 7-1.05 of the Standard Specifications and Engineering Standards.

ARTICLE IX. Insurance. Contractor shall provide insurance as set forth in Section 7-1.06 of the Standard Specifications and Engineering Standards. Maintenance of required insurance coverage is a material element of this Contract and failure to maintain or renew coverage or to provide evidence of renewal shall be a material breach of this Contract.

ARTICLE X. Governing Documents. It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and the bid or proposal therefore, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said bid or proposal conflicting herewith.

ARTICLE XI. Compliance with Statutes and Regulations. Contractor will be knowledgeable of and will comply with all applicable federal, state, county and city statutes, rules, regulations, ordinances and orders.

ARTICLE XII. Notice. All notices or other official correspondence relating to contractual matters between the parties hereto shall be made by personal service or by first class mail, postage prepaid, addressed to the parties as follows:

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City: City Clerk
City of Arroyo Grande
300 East Branch Street
Arroyo Grande, California 93420

Contractor: _____

ARTICLE XIII. Severability. If any part of this Contract is held invalid by a court of competent jurisdiction, the balance shall retain its full force and effect.

ARTICLE XIV. Governing Law; Jurisdiction. This Contract will be administered and interpreted under the laws of the State of California. Jurisdiction of any litigation arising from the Contract will be in San Luis Obispo County, California.

ARTICLE XV. Authorization. All officers and individuals executing this and other documents on behalf of the respective parties hereby certify and warrant that they have the capacity and have been duly authorized to execute said documents on behalf of the entities indicated.

ARTICLE XVI. Provisions Required by Law. Each and every provision of law and clause required by law to be inserted in this Contract, including but not limited to the following statutorily required provisions, shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not currently inserted, then upon application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

The following statutorily required provisions hereby apply to this contract:

Record Audit. In accordance with Government Code, Section 8546.7, records of both the City and the Contractor shall be subject to examination and audit by the Auditor General for a period of three (3) years after final payment.

Retention of Securities. Public Contract Code Section 22300 permits the substitution of securities for any monies withheld by a public agency to ensure performance under a contract, at the request and expense of the Contractor.

Claims. In accordance with the requirements of Public Contract Code Section 9204(e), a copy of Public Contract Code Section 9204 is attached hereto and made a part hereof.

Prevailing Wages and DIR Registration. In accordance with California Labor Code Section 1725.5, Contractors and Subcontractors (as defined by California Labor Code

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Section 1722.1) bidding on or engaging in the performance of any Public Works contracts in California shall be registered with the Department of Industrial Relation.

In accordance with California Labor Code Section 1770 and 1773, the City has determined that prevailing wage rates apply to this project. Copies of the prevailing rates of per diem wages applicable to this Contract are available from the California Division of Labor Statistics and Research at www.dir.ca.gov/dslr/PWP/index.htm or 455 Golden Gate Ave. 9th Floor, San Francisco, CA 94102. Any employee whose type of work is not covered by any of the classified wage rates shall be paid not less than the rate of wage listed for the classification which most nearly corresponds to the type of work performed.

Pursuant to California Labor Code Section 1775, the Contractor shall forfeit no more than \$200 per calendar day, or portion of a day, for each worker paid less than the prevailing rates for such work or craft, and the penalty shall be imposed and distributed pursuant to Section 1775.

The following Labor Code sections are hereby referenced and made a part of this Agreement:

1. Section 1775 - Penalty for Failure to Comply with Prevailing Wage Rates.
3. Section 1777.5 - Apprenticeship Requirements.
4. Section 1813 - Penalty for Failure to Pay Overtime.
5. Sections 1810 and 1811 - Working Hour Restrictions.
6. Section 1776 - Payroll Records.
7. Section 1773.8 - Travel and Subsistence Pay.

The City will not recognize any claims for additional compensation because of the payment of the wages set forth in the Contract.

In accordance with the requirements of Labor Code Section 1771.4(a)(1), this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations

In accordance with the provisions of the California Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Section 1777.1 or Section 1777.17 of the California Labor Code. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid or may have been paid to a debarred subcontractor by a contractor on the Project shall be returned to the Agency. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

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IN WITNESS WHEREOF: The parties hereto have caused this Contract to be executed the day and year first above written.

CITY OF ARROYO GRANDE

CONTRACTOR

By: _____
Mayor

By: _____

Title

ATTEST:

Director of Legislative & Information
Services / City Clerk

APPROVED AS TO FORM:

City Attorney

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Attachment: Public Contract Code Section 9204

9204.

- (a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.
- (b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.
- (c) For purposes of this section:
 - (1) “Claim” means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:
 - (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.
 - (B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.
 - (C) Payment of an amount that is disputed by the public entity.
 - (2) “Contractor” means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.
 - (3) (A) “Public entity” means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.
 - (B) “Public entity” shall not include the following:

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- (i) The Department of Water Resources as to any project under the jurisdiction of that department.
 - (ii) The Department of Transportation as to any project under the jurisdiction of that department.
 - (iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.
 - (iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.
 - (v) The Military Department as to any project under the jurisdiction of that department.
 - (vi) The Department of General Services as to all other projects.
 - (vii) The High-Speed Rail Authority.
- (4) “Public works project” means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.
- (5) “Subcontractor” means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.
- (d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.
- (B) The claimant shall furnish reasonable documentation to support the claim.
- (C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified

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mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

- (D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.
- (2) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.
- (B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.
- (C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

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- (D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.
 - (E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.
- (3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.
 - (4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.
 - (5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.
- (e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.
 - (f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe

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reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

- (g) This section applies to contracts entered into on or after January 1, 2017.
- (h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.
- (i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.

-- END OF CONTRACT --

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PAYMENT BOND (FOR LABOR AND MATERIAL)

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and

_____ as Surety, are held and firmly bound unto the City of Arroyo Grande, in the sum of _____ Dollars

(\$ _____) lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas said Principal has been awarded and is about to enter into a written contract with the City of Arroyo Grande for the work described in CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF, **“FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR REPLACEMENT PROJECT, PW 2021-09”**, which is attached hereto, made a part hereof, and to which reference is hereby made for all particulars, and is required by said City to give this bond in connection with the execution of said contract;

NOW THEREFORE, if said Principal, as Contractor in said contract, or Principal's Subcontractor, fail to pay any of the persons referred to in Section 3181 of the Civil Code of the State of California for labor performed, skills or other necessary services bestowed, site improvement made, equipment leased, or appliances, equipment implements, machinery, materials, power, provender, provisions, teams, or trucks furnished or used in, upon, for, or about the performance of the work contracted to be done, or for amounts due under the employment Insurance Act with respect to work or labor performed by any such claimant, said Surety shall pay for the same. In an amount not exceeding the sum specified above; and if suit is brought upon this bond, a reasonable attorney's fee to be fixed by the court. This bond is pursuant to the provisions of Ch 7 Div 3, Pt 4, Tit 15, of the Civil Code of the State of California, and shall insure to the benefit of any of the persons referred to in said Civil Code Section 3181, as it now exists or may hereafter be amended, so as to give a right of action to such persons or their assigns in any suit brought upon this bond. No premature payment by said City to said Principal shall exonerate any Surety unless the City Council of said City shall have actual notice that such payment is premature at the time and it is ordered by said Council, and then only to the extent that such payment shall result in loss to such Surety, but in no event more than the amount of such premature payment.

It is agreed, that any alterations in the work to be done, or increase or decrease of the material to be furnished, which may be made pursuant to the terms of said contract shall not in any way release either the Principal or Surety hereunder, nor shall any extension of time granted under the provisions of said contract release either the Principal or Surety, and notice of such alterations or extensions of the contract is hereby waived by the surety.

APPENDICES

WITNESS our hands this _____ day of _____, 2022.

Surety

Principal

ALL SIGNATURES MUST BE WITNESSED BY NOTARY (Attach appropriate jurats)

-- END OF PAYMENT BOND --

APPENDICES

FAITHFUL PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____, as Principal, and

_____ as Surety, are held and firmly bound unto the City of Arroyo Grande, in the sum of _____ Dollars

(\$ _____) lawful money of the United States, for the payment of which sum, well and truly to be made, has been awarded and is about to enter into a written contract with the City of Arroyo Grande for the work described in the CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF THE **“FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR REPLACEMENT PROJECT, PW 2021-09”** which is attached hereto, made a part hereof, and to which reference is hereby made for all particulars, and is required by said City to give this bond in connection with the execution of said contract;

NOW, THEREFORE, if said Principal shall well and truly do and perform all of the covenants and obligations of said contract on Principal's part to be done and performed at the times and in the manner specified therein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect. No premature payment by said City to said Principal shall exonerate any Surety unless the City Council of said City shall have actual notice that such payment is premature at the time it is ordered by said Council, and then only to the extent that such payment shall result in loss to such Surety, but in no event more than the amount of such premature payment.

It is agreed, that any alterations in the work to be done, or increase or decrease of the material to be furnished, which may be made pursuant to the terms of said contract shall not in any way release either the Principal or Surety hereunder, nor shall any extensions of time granted under the provisions of said contract release either the principal or surety, and notice of such alterations or extensions of the contract is hereby waived by the Surety.

WITNESS our hands this _____ day of _____, 2022.

Surety

Principal

ALL SIGNATURES MUST BE WITNESSED BY NOTARY (Attach appropriate jurats)

-- END OF FAITHFUL PERFORMANCE BOND --

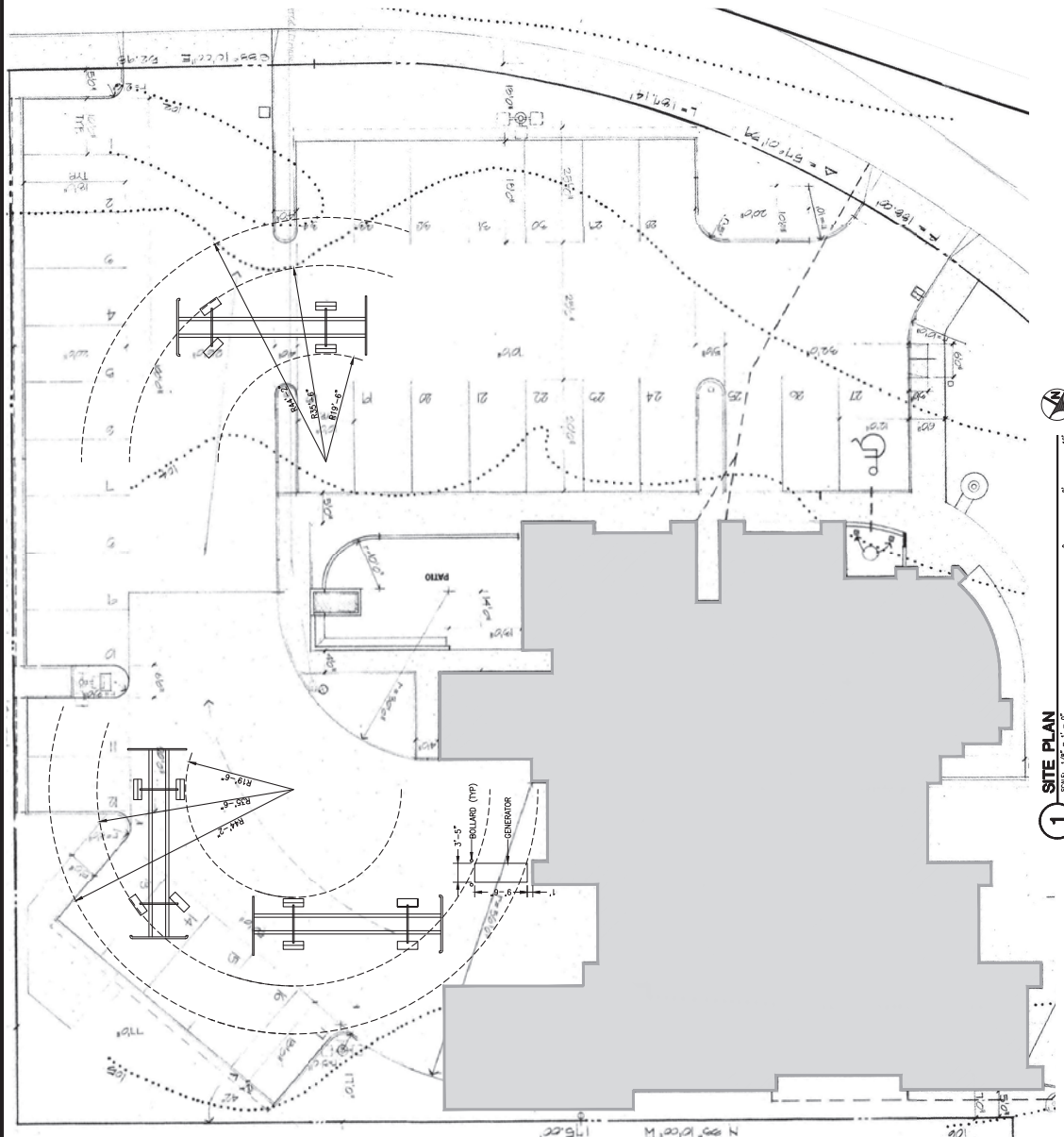
ATTACHMENT 5 - PLANS

GENERAL SHEET NOTES

A. SITE PLAN SHOWS MINIMUM FIRE TRUCK TURNING REQUIREMENTS. NEW GENERATOR SHALL PROVIDE PROPER CLEARANCES FOR FIRE TRUCK TURNING REQUIREMENTS. ALL CLEARANCES SHALL BE VERIFIED WITH CITY AND THE DEPARTMENT FOR ADDITIONAL REQUIREMENTS.

REFERENCE SHEET NOTES

1. NEW GENERATOR, TANK ENCLOSURE, AND BOLLARDS SHALL CLEAR OF FIRE TRUCK TURNING RADII.



1 SITE PLAN
SCALE: 1/8" = 1' = 0"

REFERENCE NO.
PW 2021-09
SHEET:
4 OF 16

CITY OF ARROYO GRANDE
PUBLIC WORK DEPARTMENT
EMERGENCY GENERATOR REPLACEMENT PROJECT
ELECTRICAL SITE PLAN

REVIEWED FOR CODE COMPLIANCE
04.12.2022
BRI CONSULTING GROUP

DESIGNED BY: [] DRAWN BY: [] CHECKED BY: [] SCALE: AS NOTED
PREPARED UNDER THE DIRECTION OF:
JEFFREY COSAL



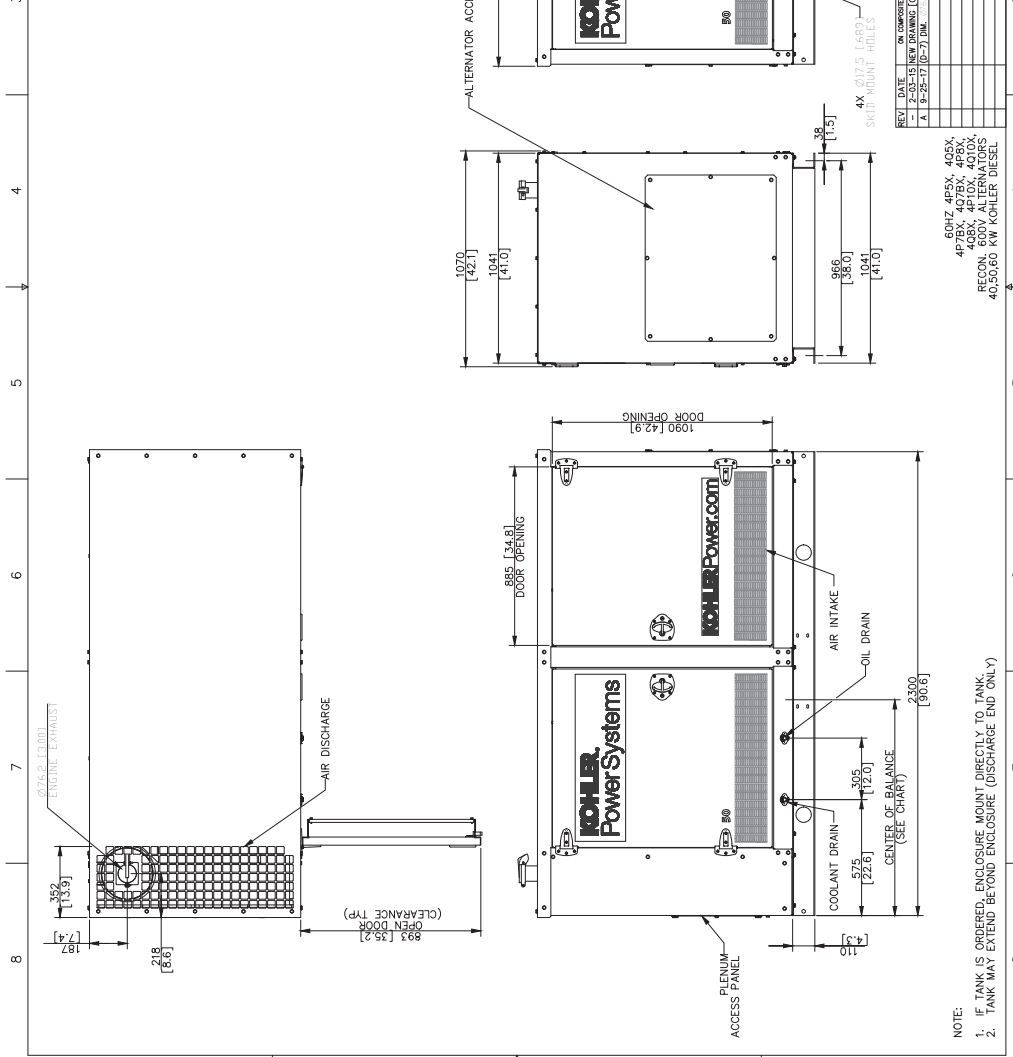
SALASOBRIEN
Expect a difference
305 South 11th Street
San Diego, CA 92101
408.282.1500 | 408.292.2585 (F)
salasobrien.com
Beverly Hills | Los Angeles | Monterey
San Diego | San Luis Obispo | Seattle



REV	DESCRIPTION	DATE	APPD. BY	DESIGN FIRM
50XCD		03/03/22		
92XCD		08/17/22		
102XCD		09/29/22		

MODEL	DESCRIPTION	ENCLOSURE WEIGHT KG (LBS)	ENCLOSED CENTER OF BALANCE
4P5X	STEEL WEATHER, 40-60KW	287 (635)	50.3
4P5X	STEEL SOUND, 40-60KW	277 (613)	50.3
4P5X	ALUMINUM SOUND, 40-60KW	187 (415)	31.0
4P75X	STEEL WEATHER, 40-60KW	287 (635)	51.1
4P75X	STEEL SOUND, 40-60KW	277 (613)	51.1
4P75X	ALUMINUM SOUND, 40-60KW	187 (415)	31.8
4P85X	STEEL WEATHER, 40-60KW	287 (635)	51.5
4P85X	STEEL SOUND, 40-60KW	277 (613)	51.5
4P85X	ALUMINUM SOUND, 40-60KW	187 (415)	32.2
4P10X	STEEL WEATHER, 40-60KW	261 (575)	52.2
4P10X	STEEL SOUND, 40-60KW	257 (569)	52.1
4P10X	ALUMINUM SOUND, 40-60KW	177 (391)	32.9

NOTES
 1. EQUIPMENT BASIS OF DESIGN. ELECTRICAL CONTRACTOR TO VERIFY THE DESIGN PERFORMANCE AND FOOTPRINT REQUIREMENTS.

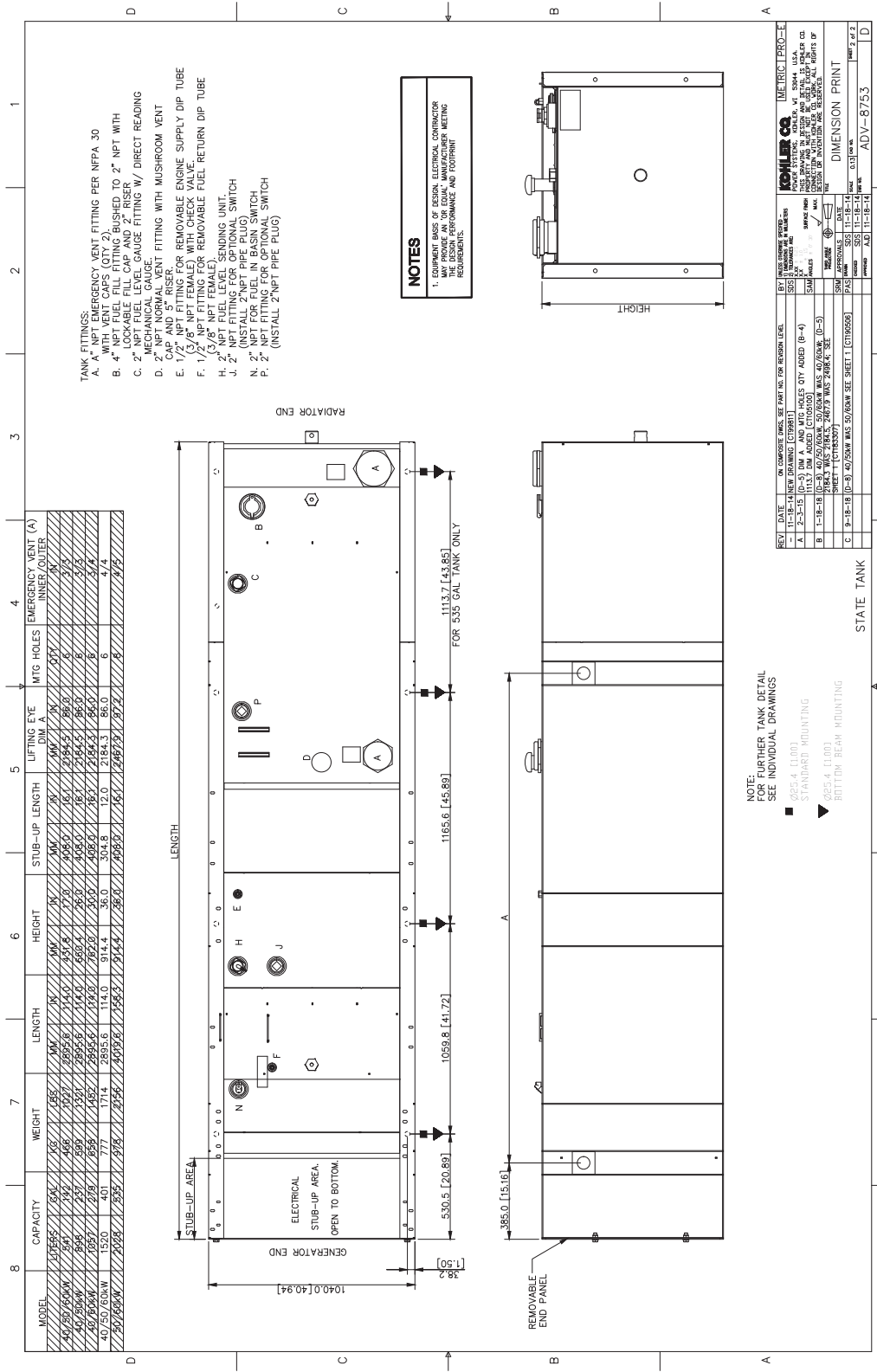


NOTE:
 1. IF TANK IS ORDERED, ENCLOSURE MOUNT DIRECTLY TO TANK.
 2. TANK MAY EXTEND BEYOND ENCLOSURE (DISCHARGE END ONLY)

REV	DATE	DESCRIPTION	BY	CHKD	DATE	SCALE	PROJECT
1	02/25/22	ISSUE FOR CONSTRUCTION	JG	JG	02/25/22	AS NOTED	EMERGENCY GENERATOR REPLACEMENT PROJECT
2	03/03/22	REVISED PER COMMENTS	JG	JG	03/03/22	AS NOTED	EMERGENCY GENERATOR REPLACEMENT PROJECT
3	08/17/22	REVISED PER COMMENTS	JG	JG	08/17/22	AS NOTED	EMERGENCY GENERATOR REPLACEMENT PROJECT
4	09/29/22	REVISED PER COMMENTS	JG	JG	09/29/22	AS NOTED	EMERGENCY GENERATOR REPLACEMENT PROJECT

1 KOHLER 60KW GENERATOR
 SCALE: N.T.S.

DATE: 03/03/22 08/17/22 09/29/22	APPD. BY: JG JG JG	DESIGN FIRM: expect a difference 305 South 11th Street San Diego, CA 92101 619.231.1900 619.231.2585 (F) salasobrien.com Sacramento Los Angeles Henderson San Diego San Luis Obispo Seattle	SEAL: 	DESIGNED BY: JG DRAWN BY: JG CHECKED BY: JG SCALE: AS NOTED PREPARED UNDER THE DIRECTION OF: JEFFREY GOSAL	HORIZ. VERT.			REFERENCE NO. PW 2021-09 SHEET: 6 OF 16
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- TANK FITTINGS:
- A. 4" NPT EMERGENCY VENT FITTING PER NFPA 30 WITH VENT CAPS (QTY 2)
 - B. 4" NPT FUEL FILL FITTING BUSHED TO 2" NPT WITH LOCKABLE FILL CAP AND 2" RISER
 - C. 2" NPT FUEL LEVEL GAUGE FITTING W/ DIRECT READING MESH FUEL LEVEL GAUGE
 - D. 2" NPT NORMAL VENT FITTING WITH MUSHROOM VENT CAP AND 5" RISER
 - E. 1/2" NPT FITTING FOR REMOVABLE ENGINE SUPPLY DIP TUBE WITH MUSHROOM VENT
 - F. 1/2" NPT FITTING FOR REMOVABLE FUEL RETURN DIP TUBE WITH MUSHROOM VENT
 - G. 3/8" NPT FEMALE
 - H. 2" NPT FUEL LEVEL SENDING UNIT
 - I. 2" NPT FUEL LEVEL SENDING UNIT SWITCH (INSTALL 2" NPT PIPE PLUG)
 - J. 2" NPT FOR FUEL IN BASIN SWITCH
 - N. 2" NPT FITTING FOR OPTIONAL SWITCH (INSTALL 2" NPT PIPE PLUG)
 - P. 2" NPT FITTING FOR OPTIONAL SWITCH (INSTALL 2" NPT PIPE PLUG)

NOTES

1. EQUIPMENT BASIS OF RESON. ELECTRICAL CONTRACTOR MAY PROVIDE AN OR EQUAL, MANUFACTURER MEETING REQUIREMENTS.

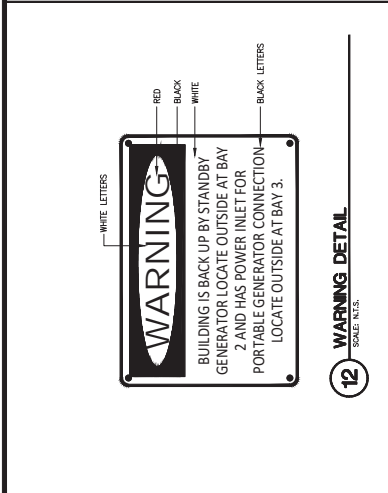
NOTE: FOR FURTHER TANK DETAIL SEE INDIVIDUAL DRAWINGS

- 4025.4 (1.00) STANDARD MOUNTING
- ▼ 4026.4 (1.00) BOTTOM BEAM MOUNTING

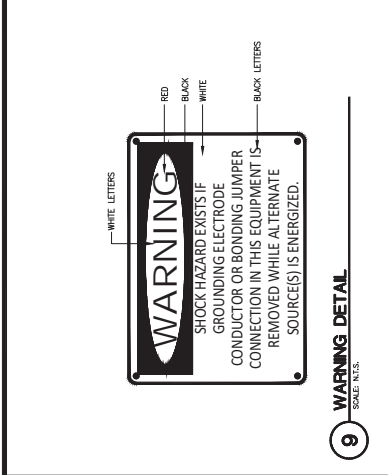
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2	11-12-14	ISSUED FOR REVIEW	SSS	SSS	11-12-14
3	11-12-14	ISSUED FOR REVIEW	SSS	SSS	11-12-14
4	11-12-14	ISSUED FOR REVIEW	SSS	SSS	11-12-14

1 72 HOURS SUB-BASE FUEL TANK

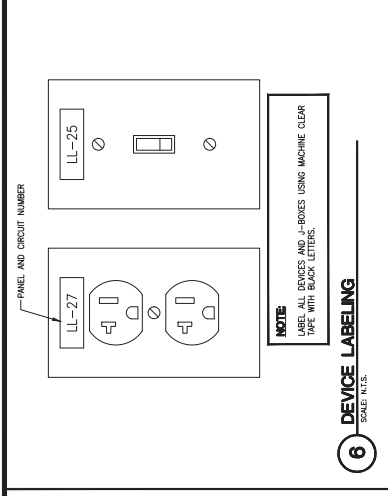
DATE: 03/03/22	APPRD. BY:	DESIGN FIRM: SALASOBIEN	SCALE: AS NOTED	DESIGNED BY: JEFFREY COSAL	CHECKED BY: AS	REVIEWED: CODE COMPLIANCE 04/12/2022 BPR CONSULTING GROUP	REFERENCE NO: PW 2021-09
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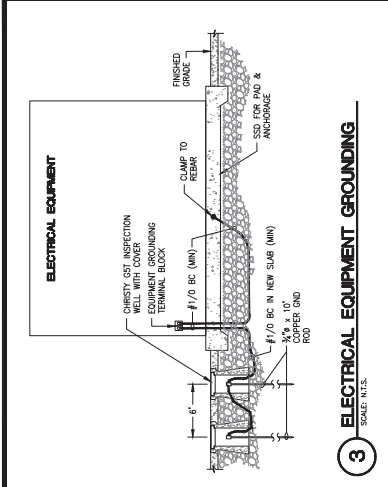
11 WARNING DETAIL
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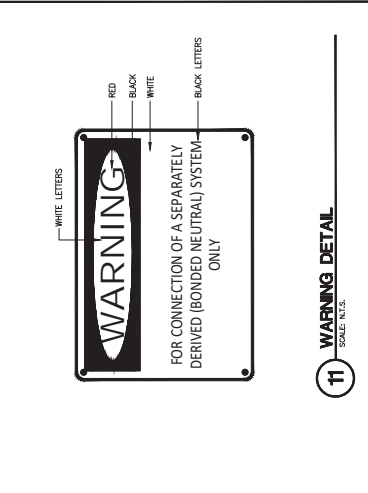
12 WARNING DETAIL
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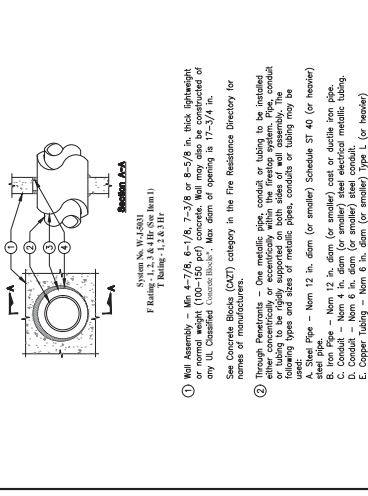
6 DEVICE LABELING
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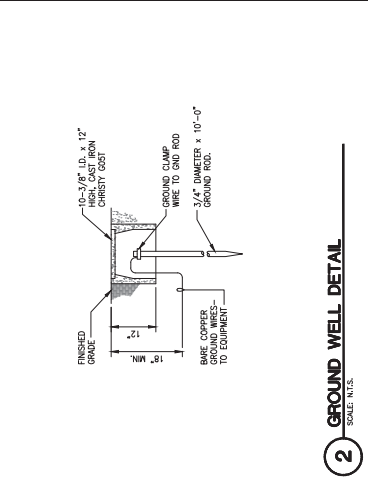
3 ELECTRICAL EQUIPMENT GROUNDING
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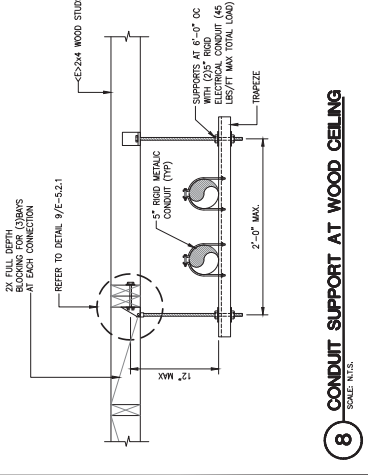
8 CONDUIT SUPPORT AT WOOD CEILING
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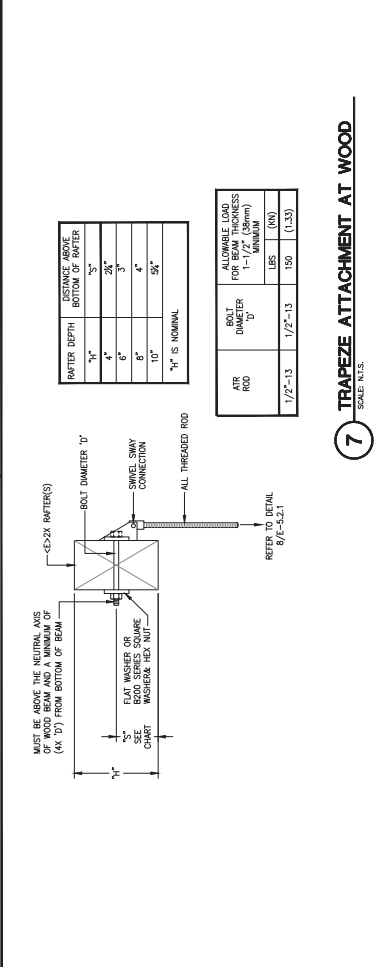
2 GROUND WELL DETAIL
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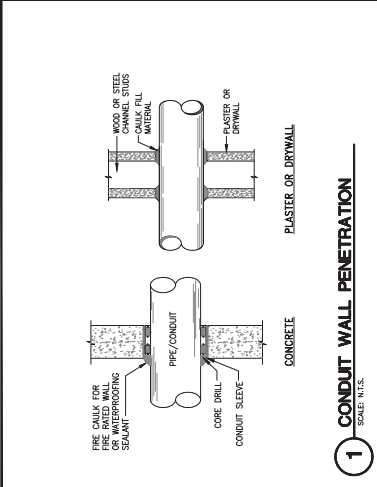
4 PIPE THROUGH CONCRETE WALL
SCALE: N.T.S.



7 TRAPEZE ATTACHMENT AT WOOD
SCALE: N.T.S.



2 GROUND WELL DETAIL
SCALE: N.T.S.



1 CONDUIT WALL PENETRATION
SCALE: N.T.S.

REV	DESCRIPTION	DATE	APP'D. BY	DESIGN FIRM	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE
50XCD		03/03/22							AS NOTED
95XCD		08/17/22							AS
100XCD		09/29/22							HORIZ.
									VERT.

<p>Salasobrien Expect a difference 305 South 11th Street San Antonio, TX 78205 Phone: 214-223-2318 salasobrien.com 408.282.1500 408.292.2585 (F)</p>
<p>CITY OF ARROYO GRANDE PUBLIC WORK DEPARTMENT EMERGENCY GENERATOR REPLACEMENT PROJECT ELECTRICAL DETAILS</p>
<p>REVIEWED CODE COMPLIANCE 04/12/2022 BPC CONSULTING GROUP</p>
<p>REFERENCE NO. PW 2021-09</p>
<p>SHEET: 11 OF 16</p>

CONCRETE

1. CONCRETE CLASSES:

CLASS	USE	28-DAY STRENGTH (PSI)	MAXIMUM HEIGHT (FT)	W/C RATIO	MAX # FLYASH/SUB
A	MAT SLAB, PAD	4000	1	145	0.5
				15-25	

- CONCRETE MIXING MUST COMPLY WITH ASTM D94.
- THOROUGHLY CONSOLIDATE ALL CONCRETE.
- REINFORCING STEEL:
 - BAR: ASTM A615, GRADE 60.
 - ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY MARKED "NOT REINFORCED"

5. TERMINATION OF REINFORCEMENT

- TERMINATE ALL BARS IN LAP, 90 DEGREE BENDS, OR WITH DOWELS INTO EXISTING CONCRETE.
- BEND TOP FOOTING BARS DOWN TO BOTTOM MAT AT ENDS.
- BEND BOTTOM FOOTING BARS UP WITH STANDARD 90 DEGREE BENDS.
- PROVIDE DOWELS INTO FOOTINGS AT WALLS OF SAME SIZE AND SPACING AS WALL TERMINAL REINFORCEMENT.
- CONCRETE SHALL BE CAST UP WITH COMPACTORS WHICH ARE 1/2% OF BAR STRENGTH OR GREATER. SUBMIT ICD REPORT.
- DO NOT FIELD BEND REINFORCING WITHOUT PRIOR APPROVAL FROM THE EGR.
 - MINIMUM CONCRETE COVER FOR REINFORCING STEEL:
 - SURFACES PLACED AGAINST EARTH 3"
 - FORMED SURFACES BELOW GRADE 2"
 - SURFACES EXPOSED TO WEATHER 2"
 - BEAM AND COLUMN BARS (INCLUDING STIRRUPS OR TIES) 1-1/2"
 - EXTERIOR WALL AT EXTERIOR FACE 1-1/2"
 - SLABS AND WALLS NOT EXPOSED TO WEATHER 1"

CONTRACTOR SUBMITTALS

- PROVIDE SHOP DRAWINGS FOR ALL REINFORCING STEEL, SHOWING BENDING, PLACEMENT DETAILS, SIZE AND LOCATION.
- PROVIDE CERTIFIED COPIES OF ALL CONCRETE MIX DESIGNS INCLUDING COMPRESSIVE STRENGTH TEST REPORTS ONE WEEK PRIOR TO INSTALLATION OF ANY CONCRETE.

TESTING:

- OWNER'S TESTING AGENCY SHALL PERFORM THE FOLLOWING TESTS AND SUBMIT TEST REPORTS TO THE JURISDICTION AND OWNER.
 - PERFORM CONCRETE TESTING FOR CONCRETE IN ACCORDANCE WITH AAI J18 SECTION 5.6. A. MAKE AND CURE THREE SPECIMEN CYLINDERS ACCORDING TO ASTM C31 AND ASTM C172 FOR EACH 50 CUBIC YARDS OF CONCRETE POURED AT SITE EACH DAY.
 - RETAIN ONE CYLINDER FOR SEVEN-DAY TEST AND TWO FOR THE 28-DAY TEST. TEST FOR COMPRESSIVE STRENGTH ACCORDING TO ASTM C31.

SPECIAL INSPECTION:

- CONCRETE PLACEMENT.
- REINFORCING STEEL.
- INSTALLATION OF ALL EMBEDDED ANCHORS, EXPANSION ANCHORS, AND EPOXY ANCHORS.

CONCRETE

4. EXTEND FOOTINGS A MINIMUM OF 12 INCHES BELOW LOWEST ADJACENT GRADE AND BEAR ONLY ON RECOMPACTED FILL OR NATIVE SOIL.

- SHAPE OF THE STRUCTURE AND MATERIALS TO BE EXCAVATED UNNECESSARILY.
- VERIFY LOCATION OF UNDERGROUND UTILITIES BEFORE EXCAVATION. NOTIFY EEP PRIOR TO EXCAVATION IN THE EVENT SUCH UTILITIES ARE ENCOUNTERED. DO NOT PLACE UTILITY LINES THROUGH OR BELOW FOUNDATIONS WITHOUT ENGINEER APPROVAL.
- UTILITIES EQUIPMENT BEHIND STEPS, ETC. SEE DRAWINGS OTHER THAN STRUCTURAL WALLS.
- PLACEMENT OF FILL AND RE-COMPACTION OF NATIVE SOILS SHALL BE IN ACCORDANCE WITH THE SOILS REPORTS LISTED.

EPOXY/ANCHORS

1. EPOXY ANCHOR INSTALLATION VALUES:

THREADED ANCHOR DIAMETER (in.)	REBAR SIZE	MIN. EMBED (in.)	STRENGTH TENSION (lbs)	STRENGTH SHEAR (lbs)	STRENGTH TENSION TEST (lbs)	STRENGTH SHEAR TEST (lbs)
3/8	#3	3"	1,000	2,175	1250	1250
1/2	#4	4"	1,700	3,750	2200	2200
5/8	#5	5"	2,400	5,000	3000	3000
3/4	#6	6"	3,150	6,800	3940	3940
1	#7	7"	3,300	8,500	4125	4125

- EPOXY SHALL BE MIXED PER ECR 3014. INSTALLATION SHALL COMPLY WITH LATEST ICD REPORT.
- STAINLESS STEEL THREADED RODS SHALL CONFORM TO ASTM A193 GRADE B7. REINFORCING BARS SHALL COMPLY WITH ASTM A615 GRADE 60.
- SPECIAL INSPECTION OF ANCHORS IS REQUIRED AND SHALL COMPLY WITH ICD CHAPTER 17A. INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSION, CONCRETE STRENGTH AND TYPICAL TENSILE STRENGTH OF CONCRETE SHALL BE PERFORMED. THE SPECIAL INSPECTOR MUST VERIFY THE INSTALLATION OF EACH ANCHOR AND SIZE BY COMPARING WITH PERSONNEL. THIS SHALL BE PERFORMED IN THE PRESENCE OF THE SPECIAL INSPECTOR.
- LOADS CORRESPOND TO 100% OF STRENGTH FOR SINGLE ANCHORS IN CRACKED CONCRETE. TENSILE STRENGTH IS 100% OF TENSILE STRENGTH. SHEAR STRENGTH IS 100% OF SHEAR STRENGTH. TENSILE STRENGTH IS 100% OF TENSILE STRENGTH. TENSILE STRENGTH IS 100% OF TENSILE STRENGTH.
- WHEN INSTALLING PULLED-IN ANCHORS IN EXISTING REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID DAMAGING OR LOOSENING THE EXISTING REINFORCING. LOCATE THE REINFORCING BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION.
- PLATE BOLTING, SIZE OF EQUIPMENT ANCHORS AND TIGHTENING TORQUE SHALL MAINTAIN OTHER ANCHORS UNLESS NOTED ON DRAWINGS. TENSILE TESTED ANCHORS SHALL MAINTAIN TENSILE STRENGTH OF 100% OF TENSILE STRENGTH. SHEAR TESTED ANCHORS SHALL MAINTAIN SHEAR STRENGTH OF 100% OF SHEAR STRENGTH. TENSILE TESTED ANCHORS SHALL MAINTAIN TENSILE STRENGTH OF 100% OF TENSILE STRENGTH. SHEAR TESTED ANCHORS SHALL MAINTAIN SHEAR STRENGTH OF 100% OF SHEAR STRENGTH.
- EPOXY ANCHORS MAY ONLY BE USED AT LOCATIONS SHOWN ON THE PLANS.

SCOPE OF WORK

MAT SLAB FOUNDATION AND SEISMIC ANCHORAGE OF GENERATOR.

GENERAL:

- THESE DRAWINGS ARE COPY REPRODUCED INSTRUMENTS OF SERVICE OF THE STRUCTURAL ENGINEER, INC. FOR USE ONLY ON THIS PROJECT UNLESS OTHERWISE NOTED.
- CONSTRUCTION DOCUMENTS REPRESENT THE ENDED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO THE SEQUENCE OF CONSTRUCTION, ORDER OF CONSTRUCTION, AND THE LOCATION OF MEASUREMENTS TO DETERMINE THE LOCATION OF ALL PERSONS AND STRUCTURES THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, OBSERVATION VISITS TO THE SITE BY THE ARCHITECT, ENGINEER, OR CONSTRUCTION MANAGER DO NOT RELIEVE THE CONTRACTOR OF SUCH RESPONSIBILITY.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY LICENSES AND PERMITS. THE CONTRACTOR MUST OBTAIN ALL STATE AND LOCAL LAWS GOVERNING THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SERVICE DURING CONSTRUCTION.
- ALL CONSTRUCTION TO BE PERFORMED IN A MANNER THAT WILL MINIMIZE IMPACT ON THE EXISTING STRUCTURE AND UTILITIES. THE CONTRACTOR SHALL MAINTAIN APPROPRIATE BARRIERS AROUND CONSTRUCTION. COORDINATE ALL OPERATIONS WITH THE OWNER.
- THE SCOPE OF WORK INCLUDES CLEANUP NECESSARY TO LEAVE THE BUILDING IN A NEAT AND USABLE CONDITION. ALL REMOVED ITEMS, MATERIALS AND DEBRIS UNLESS OTHERWISE NOTED, SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
- STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH CONSTRUCTION DOCUMENTS FROM THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL DISCREPANCIES IN FLOOR SLABS, OPENINGS IN WALLS AND FLOORS REQUIRED BY ARCHITECTURAL AND MECHANICAL FEATURES, WALLS, RAMP, STAIRS, LOBBIES, PAVING, ETC.
- THE CONTRACTOR SHALL CONSULT THE ARCHITECT FOR ELUCIDATION BEFORE PROCEEDING WITH THE WORK.
- CHANGES TO THE SIZE OR MATERIAL OF STRUCTURAL ELEMENTS AND PENETRATIONS THROUGH STRUCTURAL MEMBERS CAN NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
- OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND SPECIFICATIONS SHALL BE RESOLVED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WORK. IF CERTAIN FEATURES ARE NOT FULLY SHOWN OR CALLED FOR ON THE DRAWINGS OR SPECIFICATIONS, THEIR CONSTRUCTION SHALL BE OF THE SAME QUALITY AND MATERIALS AS SHOWN OR SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REFERENCED ONCE APPLY TO ALL SIMILAR CONDITIONS.

EXISTING CONSTRUCTION

- WORK SHOWN IS NEW UNLESS NOTED AS EXISTING (E).
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING JOB CONDITIONS, REVIEW ALL DRAWINGS, AND VERIFY DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SERVICE DURING CONSTRUCTION.
- THE REMOVAL OF EXISTING WORK SHALL BE PERFORMED WITH GREAT CARE TO PROTECT REMAINING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL MECHANICAL, ELECTRICAL, OR ARCHITECTURAL FEATURES NOT INDICATED FOR REMOVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVAL PRIOR TO THE REMOVAL OF ANY WORK.
- THE CONTRACTOR MUST SAFELY SHORE EXISTING CONSTRUCTION WHEREVER EXISTING CONSTRUCTION IS TO BE REMOVED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL SHORING AND BRACING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL SHORING AND BRACING.
- ALL FINISHES, STRUCTURAL ELEMENTS, AND ARCHITECTURAL FEATURES AFFECTED BY CONSTRUCTION TO BE REPAIRED AND/OR REPLACED ARE TO MATCH EXISTING CONSTRUCTION.

DESIGN BASIS

- APPLICABLE CODE: CALIFORNIA BUILDING CODE, 2019 EDITION.
- WIND LOADS: DESIGN WIND, 102 MPH EXPOSURE C.
- SEISMIC LOADS: RISK CATEGORY IV. SEISMIC IMPERFORMANCE FACTOR I=1.5. SEISMIC DESIGN CATEGORY 0 - DEFAULT. S_w = 0.658.

FOUNDATIONS

- ALL FOUNDATIONS SHALL BE DESIGNED IN ACCORDANCE WITH THE FOLLOWING:
 - SOIL BEARING CAPACITIES: 1500 PSF. DEAD + LIVE LOADS: 100 PSF/FT. SEISMIC LOADS: 100 PSF/FT.
 - PASSIVE PRESSURES.
- ALLOWABLE DESIGN VALUES:
 - SOIL BEARING CAPACITIES: 1500 PSF. DEAD + LIVE LOADS: 100 PSF/FT. SEISMIC LOADS: 100 PSF/FT.
 - PASSIVE PRESSURES.

CITY OF ARROYO GRANDE
PUBLIC WORKS DEPARTMENT

EMERGENCY GENERATOR REPLACEMENT PROJECT

STRUCTURAL GENERAL NOTES

REFERENCE NO. PW 2021-09

SHEET: 15 OF 16

REVIEWED
CODE COMPLIANCE
04.11.2022
BPR CONSULTING GROUP

DESIGNED BY: SCALE: AS NOTED

DRAWN BY: CHECKED BY:

PREPARED UNDER THE DIRECTION OF: HORIZ.

PARDEEP JHUITI VERT.

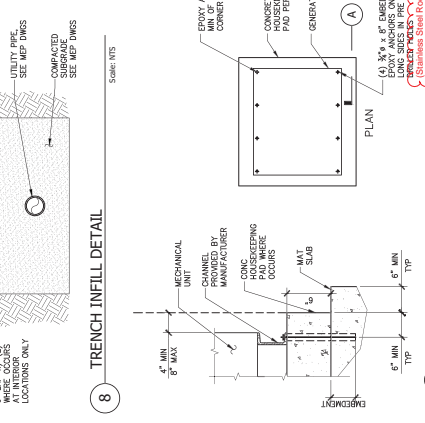
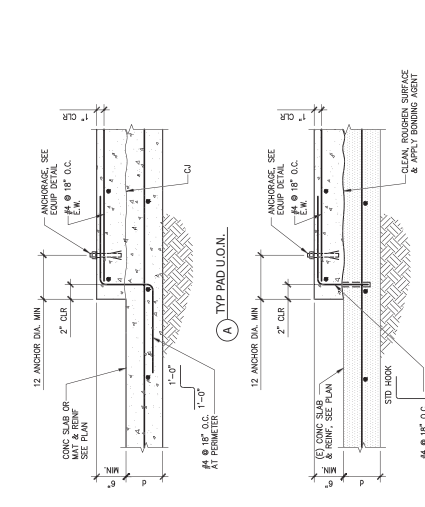
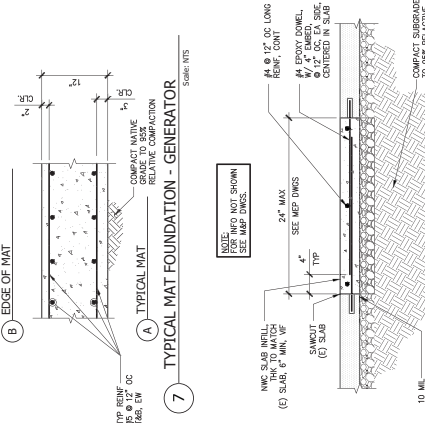
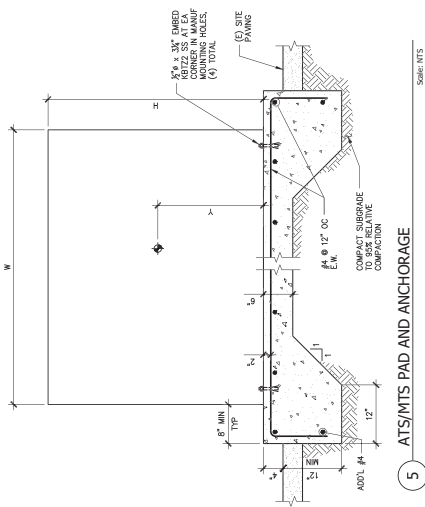
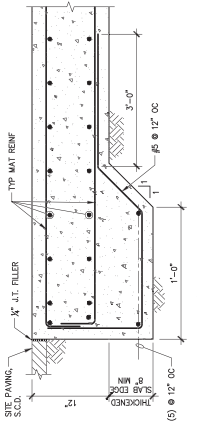
SEAL: [Professional Engineer Seal]

SALASOBRIEN
[Expect a difference]
San Diego, California 95112-2218
408.282.1500 | 408.297.2995 (F)
salasobrien.com
Oakland | Orange County | Sacramento
San Diego | San Luis Obispo | Seattle

REV.	DESCRIPTION:	DATE:	APPR. BY:	DESIGN FIRM:
5000		03/07/22		
10000		09/12/22		
10000		09/20/22		

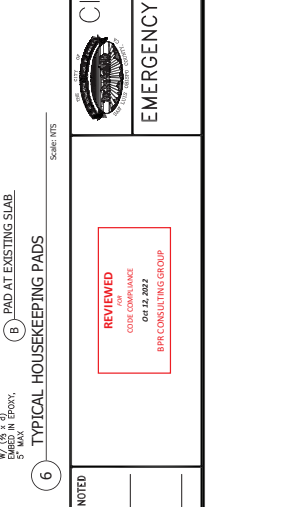
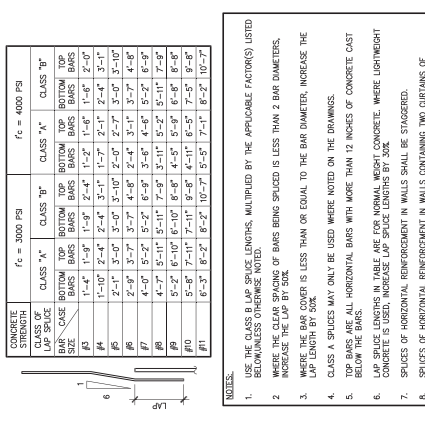
EQUIPMENT SCHEDULE

UNIT	MARK (LBS)	HEIGHT (IN)	WIDTH (IN)	DEPTH (IN)	OS-Y (IN)
ATS	1,620	95.2	49.12	36.66	44.62
MIS	1,100	66	33	32.6	32.2



CONCRETE REBAR BENDS AND HOOKS

CONCRETE STRENGTH	F _c = 3000 PSI				F _c = 4000 PSI			
	CLASS 'A'	CLASS 'B'	CLASS 'A'	CLASS 'B'	CLASS 'A'	CLASS 'B'	CLASS 'A'	CLASS 'B'
BAR CASE	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM
SIZE	1'-4"	1'-9"	1'-9"	2'-4"	1'-2"	1'-6"	1'-6"	2'-0"
#1	1'-10"	2'-4"	2'-4"	3'-1"	1'-2"	2'-1"	2'-4"	3'-1"
#2	2'-1"	3'-0"	3'-0"	3'-10"	2'-0"	2'-7"	3'-0"	3'-10"
#3	2'-8"	3'-7"	3'-7"	4'-8"	2'-4"	3'-1"	3'-7"	4'-8"
#4	3'-5"	4'-4"	4'-4"	5'-4"	3'-1"	3'-8"	4'-1"	5'-4"
#5	4'-2"	5'-1"	5'-1"	6'-1"	3'-8"	4'-5"	5'-0"	6'-1"
#6	5'-0"	6'-10"	6'-10"	8'-0"	4'-5"	5'-9"	6'-8"	8'-0"
#7	5'-8"	7'-11"	7'-11"	9'-8"	4'-11"	6'-5"	7'-5"	9'-8"
#8	6'-3"	8'-2"	8'-2"	10'-7"	5'-5"	7'-1"	8'-2"	10'-7"



ATTACHMENT 6 - CONTRACTOR BID

BID BOOK

All bid forms must be completed and submitted with your bid. Failure to submit these forms and required bid bond will be cause to reject the bid as nonresponsive. Staple all bid forms together.

THE UNDERSIGNED, agrees that they have carefully examined:

1. the location of the proposed work
2. the plans and specifications
3. read the accompanying instructions to bidders
4. any supplemental project information

and propose to furnish all:

5. materials
6. labor

to complete all the required work satisfactorily in compliance with

7. plans
8. specifications
9. special provisions

for the prices set forth in the bid item list:

BID ITEM LIST FOR FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR REPLACEMENT PROJECT SPECIFICATION NO. PW 2021-09

Item No.	Item Description	Unit of Measure	Estimated Quantity	Item Price (in figures)	Total (in figures)
BID					
1	REPLACEMENT GENERATOR	LS	1	462,357.00	462,357.00
Bid Total				\$ 462,357.00	
Company Name: Electricraft, Inc.					

The Bidder shall break down the lump sum price per the following **Schedule of Values**:
Prices listed below shall total the lump sum price above.

1.	New generator and sub-base fuel tank.	\$	110,000
2.	ATS, MTS, Panels, Appleton connectors.	\$	75,000
3.	New conduits, conductors, associated pull boxes for power and low voltage.	\$	202,857
4.	Concrete pads for new equipment.	\$	50,000
5.	Bollards – Material and installation.	\$	13,000
6.	All demolition including removal and discard old generator.	\$	10,000
7.	All permits.	\$	1,500

BID BOOK

NONCOLLUSION DECLARATION

I, Jacob P. Treder, declare that I am Vice President/CFO of Electricraft, Inc., the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone refrained from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Executed on January 25th, 2023, in San Luis Obispo, California

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

(SEAL)

Vice President/CFO
(Signature and Title of Declarant)

Subscribed and sworn to before me
this 25th day of _____, 2023

Notary Public

Company Name: _____

BID BOOK

CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

PROJECT: FIVE CITIES FIRE AUTHORITY EMERGENCY GENERATOR
REPLACEMENT PROJECT, PW 2021-09

I, Jacob P. Treder the Vice President/CFO of
(Name) (Title)

Electriccraft, Inc., declare, state and certify that:
(Contractor Name)

1. I am aware that California Labor Code §3700(a) and (b) provides:

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees."

2. I am aware that the provisions of California Labor Code §3700 require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of this Contract.

Electriccraft, Inc.
(Contractor Name)

By:  _____
(Signature)

Jacob P. Treder, Vice President/CFO
(Typed or Printed Name)

BID BOOK

Bidder Acknowledgements

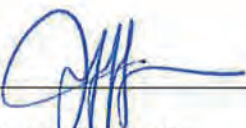
By signing below, the bidder acknowledges and confirms that this bid is based on the information contained in the contract documents, including the notice to bidders, plans, specifications, special provisions, and addendum number(s) None.

(Note: You are responsible to verify the number of addenda prior to the bid opening.)

The undersigned further agrees that in case of default in executing the required contract, with necessary bonds, within eight days, (not including Saturdays, Sundays, and legal holidays), after having received a mailed notice that the contract is ready for signature, the proceeds of the check or bond accompanying his bid will become the property of the City of Arroyo Grande.

Licensed in accordance with an act providing for the registration of contractors, License No. 468443, Expiration Date 01/31/2025.

The above statement is made under penalty of perjury, and any bid not containing this information "will be considered non-responsive and will be rejected" by the City.

Signature of Bidder 
Jacob P. Treder, Vice President/CFO
(Print Name and Title of Bidder)

Business Name (DBA): Electricraft, Inc.

Owner/Legal Name: Electricraft, Inc.

Indicate One: Sole-proprietor Partnership Corporation

List Partners/Corporate

Officers: Jon W. Treder (Wes), President/CEO
Name Title

Jacob P. Treder, Vice President/CFO
Name Title

Jon P. Treder, VP Founder
Name Title

Name Title

BID BOOK

Business Address 200 Suburban Road, Suite A

City, State, Zip Code San Luis Obispo, CA 93401

Mailing Address 200 Suburban Road, Suite A

City, State, Zip Code San Luis Obispo, CA 93401

Phone Number 805.544.8224

Fax Number 805.544.0208

Email Address info@electriccraftinc.com / jtreder@electriccraftinc.com

DIR Number 1000002190

Date Exp. 06/30/2024

BID BOOK

Reference Number 3

Customer Name & Contact Individual City of Paso Robles - Matt Thompson	
Telephone & Fax Number 805.227.7200 Ext. 7716	
Street Address, City, State, Zip Code 1000 Spring Street Paso Robles, CA 93446	
Is this similar to the project being bid or did this project include emergency generator replacement activity? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Was this contract for a public agency? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe the services provided and how this project is similar to that which is being bid: Installation of five new City supplied generators and automatic transfer switches at Lift Stations: LS4, LS7, LS8, LS11, and LS13. Each location required tying into the existing service to implement the new ATS and generator.	
Project Name: City of Paso Robles Lift Station Generators Date project completed: July 2020	

BID BOOK

ATTACH BIDDER'S BOND TO ACCOMPANY BID

Know all men by these presents:

That we _____ Electricraft, Inc. _____, AS PRINCIPAL,
and _____ Philadelphia Indemnity Insurance Company _____, AS SURETY,
are held and firmly bound unto the City of Arroyo Grande in the sum of:

_____ Ten percent of the total bid amount _____ Dollars

(10% _____) to be paid to said City or its certain attorney, its successors and assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents:

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the certain bid of the
above bounden _____ Electricraft, Inc. _____

to construct _____ Five Cities Fire Authority Emergency Generator Replacement Project _____
(insert name of street and limits to be improved or project)

dated _____ January 13, 2022 _____ is accepted by the City of Arroyo Grande, and if the

above bounden _____ Electricraft, Inc. _____, his heirs, executors, administrators, successors, and assigns shall duly enter into and execute a contract for such construction and shall execute and deliver the two bonds described within ten (10) days (not including Saturdays, Sundays, or legal holidays) after the above bounden, _____ Electricraft, Inc. _____, has received notice by and from the said City of Arroyo Grande that said contract is ready for execution, then this obligation shall become null and void; otherwise, it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, we hereunto set our hands and seals this _____ 11th _____ day of
_____ January _____, 20 _____ 23 _____.

BID BOOK

Bidder Principal: Electricraft, Inc.




Signature

1/25/23

Date

Printed Name: Jacob Treder
Title: Vice President/CFO

Surety: Philadelphia Indemnity Insurance Company

By: 

Ryan Butterfas, Attorney-in Fact

Bidder's signature is not required to be notarized. Surety's signature must be notarized.
Equivalent form may be substituted

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of Orange)

On JAN 11 2023 before me, Adelaide C. Hunter, Notary Public
Date Here Insert Name and Title of the Officer

personally appeared Ryan Butterfas
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature A. Hunter
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____ Document Date: _____

Number of Pages: _____ Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

Corporate Officer — Title(s): _____

Partner — Limited General

Individual Attorney in Fact

Trustee Guardian or Conservator

Other: _____

Signer Is Representing: _____

Signer's Name: _____

Corporate Officer — Title(s): _____

Partner — Limited General

Individual Attorney in Fact

Trustee Guardian or Conservator

Other: _____

Signer Is Representing: _____

PHILADELPHIA INDEMNITY INSURANCE COMPANY

One Bala Plaza, Suite 100
Bala Cynwyd, PA 19004-0950

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS: That **PHILADELPHIA INDEMNITY INSURANCE COMPANY** (the Company), a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, does hereby constitute and appoint **Linda D. Coats, Matthew J. Coats, Summer Reyes and Ryan Butterfas of Coats Surety Insurance Services, Inc**, its true and lawful Attorney-in-fact with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business and to bind the Company thereby, in an amount not to exceed **\$50,000,000**.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of PHILADELPHIA INDEMNITY INSURANCE COMPANY on the 14th of November, 2016.

RESOLVED: That the Board of Directors hereby authorizes the President or any Vice President of the Company: (1) Appoint Attorney(s) in Fact and authorize the Attorney(s) in Fact to execute on behalf of the Company bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof and to attach the seal of the Company thereto; and (2) to remove, at any time, any such Attorney-in-Fact and revoke the authority given. And, be it

FURTHER RESOLVED: That the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney or certificate relating thereto by facsimile, and any such Power of Attorney so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

IN TESTIMONY WHEREOF, PHILADELPHIA INDEMNITY INSURANCE COMPANY HAS CAUSED THIS INSTRUMENT TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY ITS AUTHORIZED OFFICE THIS 5TH DAY OF MARCH, 2021.

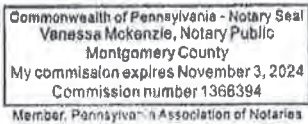
(Seal)



John Glomb, President & CEO
Philadelphia Indemnity Insurance Company

On this 5th day of March, 2021 before me came the individual who executed the preceding instrument, to me personally known, and being by me duly sworn said that he is the therein described and authorized officer of the **PHILADELPHIA INDEMNITY INSURANCE COMPANY**; that the seal affixed to said instrument is the Corporate seal of said Company; that the said Corporate Seal and his signature were duly affixed.

Notary Public:



residing at:

Bala Cynwyd, PA

My commission expires:

November 3, 2024

I, Edward Sayago, Corporate Secretary of PHILADELPHIA INDEMNITY INSURANCE COMPANY, do hereby certify that the foregoing resolution of the Board of Directors and the Power of Attorney issued pursuant thereto on the 5th day March, 2021 are true and correct and are still in full force and effect. I do further certify that John Glomb, who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of PHILADELPHIA INDEMNITY INSURANCE COMPANY.

In Testimony Whereof I have subscribed my name and affixed the facsimile seal of each Company this 11th day of January, 2023



Edward Sayago, Corporate Secretary
PHILADELPHIA INDEMNITY INSURANCE COMPANY

BID BOOK

Home



CONTRACTORS STATE LICENSE BOARD



Contractor's License Detail for License # 468443

DISCLAIMER: A license status check provides information taken from the CSLB license database. Before relying on this information, you should be aware of the following limitations.

- ▶ CSLB complaint disclosure is restricted by law (B&P 7124.6) If this entity is subject to public complaint disclosure click on link that will appear below for more information. Click [here](#) for a definition of disclosable actions.
- ▶ Only construction related civil judgments reported to CSLB are disclosed (B&P 7071.17)
- ▶ Arbitrations are not listed unless the contractor fails to comply with the terms
- ▶ Due to workload, there may be relevant information that has not yet been entered into the board's license database

Data current as of 1/12/2023 1:45:46 PM

Business Information

ELECTRICRAFT INC
200 SUBURBAN RD STE A
SAN LUIS OBISPO, CA 93401
Business Phone Number:(805) 544-8224

Entity Corporation
Issue Date 01/22/1985
Expire Date 01/31/2025

License Status

This license is current and active.

All information below should be reviewed.

Classifications

- ▶ C10 - ELECTRICAL
- ▶ C11 - ELEVATOR INSTALLATION

License Information

Contractor's Bond

This license filed a Contractor's Bond with CONTRACTORS BONDING AND INSURANCE COMPANY

Bond Number: CA1212

Bond Amount: \$25,000

Effective Date: 01/01/2023

[Contractor's Bond History](#)

Bond of Qualifying Individual

- ▶ The qualifying individual JON PHILLIP TREDER certified that he/she owns 10 percent or more of the voting stock/membership interest of this company; therefore, the Bond of Qualifying Individual is not required
Effective Date: 01/01/2011
[BQI's Bond History](#)
- ▶ The qualifying individual JON WESLEY TREDER certified that he/she owns 10 percent or more of the voting stock/membership interest of this company; therefore, the Bond of Qualifying Individual is not required
Effective Date: 09/14/2012

Insurance

This license has workers compensation insurance with the SERVICE AMERICAN INDEMNITY COMPANY

Policy Number:SAMTWC10021500

Effective Date: 10/01/2022

Expire Date: 10/01/2023

[Workers' Compensation History](#)



APPLICATION FOR PUBLIC WORKS CONTRACTOR REGISTRATION

Registration Information

Type: Public Works

Period: 08/05/2021 06/30/2024

Contractor Information

Contractor Name: ELECTRICRAFT, INC.

Trade Name:

License Type Number: 1000002190

Contractor Physical Address

Physical Business Country: United States of America

Physical Business City/ Province: SAN LUIS OBISPO

Physical Business Address: 200 SUBURBAN ROAD, SUITE A

Physical Business State: CA

Physical Business Postal Code: 93401

Contractor Mailing Address

Mailing Country: United States of America

Mailing City /Province: SAN LUIS OBISPO

Mailing Address: 200 SUBURBAN ROAD, SUITE A

Mailing State: CA

Mailing Postal Code: 93401

Contact Info

Daytime Phone:

Daytime Phone Ext.:

Mobile Phone:

Business Email: ctreder@electriccraftinc.com

Applicant's Email: ctreder@electriccraftinc.com

Workers' Compensation

Professional Employer Organization (PEO)

Do you lease employees through Professional Employer Organization? No

Workers' Compensation Overview

Carrier: TRAVELERS
Policyholder Name: ELECTRICRAFT, INC.
Policy Number: UB3L48592A

Inception Date: 10/01/2020
Expiration Date: October 1, 2021

Certification

Yes I certify that I do not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award

I certify that the contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

Yes I certify that one of the following is true: (1) I am licensed by the Contractors State License Board (CSLB) in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code; or (2) my business or trade is not subject to licensing by the CSLB.

I understand refunds are not authorized

I, Carrie Treder, the undersigned, am , ELECTRICRAFT, INC. with the authority to act for and on behalf of the above named contractor. I certify under penalty of perjury that all of the above information provided is true and correct. I further acknowledge that any untruthful information provided in this application could result in the certification being canceled.

I certify this on: 12:42 PM

Legal Entity Information

Legal Entity Type: Corporation

Name: ELECTRICRAFT, INC.

Request for Taxpayer Identification Number and Certification

**Give Form to the
 requester. Do not
 send to the IRS.**

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

See Specific Instructions on page 3.
 Print or type.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. ELECTRICRAFT, INC.	
2 Business name/disregarded entity name, if different from above _____	
3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only one of the following seven boxes. <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input checked="" type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____ Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner. <input type="checkbox"/> Other (see instructions) ▶ _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
5 Address (number, street, and apt. or suite no.) See instructions. 200 SUBURBAN ROAD, SUITE A	Requester's name and address (optional) _____
6 City, state, and ZIP code SAN LUIS OBISPO, CA 93401	
7 List account number(s) here (optional) _____	

Part I Taxpayer Identification Number (TIN)											
Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> , later. Note: If the account is in more than one name, see the instructions for line 1. Also see <i>What Name and Number To Give the Requester</i> for guidelines on whose number to enter.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Social security number</td> </tr> <tr> <td style="text-align: center;">[] [] [] - [] [] - [] [] [] []</td> <td></td> </tr> <tr> <td colspan="2" style="text-align: center;">OR</td> </tr> <tr> <td colspan="2" style="text-align: center;">Employer identification number</td> </tr> <tr> <td style="text-align: center;">7 7 - 0 0 5 0 2 7 0</td> <td></td> </tr> </table>	Social security number		[] [] [] - [] [] - [] [] [] []		OR		Employer identification number		7 7 - 0 0 5 0 2 7 0	
Social security number											
[] [] [] - [] [] - [] [] [] []											
OR											
Employer identification number											
7 7 - 0 0 5 0 2 7 0											

Part II Certification	
Under penalties of perjury, I certify that:	
1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and 3. I am a U.S. citizen or other U.S. person (defined below); and 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.	
Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.	

Sign Here	Signature of U.S. person ▶	Date ▶ <u>7/7/2022</u>
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
9/29/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Leavitt Central Coast Insurance Services, Inc. License #0G39781 950 East Blanco Rd, Suite 103 Salinas CA 93901	CONTACT NAME: Candi Renteria PHONE (A/C, No, Ext): (831) 424-6404 E-MAIL ADDRESS: candida-renteria@leavitt.com	FAX (A/C, No): (831) 424-0140
	INSURER(S) AFFORDING COVERAGE	
INSURED ELECTRICRAFT INC. 200 Suburban Rd Suite A San Luis Obispo CA 93401	INSURER A: Travelers Indemnity Co of CT NAIC # 25682	
	INSURER B: Travelers Property Casualty Co of Ameri 25674	
	INSURER C: Service American Indemnity Company 39152	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER: 22-23 MASTER (WC ONLY)** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER			CO7K351438	4/1/2022	4/1/2023	EACH OCCURRENCE \$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000
							MED EXP (Any one person) \$ 5,000
							PERSONAL & ADV INJURY \$ 1,000,000
							GENERAL AGGREGATE \$ 2,000,000
							PRODUCTS - COMP/OP AGG \$ 2,000,000
							\$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			8103N17837A	4/1/2022	4/1/2023	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
							BODILY INJURY (Per person) \$
							BODILY INJURY (Per accident) \$
							PROPERTY DAMAGE (Per accident) \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			CUP7K371505	4/1/2022	4/1/2023	EACH OCCURRENCE \$ 13,000,000
							AGGREGATE \$ 13,000,000
							\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N If yes, describe under DESCRIPTION OF OPERATIONS below			SAMTWC10021500	10/1/2022	10/1/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER
							E.L. EACH ACCIDENT \$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
A	INSTALLATION FLOATER EQUIPMENT FLOATER			CO7K351438	4/1/2022	4/1/2023	LIMIT \$200,000
				CO7K351438	4/1/2022	4/1/2023	LIMIT \$100,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: All CA Operations

CERTIFICATE HOLDER jwright@electriccraftinc.com Proof Of Insurance	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE Francis Svedas/CARENT <i>Francis Svedas</i>

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WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT-CALIFORNIA

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be 0.02% of the California workers' compensation premium otherwise due on such remuneration.

Schedule

Person or Organization

Job Description

Blanket Waiver of Subrogation as required by written contract

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective 10/01/2022
Insured Electricraft Inc

Policy No. SAMTWC10021500
Insurance Company Service American Indemnity Company

Endorsement No.

Countersigned By

Francis C. Lueders

ATTACHMENT 7 – PUBLIC CONTRACT CODE SECTION 9204

Attachment: Public Contract Code Section 9204

- (a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.
- (b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.
- (c) For purposes of this section:
 - (1) “Claim” means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:
 - (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.
 - (B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.
 - (C) Payment of an amount that is disputed by the public entity.
 - (2) “Contractor” means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.
 - (3) (A) “Public entity” means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.
 - (B) “Public entity” shall not include the following:
 - (i) The Department of Water Resources as to any project under the jurisdiction of that department.
 - (ii) The Department of Transportation as to any project under the jurisdiction of that department.
 - (iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

- (iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.
 - (v) The Military Department as to any project under the jurisdiction of that department.
 - (vi) The Department of General Services as to all other projects.
 - (vii) The High-Speed Rail Authority.
- (4) “Public works project” means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.
- (5) “Subcontractor” means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.
- (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.
- (B) The claimant shall furnish reasonable documentation to support the claim.
- (C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.
- (D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.
- (2) (A) If the claimant disputes the public entity’s written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

- (B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.
- (C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.
- (D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.
- (E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.
- (3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.
- (4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.
- (5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The

subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

- (e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.
- (f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.
- (g) This section applies to contracts entered into on or after January 1, 2017.
- (h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.
- (i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.











AG- PW 2022-09 (350-5473) - FCFA Generator Contract Electricraft signed reduced

Final Audit Report

2023-03-22

Created:	2023-03-22
By:	Jessica Matson (jmatson@arroyogrande.org)
Status:	Signed
Transaction ID:	CBJCHBCAABAACNKNmOo7CDhhsleRcs8-kdtzSsJHcRzz

"AG- PW 2022-09 (350-5473) - FCFA Generator Contract Electricraft signed reduced" History

-  Document created by Jessica Matson (jmatson@arroyogrande.org)
2023-03-22 - 8:22:53 PM GMT - IP address: 68.186.37.2
-  Document emailed to Jessica Matson (jmatson@arroyogrande.org) for signature
2023-03-22 - 8:29:08 PM GMT
-  Document emailed to Whitney McDonald (wmcdonald@arroyogrande.org) for signature
2023-03-22 - 8:29:08 PM GMT
-  Document emailed to isaac.rosen@bbklaw.com for signature
2023-03-22 - 8:29:08 PM GMT
-  Document e-signed by Jessica Matson (jmatson@arroyogrande.org)
Signature Date: 2023-03-22 - 8:29:27 PM GMT - Time Source: server- IP address: 68.186.37.2
-  Email viewed by isaac.rosen@bbklaw.com
2023-03-22 - 8:34:54 PM GMT - IP address: 91.132.187.233
-  Email viewed by Whitney McDonald (wmcdonald@arroyogrande.org)
2023-03-22 - 8:38:35 PM GMT - IP address: 174.194.203.137
-  Document e-signed by Whitney McDonald (wmcdonald@arroyogrande.org)
Signature Date: 2023-03-22 - 8:38:52 PM GMT - Time Source: server- IP address: 174.194.203.137
-  Signer isaac.rosen@bbklaw.com entered name at signing as Isaac Rosen
2023-03-22 - 10:30:53 PM GMT - IP address: 74.116.243.2
-  Document e-signed by Isaac Rosen (isaac.rosen@bbklaw.com)
Signature Date: 2023-03-22 - 10:30:55 PM GMT - Time Source: server- IP address: 74.116.243.2

 Agreement completed.

2023-03-22 - 10:30:55 PM GMT

Names and email addresses are entered into the Acrobat Sign service by Acrobat Sign users and are unverified unless otherwise noted.