DOCUMENT 00 9111

ADDENDUM NO. 3

Date: August 27, 2026

ROSAMOND COMMUNITY SERVICES DISTRICT

ADMIN BUILDING STANDBY GENERATOR REPLACEMENT

3179 35th Street West, Rosamond, CA 93560
Project No. 12609, 22609

Item No. 1: The Contract Document "ADMIN GENERATOR IFB SUBMITTAL - SPECIFICATION.pdf" is revised and re-released as "ADMIN GENERATOR ADDENDUM-02 SUBMITTAL - SPECIFICATION.pdf"

Please find the following changes in the revised document:

1) Section "Division 1" was duplicated and included twice in previous release. The second "Division 1" has been removed and replaced with section titled "Technical Specifications".
2) Document 00 0101, Title Page 1 , changed Bid Opening Date from "9/1/2026" to "9/15/2026".
3) Document 00 0101, Title Page 1, changed "Required Contractor's License Classification: Class A" to "Required Contractor's License Classification: Class A, B or C-10".
4) Document 00 0101, Title Page 3, Mandatory Pre-Bid Jobwalk date, added "OR Monday 8/31/2026 at 10:00 A.M." Contractors who attended the 8/13/2026 job walk are not required to attend 8/31/2026 job walk.
5) Document 00 1113, Notice to Contractors, Paragraph 1.05, added to the end of paragraph: "or Monday, August 31, 2026, at 10:00 a.m.".
6) Document 00 1113, Notice to Contractors, Paragraph 2.01, change ". . A California A. . ." to ". . A California Class A, Class B or Class C-10 . . .".

Item No. 2: Sheet E-04, change ATS parameter "35K AIC" to "65K AIC". Refer to Technical Specification 263626, Part 2, A.1, the automatic transfer switch withstand current rating shall be no less than 65,000 AIC.

The following Addenda were issued, modifying the Project Manual:
Addendum No. 1, issued on August 20, 2026.
Addendum No. 2, issued on August 24, 2026.
Addendum No. 3, issued on August 27, 2026.

Patrick Tsang, PE
Architect/Engineer

Contractor

Signature

Date

Name/Title

attached: ADMIN GENERATOR ADDENDUM-02 SUBMITTAL - SPECIFICATION.pdf

AECOM

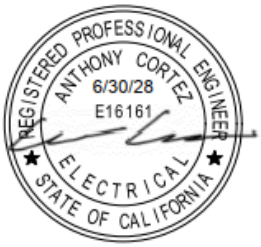
ROSAMOND COMMUNITY SERVICES DISTRICT

Rosamond, California

BID DOCUMENTS & TECHNICAL SPECIFICATIONS

Admin Building Standby Generator Replacement

August 2026



DOCUMENT 00 0101

PROJECT MANUAL

RCSD ADMIN BUILDING GENERATOR REPLACEMENT

Bid Opening Date
TUESDAY, 9/15/2026 at 2:00 P.M.

Rosamond Community Services District

RCSD Project Number: 12609, 22609
Approved: Board of Directors
Required Contractor's License Classification: Class A, B, or C10
Construction Estimate: $391,000

Rosamond Community Services District
3179 35th Street West
Rosamond, CA 93560

MANDATORY PRE-BID JOBWALK

DATE: TUESDAY, 8/13/2026, at 10:00 A.M. OR MONDAY, 8/31/2026 at 10:00 A.M.

INTERESTED CONTRACTORS SHALL ASSEMBLE AT THE ROSAMOND COMMUNITY SERVICES DISTRICT OFFICE LOCATED AT

3179 35TH Street West,
Rosamond, CA 93560

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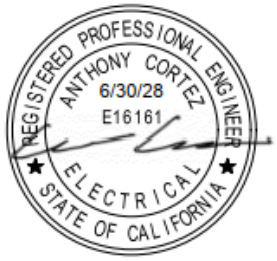
DOCUMENT 00 0105

CERTIFICATIONS PAGE

PROJECT TITLE:	**ADMIN BUILDING STANDBY GENERATOR REPLACEMENT**
LOCATION:	3179 35TH Street West, Rosamond, CA 93560
RCSD PROJECT NUMBER(S):	12609, 22609
OWNER:	ROSAMOND COMMUNITY SERVICES DISTRICT 3179 35TH STREET WEST ROSAMOND, CA 93560 TEL: 661-256-3411 FAX: 661-256-2557
OWNER'S PROJECT MANAGER:	General Manager or its Designee
CONSULTANT/PROJECT ENGINEER:	AECOM Technical Services, Inc. 5001 E. Commercenter Drive, Suite 100 Bakersfield, CA 93309



Anthony Cortez, PE

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DOCUMENT 00 0110

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DOCUMENT 00 1113
NOTICE TO CONTRACTORS

ARTICLE 1 – INVITATION TO BID

1.01 **Notice Inviting Bids:** Rosamond Community Services District (hereinafter "Owner") will receive sealed Bids at the Rosamond Community Services District office, **3179 35th Street West, Rosamond, California 93560** until **2:00 p.m. on Tuesday, September 15, 2026,** for the following public work:

ADMIN BUILDING STANDBY GENERATOR REPLACEMENT

1.02 **Project Description:** The project, in general, consists of replacing the existing standby generator at the RCSD Administration Building.

Work shall be completed within **Two hundred sixty (260) Working Days** from the date when the Contract Time commences to run.

1.03 **Procurement of Bidding Documents:** Interested Bidders shall access the bid documents via the link at https://www.rosamondcsd.com/engineering-planning. It is the sole responsibility of the Bidder to contact the Owner at 661-256-3411 to verify that all addenda have been received. Addenda may be obtained from the Owner's website or from the Owner. Bid Proposals that do not contain a signed cover sheet for all addenda may, in the sole discretion of the Owner, be rejected as non-responsive.

1.04 **Instructions:** Bidders shall refer to Document 00 2113 Instructions to Bidders for the required documents and items to be submitted in a sealed envelope. Sealed proposals will be received on the date and time indicated in Paragraph 1.01, at the following location:

Delivered in person, by courier service or by mail to the Rosamond Community Services District, 3179 35th Street West, Rosamond, CA 93560.

It is the sole responsibility of the Bidder to arrive at the Owner's lobby at least ten (10) minutes prior to the bid receipt deadline to receive a test time stamp. The time stamp clock in the main lobby of the Owner shall be the official time. Any bid received at or after **2:00 p.m.** will be returned unopened. Soon after **2:00 p.m.** the bids will be publicly opened and read in the Board Chambers at the Owner's address listed above.

1.05 **Mandatory Pre-Bid Site Visit: Owner will conduct a Mandatory Pre-Bid Conference and Site Visit at:**

Rosamond Community Services District Office
3179 35th Street West
Rosamond, CA
on
Tuesday August 4, 2026, at 10:00 a.m. or Monday August 31, 2026, at 10:00 a.m.

1.06 **Bid Preparation Cost:** Bidders are solely responsible for the cost of preparing their Bids.

1.07 **Reservation of Rights:** Owner 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.

ARTICLE 2 – LEGAL REQUIREMENTS

2.01 **Required Contractor's License(s):** A California **Class A, Class B, or Class C-10** contractor's license is required to bid this contract. Joint ventures must secure a joint venture license prior to award of this Contract.

2.02 **Substitution of Securities:** Owner will permit the successful bidder to substitute securities for any retention monies withheld to ensure performance of the contract, as set forth in Document 00 6290 Escrow Agreement For Security Deposits In Lieu Of Retention and incorporated herein in full by this reference, in accordance with Section 22300 of the California Public Contract Code.

2.03 **Prevailing Wage Laws:** Pursuant to Part 7 of Division 2 of the California Labor Code (Section 1720 et seq.) the Contractor shall pay not less than the prevailing rate of wages to workers on this project as determined by the Director of the California Department of Industrial Relations. The Director's schedule of prevailing rates is on file and open for inspection at the Rosamond Community Services District, 3179 35th Street West, Rosamond CA, 93560, and is incorporated herein by this reference.

This project may be subject to monitoring and enforcement by the Department of Industrial Relations (DIR), including the obligation to submit certified payroll records directly to the DIR Compliance Monitoring Unit (CMU) at least monthly in a format prescribed by the Labor Commissioner. The contractor must post job site notices as prescribed by DIR regulation.

2.04 **Required Registration with the State of California Department of Industrial Relations:** Pursuant to California Labor Code 1725.5, all contractors and subcontractors must be registered with the Department of Industrial Relations (DIR) in order to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any public work contract. Detailed information about contractor's responsibilities and online registration may be obtained on the State of California Department of Industrial Relations, Public Works website, http://www.dir.ca.gov/Public-Works/PublicWorks.html

2.05 For projects **without** Federal Funding, each Bidder must be licensed, as required by law, at the time the bid is submitted. For projects **with** Federal Funding, each Contractor must be licensed at the time the Contract is awarded.

END OF DOCUMENT

DOCUMENT 00 2113
INSTRUCTIONS TO BIDDERS

Bids are requested by the Rosamond Community Services District ("hereinafter "Owner"), for a general construction contract, or work described in general, as set forth in Document 00 1113 (Notice to Contractors), and the following additional terms.

ARTICLE 1 - PROCEDURES FOR SUBMISSION OF BIDS

1.01 Required Pre-Bid Conference and Site Visit

A. Owner may conduct Pre-Bid Conference and Site Visit at the date, time and location indicated in Document 00 1113 (Notice to Contractors), to consider such matters as Bidders may request and perform a Site Visit immediately following, at the Site. If the Notice to Contractors specifies a required Site Visit, Bidders must attend Pre-Bid Conference and Site Visit and sign an attendance roster as a condition to bidding.

B. The Site Visit may be the Bidders' only opportunity to investigate conditions at the Site. Other Pre-Bid Site Visits may be scheduled at Owner's sole discretion, depending on staff availability.

1.02 Required Pre-Bid Investigations

A. Prior to submission of Bid, Bidder must conduct a careful examination of Bidding Documents and understand the nature, extent, and location of Work to be performed. Refer to Document 00 7200 (General Conditions) on required pre-bid investigations.

1.03 Bidder Questions and Answers

A. Bidders must direct all questions about the meaning or intent of Bidding Documents to Owner in writing. Interpretations or clarifications considered necessary by Owner in response to such questions will be issued by written Addenda. It is the sole responsibility of the Bidder to contact Owner at 661-256-3411 to verify that all addenda have been received. Addenda will only be available from ARC Document Solutions. The owner may not answer questions received less than ten Calendar Days prior to the date for opening Bids.

B. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect, and Bidders shall not rely on oral statements.

1.04 Addenda

A. Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner. It is the sole responsibility of the Bidder to contact Owner at 661-256-3411, to verify that all addenda have been received. Bid Proposals that do not contain a signed cover sheet for all addenda may, in the sole discretion of the Owner, be rejected as non-responsive. Addenda may also be acknowledged by number in Document 00 4100 (Bid Form). All addenda shall be part of the Contract Documents. A complete listing of Addenda may be secured from Owner.

ARTICLE 2 - RECEIPT OF BIDS:

2.01 Date and Time

A. Sealed Bids will be received by the Owner until the date and time indicated in Document 00 1113 (Notice to Contractors). All Bid envelopes will be time-stamped to reflect their submittal time. Owner shall reject all Bids received after the specified time and will return such Bids to Bidders unopened. Bidders must submit Bids in accordance with this Document 00 2113.

2.02 Bid Submission:

A. Owner will receive Bids in a sealed envelope, containing the required items described herein.

B. Bidders should mark their Bid envelope using the name, address, identifying information and project number, indicated in Document 00 1113 (Notice to Contractors).

2.03 Required Contents of Bid Submittal Envelope

A. Document 00 4100 (Bid Form). Bidders must submit Bids on Document 00 4100 (Bid Form) in accordance with the provisions of Document 00 4100. Bidders must complete all Bid items and supply all information required by Bid documents and specifications.

B. Document 00 4411 (Bond Accompanying Bid). Bidders must submit Document 00 4411 (Bond Accompanying Bid) accompanied by a cashier's check, certified check (certified without qualification and drawn on a solvent bank of the State of California or a National Bank doing business in the State of California) or completed form of Document 00 4411 of not less than 10% of the base Bid, payable to Owner and completed in accordance with the provisions of Document 00 4411.

C. Document 00 4412 (Bidder Registration and Experience Form). Bidders must submit Document 00 4412 (Bidder Registration and Experience Form), completed in accordance with the provisions of Document 00 4412.

D. Document 00 4430 (Subcontractors List). Bidders must submit Document 00 4430 (Subcontractors List) completed in accordance with the provisions of Document 00 4430. The Subcontractors List must include the names and addresses of all subcontractors for those subcontractors who will perform any portion of work, including labor, rendering of service, or specially fabricating and installing a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in excess of one half of one percent (0.5%) of the total Bid amount. Any violation of this requirement may result in a Bid being deemed non-responsive and not being considered.

E. Document 00 4452 (Non-Collusion Affidavit). Bidders must submit Document 00 4452 (Non-Collusion Affidavit) completed in accordance with the provisions of Document 00 4452.

F. Document 00 4455 (Bidder Certifications). Bidders must submit Document 00 4455 (Bidder Certification) completed in accordance with the provisions of Document 00 4455.

G. Document 00 4453 (Iran Contracting Act Certification) Bidders must submit Document 00 4453 (Iran Contracting Act Certification) in accordance with Public Contract Code Sections 2200 et seq.

ARTICLE 3 - BID OPENING AND EVALUATION

3.01 Determination of Apparent Low Bidder

A. Owner will open each Bidders' Envelope at the time and place indicated in Document 00 1113 (Notice to Contractors), initially evaluate them for bid bond, subcontractor listing and addenda. Further evaluation will follow, and notification of the "Apparent Low Responsive, Responsible Bidder" will be recommended to the Board of Directors during an open meeting.

B. If Apparent Low Bidder is determined to be non-responsive or non-responsible, then Owner may proceed to the next Apparent Low Bidder's Bid pursuant to any procedures determined in its reasonable discretion, and proceed for all purposes as if this Apparent Low Bidder were the original Apparent Low Bidder.

3.02 Evaluation of Bids

A. Bids must be full, complete, clearly written and using the required forms. Bidders shall make any change in the Bid by crossing out the original entry, entering and initialing the new entry. Bidder's failure to submit all required documents strictly as required entitles Owner to reject the Bid as

non-responsive. All Bidders must submit Bids containing each of the fully executed documents supplied in this Project Manual.

B. In evaluating Bids, Owner will consider Bidders' qualifications, whether or not the Bids comply with the prescribed requirements, unit prices, and other data, as may be requested in Document 00 4100 (Bid Form) or prior to the Notice of Award.

C. Owner may conduct reasonable investigations and reference checks of Bidder and other persons and organizations as Owner deems necessary to assist in the evaluation of any Bid and to establish Bidder's responsibility, qualifications, financial ability and ability to perform the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time. Submission of a Bid constitutes Bidder's consent to the foregoing.

D. Owner shall have the right to consider information provided by sources other than Bidder. Owner shall also have the right to communicate directly with Bidder's surety regarding Bidder's bonds.

E. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between written words and figures will be resolved in favor of the words.

F. Bids shall be deemed to include the written responses of the Bidder to any questions or requests for information of Owner made as part of Bid evaluation process after submission of Bid.

3.03 Reservation of Rights

A. Owner reserves the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional Bids, and to reject the Bid of any Bidder as non-responsive as a result of any error or omission in the Bid, or if Owner believes that it would not be in the best interest of Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. For purposes of this paragraph, an "unbalanced Bid" is one having nominal prices for some Bid items and enhanced prices for other Bid items.

B. Owner may retain Bid securities and Bid bonds of other than the Apparent Low Bidder for a period of 90 Calendar Days after award or full execution of the Contract, whichever first occurs.

C. Owner may reject any or all Bids and waive any informalities or minor irregularities in the Bids. Owner also reserves the right, in its discretion, to reject any or all Bids and to re-Bid the Project.

ARTICLE 4 - MANDATORY BID PROTEST PROCEDURES:

4.01 Submission of Written Bid Protest

A. Any Bid protest in connection with the construction contract or work described in general in Document 00 1113 (Notice to Contractors) must be submitted in writing to the Rosamond Community Services District, 3179 35th Street West, Rosamond, CA 93560, before 4:30 P.M. of the fifth Business Day following opening of the Bids.

B. The initial protest document must contain a complete statement of the basis for the protest.

C. The protest must refer to the specific portion of the document that forms the basis for the protest.

D. The protest must include the name, address, and telephone number of the person representing the protesting party.

E. Only Bidders who the Owner otherwise determines are responsive and responsible are eligible to protest a Bid; protests from any other Bidder will not be considered. In order to determine whether a protesting Bidder is responsive and responsible, Owner may evaluate all information contained in any protesting Bidder's Bid.

F. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be

adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

4.02 Exclusive Remedy

A. The procedure and time limits set forth in this paragraph are mandatory and are Bidder's sole and exclusive remedy in the event of Bid protest. Bidder's failure to comply with these procedures shall constitute a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings. A Bidder may not rely on a protest submitted by another Bidder, but must timely pursue its own protest.

ARTICLE 5 - AWARD AND EXECUTION OF CONTRACT

5.01 Notice of Award and Submittal of Executed Contract Documents

A. If Contract is to be awarded, it will be awarded to the lowest responsible responsive Bidder. Such Award, if made, will be made within sixty (60) Calendar Days after the opening of the Bid Proposals.

B. Successful Bidder must execute and submit to Owner the "Required Contract Documents and Proof of Insurance" set forth below, within the time limits requested by Owner. Failure to deliver the "Required Contract Documents" to Owner by 5:00 p.m. of the 10th Day following Contractor's receipt of the Documents, will entitle the Owner to consider the Bid abandoned, and to declare the Bid security forfeited.

5.02 Required Contract Documents and Proof of Insurance

A. Document 00 5200 (Agreement), fully executed by successful Bidder. Submit five originals, each bearing an original signature.

B. Document 00 6001 (Construction Performance Bond), fully executed by successful Bidder and surety, in the amount set forth in Document 00 6001. Submit five originals.

C. Document 00 6002 (Construction Labor and Material Payment Bond), fully executed by successful Bidder and surety, in the amount set forth in Document 00 6002. Submit five originals.

D. Document 00 6003 (Guaranty), fully executed by successful Bidder. Submit five originals.

E. Insurance certificates and endorsements required by Document 00 7300 (Supplementary Conditions—Insurance): Submit Five original set.

F. Connelly Asbestos Notification IF APPLICABLE. Submit five originals.

G. Corporate Resolution IF APPLICABLE. Submit five originals.

H. Fictitious Business form IF APPLICABLE (copy of recorded document). Submit five originals.

5.03 Failure to Execute and Deliver Documents:

A. If Bidder to whom Contract is awarded, within the period described in this Document 00 2113, fails or neglects to execute and deliver all required Contract Documents and file all required bonds, insurance certificates, and other documents, Owner may, in its sole discretion, rescind the award, recover on Bidder's surety bond, or deposit Bidder's cashier's check or certified check for collection, and retain the proceeds thereof as liquidated damages for Bidder's failure to enter into the Contract. Bidder agrees that calculating the damages Owner may suffer as a result of Bidder's failure to execute and deliver all required Contract Documents would be extremely difficult and impractical and that the amount of Bidder's required Bid security shall be the agreed and presumed amount of Owner's damages.

B. Upon such failure to timely deliver all required Contract Documents as set forth herein, Owner may determine the next Apparent Low Bidder and proceed accordingly.

ARTICLE 6 - GENERAL CONDITIONS AND REQUIREMENTS

6.01 Modification of Commencement of Work:

A. Owner expressly reserves the right to modify the date for the Commencement of Work under the Contract and to independently perform and complete work related to Project. Owner accepts no responsibility to Contractor for any delays attributed to its need to complete independent work at the Site.

B. Owner shall have the right to communicate directly with Apparent Low Bidder's proposed performance bond surety, to confirm the performance bond. Owner may elect to extend the time to receive faithful performance and labor and material payment bonds.

6.02 Conformed Project Manual:

A. Following Award of Contract and at Owner's discretion, Owner may prepare a conformed Project Manual reflecting Addenda issued during bidding, which will constitute the approved Project Manual.

6.03 Payment Bond:

A. If the Project described in Document 00 1113 (Notice to Contractors) involves an expenditure in excess of twenty-five thousand dollars ($25,000), the successful Bidder must file a payment bond with and approved by Owner prior to entering upon the performance of the Work, in accordance with Civil Code § 9550.

6.04 Wage Rates:

A. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are on file at the Rosamond Community Services District, 3179 35th Street West, Rosamond, CA 93560, and are deemed included in the Bidding Documents. Upon request, Owner will make available copies to any interested party. Also, Contractor shall post the applicable prevailing wage rates at the Site.

6.05 Withdrawal of Bids:

A. Bidders may withdraw their Bids at any time prior to the Bid opening time fixed in this Document 00 2113, only by written request for the withdrawal of Bid filed with Owner at the Rosamond Community Services District, 3179 35th Street West, Rosamond, CA 93560. Bidder or its duly authorized representative shall execute request to withdraw Bid.

6.06 Ineligible Contractors and Subcontractors:

A. Owner shall not accept a Bid from a Bidder who is ineligible to bid or work on, or be awarded, a public works project pursuant to California Labor Code section 1777.1 or 1777.7. Bidders and the Contractor who is awarded the project contract shall not utilize, or allow work by, any subcontractor who is ineligible to bid or work on, or be awarded, a public works project pursuant to California Labor Code Section 1777.1 or 1777.7. (See California Public Contract Code Section 6109.) The California Division of Labor Standards Enforcement publishes a list of debarred contractors and subcontractors on the Internet at www.dir.ca.gov/DLSE/debar.html.

6.07 Substitutions:

A. Bidders must base their Bids on products and systems specified in Contract Documents or listed by name in Addenda. Owner will consider substitution requests only for "or equal items." Bidders wanting to use "or equal" item(s) shall submit Document 01 6000-A (Substitution Request Form) no later than 14 Calendar Days following the execution of the Contract by Owner. As a limitation on Bidder's privilege to request substitution of "or equal" items, Owner has found that certain items are designated as Owner standards and certain items are designated to match existing items in use on a particular public improvement either completed or in the course of

completion or are available from one source. As to such items, Owner will not permit substitution. Such items are described in the Bidding Documents.

6.08 Definitions:

A. All abbreviations and definitions of terms used in this Document 00 2113 are set forth in Document 00 7200 (General Conditions) and Section 01 4216 (Definitions).

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END OF DOCUMENT

DOCUMENT 00 3100
GEOTECHNICAL DATA AND EXISTING CONDITIONS

ARTICLE 1 - REPORTS AND INFORMATION ON EXISTING CONDITIONS

1.01 Inspection of Reports:

A. The Rosamond Community Services District (hereinafter "Owner"), its consultants, and prior contractors may have collected documents providing a general description of the Site and conditions of the Work. These documents may consist of geotechnical reports for and around the Site, contracts, contract specifications, tenant improvement contracts, as-built drawings, utility drawings, and information regarding Underground Facilities (collectively, "Existing Conditions Data".)

B. Bidders may inspect Geotechnical and Existing Conditions Data. If available, these documents are listed in Section 01 1000 (Summary) and are available for review at the district upon request.

C. Existing Conditions Data is for information only and does not describe labor, materials or equipment furnished by Contractor, but rather, information regarding conditions of the work. Such Existing Conditions Data is not a Contract Document.

ARTICLE 2 - USE OF EXISTING CONDITIONS DATA

2.01 Above-Ground Existing Conditions:

A. Owner makes no warranty or representation of existing aboveground conditions, as-built conditions, or other aboveground actual conditions verifiable by reasonable independent investigation. These conditions are verifiable by Bidder by the performance of its own independent investigation that Bidder must perform prior to bidding and Bidder must not rely on the information supplied by Owner regarding existing conditions.

B. Bidder represents and agrees that in submitting its Bid, it is not relying on any information regarding above-ground existing conditions supplied by Owner.

C. Owner is not responsible for information regarding Underground Facilities owned by others.

2.02 Underground Facilities:

A. Information supplied regarding existing Underground Facilities at or contiguous to the Site is based on information furnished to Owner by others (e.g., the builders of such Underground Facilities or others).

B. Owner assumes responsibility for only the general accuracy, completeness or thoroughness of information regarding Underground Facilities that are owned by Owner. This express assumption of responsibility applies only if Bidder has conducted the independent investigation required of it under Document 00 7200 (General Conditions) and discrepancies were not apparent. Bidder is solely responsible for any interpretation or conclusion drawn from this information.

C. Owner is not responsible only for information regarding Underground Facilities owned by others.

2.03 Hazardous Materials Surveys:

A. Bidders may rely on this data and information for general accuracy regarding the locations of potentially hazardous materials subject of the Work. Owner does not warrant and makes no representation regarding the completeness or thoroughness of any data or information regarding existing conditions or hazardous materials, including, but not limited to, quantities, characteristics, volumes, or associated structural features. Bidder represents and agrees that in submitting a Bid it is not relying on any such data, information or deductions.

B. Data and information regarding the locations of hazardous materials are not part of Contract Documents.

2.04 Geotechnical Data:

A. Bidder may rely upon the general accuracy of the "technical data" contained in the geotechnical reports and drawings identified above, but only insofar as it relates to subsurface conditions,

provided Bidder has conducted the independent investigation required of it and discrepancies were not apparent.

B. The term “technical data” shall include actual reported depths, reported quantities, reported soil types, reported soil conditions, and reported material, equipment, or structures that were encountered during subsurface exploration. The term “technical data” does not include, and Bidder may not rely upon, any other data, interpretations, opinions or information shown or indicated in such drawings or reports that otherwise relate to subsurface conditions or described structures. The term “technical data” shall not include the location of Underground Facilities.

C. Bidder may not rely on the completeness of reports and drawings for the purposes of bidding or construction. Bidder is solely responsible for any interpretation or conclusion drawn from any “technical data” or any other data, interpretations, opinions, or information contained in supplied geotechnical data.

D. Except as expressly set forth in this Document 00 3100, Owner does not warrant, and makes no representation regarding, the accuracy or thoroughness of any geotechnical data.

E. Bidder represents and agrees that in submitting its Bid, it is not relying on any geotechnical data supplied by Owner, except as specifically set forth herein.

ARTICLE 3 - INVESTIGATIONS

3.01 Required Investigations:

A. Before submitting a Bid, each Bidder shall be responsible to obtain such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise, which may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto or which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of Contract Documents.

B. Bidders shall advise Owner in writing during the Bid period of any questions, suppositions, inferences or deductions Bidders may have for Owner’s review and response.

C. Owner has provided time in the period prior to bidding for Bidder to perform these investigations.

3.02 Access to Site for Investigations:

A. During the Pre-Bid Site Visit(s), Owner will provide each Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies, as each Bidder deems necessary for submission of a Bid. Bidders must fill all holes and clean up and restore the Site to its former conditions upon completion of such explorations, investigations, tests, and studies. Such investigations may be performed only under the provisions of Document 00 2113 (Instructions to Bidders) and Document 00 7200 (General Conditions) including, but not limited to, proof of insurance and obligation to indemnify against claims arising from such investigation work. Each Bidder shall supply all equipment required to perform any investigations as each Bidder deems necessary. Owner has the right to limit the number of pieces of machinery operating at one time due to safety concerns.

END OF DOCUMENT

DOCUMENT 00 4100
BID FORM

TO THE ROSAMOND COMMUNITY SERVICES DISTRICT

THIS BID IS SUBMITTED BY:

_____
(Firm/Company Name)

Project Name: ADMIN BUILDING STANDBY GENERATOR REPLACEMENT
RCSD Project No.: 12609, 22609

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with the Rosamond Community Services District (hereinafter "Owner") in the form included in the Contract Documents, Document 00 5200 (Agreement), to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Bid and in accordance with all other terms and conditions of the Contract Documents.

2. Bidder accepts all of the terms and conditions of the Contract Documents, Document 00 1113 (Notice to Contractors), and Document 00 2113 (Instructions to Bidders), including, without limitation, those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 60 Calendar Days after the day of Bid opening, unless there is a bid protest, then 90 Calendar days after the day of bid opening.

3. In submitting this Bid, Bidder represents that Bidder has examined all of the Contract Documents, performed all necessary Pre-Bid investigations, received, reviewed and has included the signed cover sheet for each of the following Addenda in this bid submission:

Addendum Number	**Addendum Date**	**Signature of Bidder**

4. The undersigned, as Bidder, declares that: the Bidder is duly licensed under the Contractor's State License Law Business and Professions Code Section 7000 et.seq.; the only persons or parties interested in this proposal as principals are those named herein; this proposal is made without collusion with any other person, firm or corporation; the bidder has examined the location of the proposed work, the attached proposed form of Agreement, Plans, Specifications, and Addenda referred to; the Bidder agrees that if this proposal is accepted by the Owner, Bidder will contract with the Owner by execution of the documents required by Document 00 2113 (Instruction to Bidders); to do all the work and furnish all the materials specified in the contract, in

the manner and time therein prescribed, and according to the requirements of the Owner as therein set forth, and that the Bidder will accept in full payment the following amounts:

SCHEDULE OF WORK ITEMS

Bid Schedule

Item No.	Qty	Unit	Description	Unit Price	Total Amount
1	1	LS	Mobilization / Demobilization / Cleanup	$	$
2	1	LS	Furnish Generator Package	$	$
3	1	LS	Furnish Automatic Transfer Switch	$	$
4	1	LS	Demolition	$	$
5	1	LS	Permitting, Testing, and Commissioning	$	$

Total Base Bid Schedule Bid Items 1 through 5 $_____

Total Bid Price:

_____($_____)
(Words)

5. Subcontractors for work included in all Bid items are listed on Document 00 4430 (Subcontractors List) submitted herewith.

6. The undersigned Bidder understands that Owner reserves the right to reject this Bid.

7. If the documents required by Document 00 2113 (Instructions to Bidders) are mailed or delivered to the undersigned Bidder within the time described in Paragraph 2 of this Document 00 4100, or at any other time thereafter before it is withdrawn, the undersigned Bidder will execute and deliver the documents required by Document 00 2113 (Instructions to Bidders) within the times specified therein.

8. The undersigned Bidder herewith encloses cash, a cashier's check, or certified check of or on a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in form specified in Document 00 2113 (Instructions to Bidders), in the amount of ten percent (10%) of the Total Bid Price and made payable to the Rosamond Community Services District.

9. The undersigned Bidder agrees to commence Work under the Contract Documents on the date established in Document 00 7200 (General Conditions) and to complete all Work within the time specified in Document 00 5200 (Agreement).

10. The undersigned Bidder agrees that, in accordance with Document 00 7200 (General Conditions), liquidated damages for failure to complete all Work in the Contract within the time specified in Document 00 5200 (Agreement) shall be as set forth in Document 00 5200.

11. The names of all persons interested in the foregoing Bid as principals are:

IMPORTANT NOTICE: If Bidder or other interested person is a corporation, give the legal name of corporation, state where incorporated, and names of president and secretary thereof; if a partnership, give name of the firm and names of all

individual co-partners composing the firm; if Bidder or other interested person is an individual, give first and last names in full.

NAME OF BIDDER: _____,

licensed in accordance with an act for the registration of Contractors, and with license number:

_____ Expiration: _____.

_____
(Place of Incorporation, if Applicable) (Principal)

_____
(Principal)

_____
(Principal)

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

_____
(Signature of Bidder)

NOTE: If Bidder is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Business Address: _____

_____

_____

Contractor's Representative(s): _____
(Name/Title)

_____
(Name/Title)

_____
(Name/Title)

Officers Authorized to Sign Contracts _____
(Name/Title)

_____
(Name/Title)

_____
(Name/Title)

Telephone Number(s): _____
(Area Code) (Number)

_____
(Area Code) (Number)

Fax Number(s): _____
(Area Code) (Number)

_____
(Area Code) (Number)

Date of Bid: _____

END OF DOCUMENT

DOCUMENT 00 4411

BOND ACCOMPANYING BID

ROSAMOND COMMUNITY SERVICES DISTRICT

KNOW ALL MEN BY THESE PRESENTS,

That we, _____ as PRINCIPAL, and _____, as SURETY, are held and firmly bound unto the Rosamond Community Services District (hereinafter Obligee), a political subdivision of the State of California, in the penal sum of ten percent (10%) of the total amount of the bid of the Principal above named, submitted by said Principal to Obligee for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents. In no case shall the liability of the Surety hereunder exceed the sum of $_____.

THE CONDITION OF THIS OBLIGATION IS SUCH,

THAT WHEREAS THE PRINCIPAL has submitted the above mentioned bid to Obligee for certain construction specifically described as follows, for which bids are to be opened at Bakersfield, California, on the date as indicated on the bid documents for the **ADMIN BUILDING STANDBY GENERATOR REPLACEMENT.**

NOW, THEREFORE, if the aforesaid Principal is awarded the contract and, within the time and manner required under the Specifications, after the prescribed forms are presented to him for signature, enters into a written Agreement, in the prescribed form, in accordance with the bid, files the two bonds with the Obligee, one to guaranty faithful performance and the other to guaranty payment for labor and materials, as required by law, provides all required insurance certificates, Guaranty, and all other endorsements, forms, and documents required under Document 00 2113 (Instructions to Bidders), then this obligation shall be null and void; otherwise, it shall remain in full force and virtue.

If suit is brought upon this Bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including reasonable costs and Attorney's fees to be fixed by the Court.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this ___ day of _____, 20__.

Correspondence of claims relating to this bond should be sent to the surety at the following address:

_____ (SEAL)

_____ (SEAL)

_____ (SEAL)

PRINCIPAL

_____ _____ (SEAL)

_____ _____ (SEAL)

_____ _____ (SEAL)

SURETY

Phone: ( ) _____

Note: Signatures of those executing for the Surety must be properly acknowledged.

END OF DOCUMENT

DOCUMENT 00 4412
BIDDER INFORMATION FORM

INSTRUCTIONS

In order to register to undertake work for Owner, Bidder **must**:

1) Fill out this registration form completely; do not leave blanks.
2) Provide certificates of insurance or a letter evidencing coverage

INDEPENDENT CONTRACTOR REGISTRATION

Contractors DIR Registration Number: _____

Contractor's License # _____

Date: _____ Fed I.D. # _____

Full Corporate Name of Company: _____

Street Address: _____

_____

Mailing Address: _____

_____

Phone: _____ Fax: _____

Name of Principal Contact: _____

Type of Business: _____ Sole Proprietor _____ Partnership

_____ Non-Profit 501(c)(3) _____ Corporation

_____ other (please explain:_____)

INSURANCE

Workers' Compensation:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

General Liability:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: $ _____

A.M. Best Rating: _____

Automobile Liability:

Carrier: _____

Address: _____

Phone and Fax: _____

Policy Number: _____

Policy Limits: $ _____

A.M. Best Rating: _____

BONDING

Surety Company Providing Bonds: _____

Address: _____

Phone and Fax: _____

Admitted in California YES _____ NO _____

A.M. Best Rating: _____

BIDDER CERTIFIES, UNDER PENALTY OF PERJURY, THAT THE FOREGOING INFORMATION IS CURRENT AND ACCURATE AND AUTHORIZES THE ROSAMOND COMMUNITY SERVICES DISTRICT AND ITS AGENTS AND REPRESENTATIVES TO OBTAIN A CREDIT REPORT AND/OR VERIFY ANY OF THE ABOVE INFORMATION.

_____
SIGNATURE

_____
DATE

SAFETY EXPERIENCE

The following statements as to the Bidder's safety experience are submitted with the Bid, as part thereof, and the Bidder guarantees the truthfulness and accuracy of all information.

1. List Bidder's interstate Experience Modification Rate for the last three years.

   20__ _____ **20__ _____** **20__ _____**

2. Use Bidder's last year's Cal/OSHA 200 log to fill in the following number of injuries and illnesses:

   a. Number of lost workday cases _____

   b. Number of medical treatment cases _____

   c. Number of fatalities _____

3. Employee hours worked last year _____

4. State the name of Bidder's safety engineer/manager:

Attach a resume or outline of this individual's safety and health qualifications and experience.

I CERTIFY, UNDER PENALTY OF PERJURY, THAT THE FOREGOING INFORMATION IS CURRENT AND ACCURATE AND I AUTHORIZE THE ROSAMOND COMMUNITY SERVICES DISTRICT AND ITS AGENTS AND REPRESENTATIVES TO OBTAIN A CREDIT REPORT AND/OR VERIFY ANY OF THE ABOVE INFORMATION.

BIDDER:

By: _____
Signature

Its: _____
Title

Date_____

END OF DOCUMENT

(PAGE LEFT BLANK INTENTIONALLY)

DOCUMENT 00 4430

SUBCONTRACTORS LIST

Contractor Name: _____

Project Name: ADMIN BUILDING STANDBY GENERATOR REPLACEMENT

Bidder submits the following information as to the subcontractors Bidder intends to employ if awarded the Contract. Only list subcontractors whose contract with the Contractor is in an amount greater than one-half of 1 percent of the Contractor's total bid.

Full Name of Subcontractor and Address of Mill or Shop	Description of Work: Reference To Bid Items	Subcontractor's License No.	DIR Registration No.

(Bidder to attach additional sheets if necessary)

Bidder must provide Subcontractor DIR Registration Number within twenty-four hours of bid opening.

END OF DOCUMENT

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DOCUMENT 00 4452
NON-COLLUSION DECLARATION

PUBLIC CONTRACT CODE §7106

PROJECT TITLE: **ADMIN BUILDING STANDBY GENERATOR REPLACEMENT**

NON-COLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____
(Office of Affiant) (Name of Bidder)

the party making the foregoing Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham Bid. The Bidder has not directly or indirectly colluded, conspired, connived or agreed with any bidder or anyone else to put in a sham Bid, or to refrain from bidding. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the Bid price of 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. All statements contained in the Bid are true. The Bidder has not, directly or indirectly, submitted his or her price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, Bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____, at _____,
(Date) (City)

_____.
(State)

_____
(Name of Bidder)

_____
(Signature of Principal)

NOTE: If Bidder is a partnership or a joint venture, a copy of this declaration must be signed and sworn to by every member of the partnership or venture.

END OF DOCUMENT

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DOCUMENT 00 4453
IRAN CONTRACTING ACT CERTIFICATION
(Public Contract Code Sections 2200 *et seq.*)

Project Name: RCSD ADMIN BUILDING STANDBY GENERATOR REPLACEMENT

As required by California Public Contract Code section 2204, the Contractor certifies that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code sections 2200 *et seq.*) is true and correct:

☐ The Contractor is not:

(i) Identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code section 2203; or

(ii) a financial institution that extends, for 45 days or more, credit in the amount of $20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

☐ Rosamond Community Services District has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, Rosamond Community Services District will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

☐ The amount of the Contract payable to the Contractor for the project is less than $1,000,000.

CERTIFICATION

I, the official named below, CERTIFY UNDER PENALTY OF PERJURY, that I am duly authorized to legally bind the bidder to the above selected option. This certification is made under the laws of the State of California.

Firm	Signed
Date	Name/Title

Note: In accordance with Public Contract Code section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of $250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

END OF DOCUMENT

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DOCUMENT 00 4455
BIDDER CERTIFICATIONS

TO BE EXECUTED BY ALL BIDDERS AND SUBMITTED WITH BID

The undersigned Bidder certifies to the Rosamond Community Services District (hereinafter "Owner") as set forth in sections 1 through 6 below.

1. STATEMENT OF CONVICTIONS

By my signature hereunder, I hereby swear, under the penalty of perjury, that no more than one final, unappealable finding of contempt of court by a Federal Court has been issued against Bidder within the past two years because of failure to comply with an order of a Federal Court or to comply with an order of the National Labor Relations Board.

2. STATEMENT OF BIDDER

Have you, or any officer of yours, or any employee of yours who may have a proprietary interest in your Bid, ever been disqualified, removed, or otherwise prevented from bidding on or completing any Federal, State, or Local Governmental project because of a violation of law or safety regulations:

YES _____ NO _____

3. CERTIFICATION OF WORKER'S COMPENSATION INSURANCE

By my signature hereunder, as the Contractor, I certify that I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's 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 the work of this Contract.

4. CERTIFICATION OF PREVAILING WAGE RATES AND RECORDS

By my signature hereunder, as the Contractor, I certify that I am aware of the provisions of Section 1773 of the California Labor Code, which requires the payment of prevailing wage on public projects. Also, that the Contractor and any subcontractors under the Contractor shall comply with California Labor Code §1776, regarding wage records, and with California Labor Code §1777.5, regarding the employment and training of apprentices. It is the Contractor's responsibility to ensure compliance by any and all subcontractors performing work under this Contract.

5. CERTIFICATION OF COMPLIANCE WITH PUBLIC WORKS CHAPTER OF LABOR CODE

By my signature hereunder, as the Contractor, I certify that I am aware of Sections 1777.1 and 1777.7 of the California Labor Code and am eligible to bid and work on public works projects.

6. CERTIFICATION OF ADEQUACY OF CONTRACT AMOUNT

By my signature hereunder, as the Contractor, pursuant to Labor Code Section 2810(a), I certify that, if awarded the Contract based on the undersigned's Bid, the Contract will include funds sufficient to allow the Contractor to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided. I understand that the Owner will be relying on this certification if it awards the Contract to the undersigned.

BIDDER: _____
(Name of Bidder)

Date: _____, **20**___ By: _____
(Signature)

Name: _____
(Print Name)

Its: _____
(Title)

END OF DOCUMENT

DOCUMENT 00 5199
PROPOSED CONTRACT DOCUMENTS TRANSMITTAL

Date

Contractor Name
Contractor Address
City, State Zip

SUBJECT **ADMIN BUILDING STANDBY GENERATOR REPLACEMENT**

The Contract Sum of your proposed contract is _____ **Dollars ($_____).**

1. The proposed Contract Documents listed below accompany this Document 00 5199. Contractor shall return FIVE copies of each of the required documents; each of the FIVE copies require original "wet" signatures.

2. Contractor shall return the required documents to the Rosamond Community Services District no later than _____ in order to meet the Board agenda requirements.

   a. Document 00 5200 (Agreement) **DO NOT DATE THE AGREEMENT. DATE OF BOARD MEETING WILL BE INSERTED BY THE DISTRICT.**

   b. Document 00 6001 (Construction Performance Bond), executed by you and your surety. **BE CERTAIN TO HAVE A POWER OF ATTORNEY AND NOTARY FOR EACH OF THE PERFORMANCE BONDS (FIVE IN TOTAL FOR THE PERFORMANCE BOND)**

   c. Document 00 6002 (Construction Labor and Material Payment Bond), executed by you and your surety. **BE CERTAIN TO HAVE A POWER OF ATTORNEY AND NOTARY FOR EACH OF THE LABOR AND MATERIAL PAYMENT BONDS (FIVE IN TOTAL FOR THE LABOR AND MATERIAL PAYMENT BOND)**

   d. Insurance certificates **(INCLUDE ENDORSEMENTS AND WAIVER OF SUBROGATION),** as required under Document 00 7300 (Supplementary Conditions – Insurance).

   e. Document 00 6003 (Guaranty)

   f. Document 00 6200 (Withheld Contract Funds Certification)

   g. Connelly Asbestos Notification

   h. Corporate Resolution, if applicable

   i. Fictitious Business form, if applicable (must be copy of recorded document)

3. Failure to comply with these conditions will entitle Owner to consider your Bid abandoned, and to declare your Bid security forfeited.

4. Upon commencement of the Work, you and each of your Subcontractors shall certify copies of payroll records on forms provided by the Division of Labor Standards Enforcement, in accordance with California Labor Code §1776. Contractor and Subcontractors shall provide copies of certified payroll records upon request by the County.

5. The General Manager will recommend the Board of Directors execute the Agreement during the meeting of _____at 6:00 pm. You will receive a copy of the Staff Report under separate cover.

6. The Owner has identified the following staff for this project:

   a. Project Contact - **Kim B. Domingo (General Manager) at 661-256-3411, or its designee**

END OF DOCUMENT

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DOCUMENT 00 5200
AGREEMENT

THIS AGREEMENT, entered into on this day of _____, is by and between _____, whose place of business is located at _____ ("Contractor"), and the ROSAMOND COMMUNITY SERVICES DISTRICT, a political subdivision of the State of California (hereinafter "Owner"), acting under and by virtue of the authority vested in Owner by the laws of the State of California.

WHEREAS, in consideration for the promises and payment to be made and performed by Owner, and under the conditions expressed in the incorporated Bid Proposal (Bid), bonds and related papers, Contractor agrees to do all the work and furnish all the materials at the expense of Contractor (except such as the Specifications state will be furnished by Owner) necessary to construct and complete in a good and workmanlike manner to the satisfaction of the Rosamond Community Services District all the work shown and described in the plans and specifications for the project known as:

ADMIN BUILDING STANDBY GENERATOR REPLACEMENT

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, Contractor and Owner agree as follows:

ARTICLE 1 - SCOPE OF WORK OF THE CONTRACT

1.01 Work of the Contract

A. Contractor shall complete all Work specified in the Contract Documents, in accordance with the Specifications, Drawings, and all other terms and conditions of the Contract Documents (**Work**).

1.02 Price for Completion of the Work

A. Owner shall pay Contractor the following Contract Sum of _____ **Dollars ($_____)** for completion of Work in accordance with Contract Documents as set forth in Contractor's Bid, attached hereto.

ARTICLE 2 - COMMENCEMENT AND COMPLETION OF WORK

2.01 Commencement of Work

A. Contractor shall commence Work on the date established in the Notice to Proceed (**Commencement Date**).
B. Owner reserves the right to modify or alter the Commencement Date.

2.02 Completion of Work

A. Contractor shall achieve Final Completion of the entire Work **260 Working** Days from the Commencement Date.

ARTICLE 3 - LIQUIDATED DAMAGES FOR DELAY IN COMPLETION OF WORK

3.01 Liquidated Damage Amounts

A. As liquidated damages for delay Contractor shall pay Owner five Hundred **dollars ($500)** for each Calendar Day that expires after the time specified herein for Contractor to achieve Final Completion of the entire Work, until achieved.

3.02 Scope of Liquidated Damages

A. Measures of liquidated damages shall apply cumulatively.
B. Limitations and stipulations regarding liquidated damages are set forth in Document 00 7200 (General Conditions).

ARTICLE 4 - CONTRACT DOCUMENTS

4.01 Contract Documents consist of the following documents, including all changes, Addenda, and Modifications thereto:

Document 00 0101	Title Page
Document 00 1113	Notice to Contractors
Document 00 2113	Instruction to Bidders
Document 00 3100	Geotechnical Data and Existing Conditions
Document 00 4100	Bid Form
Document 00 4412	Bidder Information Form
Document 00 4430	Subcontractors List
Document 00 4452	Non-Collusion Declaration
Document 00 4453	Iran Contracting Act Certification
Document 00 4455	Bidder Certifications
Document 00 5199	Proposed Contract Documents Transmittal
Document 00 5200	Agreement
Document 00 5590	Release of Claims
Document 00 6001	Construction Performance Bond
Document 00 6002	Construction Labor and Material Payment Bond
Document 00 6003	Guaranty
Document 00 6200	Withheld Contract Funds Certification
Document 00 7200	General Conditions
Document 00 7280	Apprenticeship Programs
Document 00 7300	Supplementary Conditions – Insurance
Document 00 9111	Addendum Form - RCSD
Master Specifications	Divisions 01 through 19
Technical Specifications	
Drawings	

4.02 There are no Contract Documents other than those listed above. The Contract Documents may only be amended, modified or supplemented as provided in Document 00 7200 (General Conditions).

ARTICLE 5 - MISCELLANEOUS

5.01 Terms and abbreviations used in this Agreement are defined in Document 00 7200 (General Conditions) and Section 01 4216 (Definitions) and will have the meaning indicated therein.

5.02 It is understood and agreed that in no instance are the persons signing this Agreement for or on behalf of Owner or acting as an employee, agent, or representative of Owner, liable on this Agreement or any of the Contract Documents, or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of Owner is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.

5.03 In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, Contractor or Subcontractor offers and agrees to assign to the awarding 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 (commencing with §16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time Owner tenders final payment to Contractor, without further acknowledgment by the parties.

5.04 Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are deemed included in the Contract Documents and on file at Owner's Office, and shall be made available to any interested party on request. Pursuant to California Labor Code §§ 1860 and 1861, in accordance with the provisions of Section 3700 of the Labor Code, every contractor will be required to secure the payment of compensation to his employees. Contractor represents that it is aware of the provisions of Section 3700 of the Labor Code which 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 Contractor shall comply with such provisions before commencing the performance of the Work of the Contract Documents.

5.05 This Agreement and the Contract Documents shall be deemed to have been entered into in the County of Kern, State of California, and governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in the Superior Court for the County of Kern.

IN WITNESS WHEREOF the parties have executed five original Agreements on the day and year first above written.

RECOMMENDED AND APPROVED
AS TO CONTENT:

By _____
Kim B. Domingo, General Manager

APPROVED AS TO FORM:

By _____
Signature

_____
Typed Name

ROSAMOND COMMUNITY SERVICES DISTRICT

By _____
Ben Stewart
President, Board of Directors

CONTRACTOR:

_____
Firm's Name

_____
Type of Entity
(Corporation, partnership, sole proprietorship)

By _____
Signature

_____
Typed Name

_____
Title of Individual Executing Document on behalf of Firm

NOTICE: CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND ARE REGULATED BY CONTRACTORS' STATE LICENSE BOARD. QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR OF THAT BOARD, WHOSE ADDRESS IS: CONTRACTORS' STATE LICENSE BOARD, 1020 "N" STREET, SACRAMENTO, CALIFORNIA 95814.

END OF DOCUMENT

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DOCUMENT 00 5590

AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS
[Public Contract Code § 7100]

THIS AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS ("Agreement and Release"), made and entered into this _____ day of _____, **20**___, by and between the Rosamond Community Services District (hereinafter "Owner"), and _____ ("Contractor"), whose place of business is at _____.

RECITALS

Owner and Contractor entered into Contract Number _____ (the "Contract") for construction of Owner's **Admin Building Standby Generator Replacement** located at **3179 35th Street West Rosamond, CA 93560**

A. The Work under the Contract has been completed.

AGREEMENT

NOW THEREFORE, it is mutually agreed between Owner and Contractor as follows:

1. Contractor will not be assessed liquidated damages except as detailed below:

   Original Contract Sum $ _____

   Modified Contract Sum $ _____

   Payment to Date $ _____

   Liquidated Damages $ _____

   Payment Due Contractor $ _____

2. Subject to the provisions of this Agreement and Release, Owner will forthwith pay to Contractor the sum of _____ Dollars and _____ Cents ($_____) under the Contract, less any amounts withheld under the Contract or represented by any Notice to Withhold Funds on file with Owner as of the date of such payment.

3. Contractor acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against Owner arising from the Contract, except for the claims described in Paragraph 4 of this Document 00 5590. It is the intention of the parties in executing this Agreement and Release that this Agreement and Release shall be effective as a full, final and general release of all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities of Contractor against Owner, and all if its agents, employees, consultants, inspectors, representatives, assignees and transferees, except for the Disputed Claims set forth in Paragraph 4 of this Document 00 5590. Nothing in this Agreement and Release shall limit or modify Contractor's continuing obligations described in Paragraph 6 of this Document 00 5590.

4. The following claims submitted under Document 00 7200 (General Conditions), Article 12, are disputed (hereinafter, the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release.

[*Insert information in Chart below, affix attachment if necessary*]

CLAIM NO.	DATE SUBMITTED	DESCRIPTION OF CLAIM	AMOUNT OF CLAIM

5. Consistent with California Public Contract Code §7100, Contractor hereby agrees that, in consideration of the payment set forth in Paragraph 2 of this Document 00 5590, Contractor hereby releases and forever discharges Owner, and all of its agents, employees, consultants, inspectors, assignees and transferees from any and all liability, claims, demands, actions or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract.

6. Guarantees and warranties for the Work, and any other continuing obligation of Contractor, shall remain in full force and effect as specified in the Contract Documents.

7. Contractor shall immediately defend, indemnify and hold harmless Owner, any of the Owner's Representatives, and all of their agents, employees, consultants, inspectors, assignees and transferees, from any and all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities that may be asserted against them by any of Contractor's suppliers and/or Subcontractors of any tier and/or any suppliers to them for any and all labor, materials, supplies and equipment used, or contemplated to be used in the performance of the Contract, except for the Disputed Claims set forth in Paragraph 4 of this Document 00 5590.

8. Contractor hereby waives the provisions of California Civil Code §1542, which provide as follows:

> **A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER, MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.**

9. The provisions of this Agreement and Release are contractual in nature and not mere recitals and shall be considered independent and severable, and if any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal or other law, ruling, or regulation, then such provision, or part thereof shall remain in force and effect only to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.

10. Contractor represents and warrants that it is the true and lawful owner of all claims and other matters released pursuant to this Agreement and Release, and that it has full right, title and authority to enter into this instrument. Each party represents and warrants that it has been represented by counsel of its own choosing in connection with this Agreement and Release.

11. All rights of Owner shall survive completion of the Work or termination of the Contract, and execution of this Agreement and Release.

*** * * CAUTION: THIS IS A RELEASE - READ BEFORE EXECUTING * * ***

APPROVED AS TO FORM:

By _____
Signature

ROSAMOND COMMUNITY SERVICES DISTRICT

By _____
Kim B. Domingo, General Manager

<<_____ (Contractor)>>

Type of Entity
(corporation, partnership, sole proprietorship)

By _____
Signature

_____
Typed Name

_____
Title of Individual Executing
Document on behalf of Contractor

END OF DOCUMENT

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DOCUMENT 00 6001
CONSTRUCTION PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

A. THAT WHEREAS, the ROSAMOND COMMUNITY SERVICES DISTRICT (hereinafter "**Owner**"), a public agency of the State of California, has awarded to _____**,** as Principal, a contract dated _____ (the "**Contract**"), in the amount of **$**_____**.** The Contract is by this reference made a part hereof, for the work of the following project:

ADMIN BUILDING STANDBY GENERATOR REPLACEMENT

1.02 AND WHEREAS, Principal is required to furnish a bond in connection with the Contract, guaranteeing the faithful performance thereof;

1.03 NOW, THEREFORE, we, the undersigned Principal and_____, as Surety are held and firmly bound unto Owner in the sum of 100% OF THE CONTRACT PRICE to be paid to Owner or its successors and assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

1.04 THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal, or its heirs, executors, administrators, successors, or assigns approved by Owner, shall promptly and faithfully perform the covenants, conditions, and agreements of the Contract during the original term and any extensions thereof as may be granted by Owner, with or without notice to Surety, and during the period of any guarantees or warranties required under the Contract, and shall also promptly and faithfully perform all the covenants, conditions, and agreements of any alteration of the Contract made as therein provided, notice of which alterations to Surety being hereby waived, on Principal's part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify, defend, protect, and hold harmless Owner as stipulated in the Contract, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and effect.

1.05 No extension of time, change, alteration, modification, or addition to the Contract, or of the work required thereunder, or work or actions by Owner to mitigate the damages resulting from any breach in performance by Contractor, shall release or exonerate Surety on this bond or in any way affect the obligation of this bond; and Surety does hereby waive notice of any such extension of time, change, alteration, modification, or addition.

1.06 Whenever Principal shall be and declared by Owner in default under the Contract, Surety shall promptly remedy the default, or shall promptly, and in no event later than thirty (30) days from notice:

A. Undertake through its agents or independent contractors (but having qualifications and experience reasonably acceptable to Owner), to complete the Contract in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including without limitation, all obligations with respect to warranties, guarantees, indemnities, and the payment of liquidated damages; or

B. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and, upon determination by Owner of the lowest responsible bidder, arrange for a contract between

such bidder and Owner and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Sum, and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees, and the payment of liquidated damages; but, in any event, Surety's total obligations hereunder shall not exceed the amount set forth in the third paragraph hereof. The term "balance of the Contract Sum," as used in this paragraph, shall mean the total amount payable by Owner to the Principal under the Contract and any amendments thereto, less the amount paid by Owner to Principal.

1.07 Surety's obligations hereunder are independent of the obligations of any other surety for the performance of the Contract, and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing Owner's rights against the others. If suit is brought upon this bond the Surety shall pay reasonable costs and attorney's fees to be fixed by the court.

1.08 Surety may not use Contractor to complete the Contract absent Owner's Consent. Owner shall have the right in its sole discretion to continue the work of the Contract, as necessary following a default and/or termination, as necessary to prevent risks of personal injury, property damage or delay to the Project.

1.09 No right of action shall accrue on this bond to or for the use of any person or corporation other than Owner or its successors or assigns.

1.10 Surety shall join in any proceedings brought under the Contract upon Owner's demand, and shall be bound by any judgment.

1.11 Correspondence or claims relating to this bond shall be sent to Surety at the address set forth below.

IN WITNESS WHEREOF, we have hereunto set our hands this ___day of _____. 20__,

CONTRACTOR AS PRINCIPAL (Corp. Seal)	**SURETY** (Corp. Seal)
Company	Company
Signature	Signature
Name & Title	Name & Title
Address	Address
City, State, Zip Code	City, State, Zip Code
	Phone

END OF DOCUMENT

DOCUMENT 00 6002
CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS:

1.01 THAT WHEREAS, the ROSAMOND COMMUNITY SERVICES DISTRICT (hereinafter "**Owner**"), a public agency of the State of California, has awarded to _____**,** as Principal, a contract dated _____ (the "**Contract**"), in the amount of **$**_____**.** The Contract is by this reference made a part hereof, for the work of the following project:

ADMIN BUILDING STANDBY GENERATOR REPLACEMENT

A. AND WHEREAS, Principal is required to furnish a bond in connection with the Contract to secure the payment of claims of laborers, mechanics, material suppliers, and other persons as provided by law;

B. NOW, THEREFORE, we, the undersigned Principal and _____, as Surety, are held and firmly bound unto Owner in the sum of 100% OF THE CONTRACT PRICE **($_____),** for which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

C. THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal, or its executors, administrators, successors, or assigns approved by Owner, or its subcontractors shall fail to pay any of the persons named in California Civil Code §9100, or amounts due under the State of California Unemployment Insurance Code with respect to work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the State of California Employment Development Department from the wages of employees of Principal and subcontractors pursuant to Section 13020 of the State of California Unemployment Insurance Code with respect to such work and labor, that Surety will pay for the same in an amount not exceeding the sum specified in this bond, plus reasonable attorneys' fees, otherwise the above obligation shall become and be null and void.

D. This bond shall inure to the benefit of any of the persons named in California Civil Code §9100, as to give a right of action to such persons or their assigns in any suit brought upon this bond. The intent of this bond is to comply with the California Mechanic's Lien Law.

E. Surety, for value received, hereby expressly agrees that no extension of time, change, modification, alteration, or addition to the undertakings, covenants, terms, conditions, and agreements of the Contract, or to the work to be performed thereunder, shall in any way affect the obligation of this bond; and it does hereby waive notice of any such extension of time, change, modification, alteration, or addition to the undertakings, covenants, terms, conditions, and agreements of the Contract, or to the work to be performed thereunder.

F. Surety's obligations hereunder are independent of the obligations of any other surety for the payment of claims of laborers, mechanics, material suppliers, and other persons in connection with Contract; and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing

Owner's rights against the other. If suit is brought upon this bond the Surety shall pay reasonable costs and attorney's fees to be fixed by the court.

G. Correspondence or claims relating to this bond shall be sent to Surety at the address set forth below.

IN WITNESS WHEREOF, we have hereunto set our hands this ___ day of _____, 20__.

CONTRACTOR AS PRINCIPAL (Corp. Seal)	**SURETY** (Corp. Seal)
Company	Company
Signature	Signature
Name & Title	Name & Title
Address	Address
City, State, Zip Code	City, State, Zip Code
	Phone

END OF DOCUMENT

DOCUMENT 00 6003
GUARANTEE

TO: THE ROSAMOND COMMUNITY SERVICES DISTRICT (hereinafter "Owner"), for construction of **ADMIN BUILDING STANDBY GENERATOR REPLACEMENT** located at **3179 35th Street West Rosamond, CA 93560**

The undersigned guarantees all construction performed on this Project and also guarantees all material and equipment incorporated therein.

Contractor hereby grants to Owner for a period of one year following the date of Final Acceptance of the Work completed, or such longer period specified in the Contract Documents, its unconditional warranty of the quality and adequacy of all of the Work including, without limitation, all labor, materials and equipment provided by Contractor and its Subcontractors of all tiers in connection with the Work.

Neither final payment nor use nor occupancy of the Work performed by the Contractor shall constitute an acceptance of Work not done in accordance with this Guaranty or relieve Contractor of liability in respect to any express warranties or responsibilities for faulty materials or workmanship. Contractor shall remedy any defects in the Work and pay for any damage resulting therefrom, which shall appear within one year, or longer if specified, from the date of Final Acceptance of the Work completed.

If within one year after the date of Final Acceptance of the Work completed, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work is found to be Defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, correct such Defective Work. Contractor shall remove any Defective Work rejected by Owner and replace it with Work that is not Defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Contractor fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the Defective Work corrected or the rejected Work removed and replaced. Contractor shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Contractor fails to correct Defective Work, or defects are discovered outside the correction period, Owner shall have all rights and remedies granted by law.

Inspection of the Work shall not relieve Contractor of any of its obligations under the Contract Documents. Even though equipment, materials, or Work required to be provided under the Contract Documents have been inspected, accepted, and estimated for payment, Contractor shall, at its own expense, replace or repair any such equipment, material, or Work found to be Defective or otherwise not to comply with the requirements of the Contract Documents up to the end of the guaranty period.

All abbreviations and definitions of terms used in this Agreement shall have the meanings set forth in the Contract Documents.

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The foregoing Guaranty is in addition to any other warranties of Contractor contained in the Contract Documents, and not in lieu of, any and all other liability imposed on Contractor under the Contract Documents and at law with respect to Contractor's duties, obligations, and performance under the Contract Documents. In the event of any conflict or inconsistency between the terms of this Guaranty and any warranty or obligation of the Contractor under the Contract Documents or at law, such inconsistency or conflict shall be resolved in favor of the higher level of obligation of the Contractor.

Date	Name/Title
Contractor	Signature

For maintenance, repair or replacement service contact:

Name	Telephone
Address	Alt. Telephone
City, State, and Zip	

END OF DOCUMENT

DOCUMENT 00 6200
WITHHELD CONTRACT FUNDS CERTIFICATION

Public Contract Code Section §22300 requires the inclusion in invitations for public agency bids and in public agency contracts a provision which will, at the expense of the contractor, permit the substitution of securities of equal value for any construction progress monies withheld to ensure performance under a contract. Therefore, as a contractor on: **ADMIN BUILDING STANDBY GENERATOR REPLACEMENT**

[ ] I do not intend to substitute securities for monies withheld and thereby avail myself of the process and rights provided in Public Contract Code Section §22300.

[ ] I do intend to exercise my option as specified in Public Contract Code Section §22300 and hereby agree to the following:

1. I will establish an escrow agreement satisfactory to the Owner, with a state or federally chartered bank, which shall contain at a minimum provisions governing inter alia:

    a. The amount of securities to be deposited;

    b. The type of securities to be deposited, (eligible securities for deposit are described in Government Code Section 16430);

    c. The providing of powers of attorney or other documents necessary for the transfer of the securities deposited;

    d. The terms and conditions of conversion to cash to provide funds to meet defaults by the Contractor including, but not limited to termination of the Contractor's control over the work, stop notices filed pursuant to law, assessment of liquidated damages or other amounts to be kept or retained under the provisions of the contract;

    e. The decrease in value of securities on deposit; and

    f. The termination of the escrow agreement upon completion of the contract and acceptance by the Owner.

2. I will obtain written consent of the surety to any such agreement; and

3. I will attach to each progress payment submitted a notarized copy of escrow instructions executed by agents thereof and on bank letterhead as proof that such an account has been established. Such instructions will set forth that securities deposited shall not be withdrawn for any purpose (with contractor's complete and unreserved agreement) without prior written approval by the Rosamond Community Services District with respect to the project herein above referenced.

_____
Signature of Bidder

END OF DOCUMENT

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DOCUMENT 00 6210

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

California Public Contract Code §22300

(Rosamond Community Services District – Vendor)

This Escrow Agreement is made and entered into on _____, 20__ by and between the Rosamond Community Services District whose address is **3179 35th Street West, Rosamond, California 93560** (hereinafter "Owner"), and _____, whose address is _____ (hereinafter "Contractor") and _____, whose address is _____ (hereinafter "Escrow Agent"),

W I T N E S S E T H:

For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

1. Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and the Contractor in the amount of _____dollars ($_____), dated _____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When the Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of Rosamond Community Services District, and shall designate the Contractor as the beneficial owner.

2. Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that Escrow Agent holds securities in the form and amount specified herein.

3. When Owner makes payment of retentions earned directly to Escrow Agent, Escrow Agent shall hold them for the benefit of Contractor until the time that the escrow created under this Contract is terminated. Contractor may direct the investment of the payments into securities.

All terms and conditions of this Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when Owner pays Escrow Agent directly.

4. Contractor shall be responsible for paying all fees, costs, and expenses incurred by Escrow Agent in administering the escrow account and all expenses of Owner. These expenses and payment terms shall be determined by Owner, Contractor and Escrow Agent.

5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to Owner.

6. Contractor shall have the right to withdraw all or any part of the principal in the escrow account only by written notice to Escrow Agent accompanied by written authorization from Owner to Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

7. Owner shall have a right to draw upon the securities in the event of default by Contractor. Upon Seven (7) days written notice to the Escrow Agent from Owner of the default, Escrow Agent shall immediately convert the securities, any interest earned on the securities, and all interest earned on the interest, to cash and shall distribute the cash as instructed by Owner. Escrow Agent shall have no duty to determine whether a default has occurred and may rely solely upon the written notice of such default from Owner.

8. Upon receipt of written notification from Owner certifying that the Contract is final and complete, and that Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payment of fees and charges.

9. Escrow Agent shall rely on the written notifications from Owner and Contractor pursuant to Sections 5 to 8 of this Agreement. Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release, conversion, and disbursement of the securities and interest as set forth above.

10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

(a) On behalf of the Owner:

Kim B. Domingo
General Manager
3179 35th Street West
Rosamond, CA 93560

_____
Signature

(b) On behalf of the Contractor

_____
Signature

(c) On behalf of the Escrow Agent

_____
Signature

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

RECOMMENDED AND APPROVED AS TO CONTENT:

By _____
Kim B. Domingo
General Manager

APPROVED AS TO FORM:

By _____
Signature

NAME OF BANK

By _____
Signature

_____
, Branch Manager

"ESCROW AGENT"

ROSAMOND COMMUNITY SERVICES DISTRICT

By _____
President, Board of Directors

"OWNER"

_____
Contractor's Name

_____
Type of Entity
(corporation, partnership, sole proprietorship)

By _____
Signature

_____
Print Name

_____
Title of Individual Executing Document on behalf of Firm

"CONTRACTOR"

END OF DOCUMENT

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ARTICLE 1 - INTERPRETATION OF CONTRACT DOCUMENTS

1.1 Interpretation Of Documents

A. Contract Documents are complementary; what is called for by one is as binding as if called for by all.

B. Individual Contract Documents subdivide at first level into Articles, and then into paragraphs.

1.2 Order Of Precedence Of Documents

A. In the case of discrepancy or ambiguity in the Contract Documents, the following order of precedence shall prevail:

1. Modifications in inverse chronological order (i.e., most recent first), and in the same order as specific portions they are modifying;
2. Agreement Forms (Document 00 5200), and terms and conditions referenced therein;
3. Supplementary General Conditions, if included;
4. General Conditions (Document 00 7200);
5. Division 1 Specifications, if included;
6. Drawings and Technical Specifications (Division 2 and above);
7. Written numbers over figures, unless obviously incorrect;
8. Figured dimensions over scaled dimensions;
9. Large-scale Drawings over small-scale Drawings.

B. Any conflict between Drawings and Technical Specifications (Division 2 and above) will be resolved in favor of the document of the latest date (i.e., the most recent document), and if the dates are the same or not determinable, then in favor of Specifications.

C. Any conflict between a bill or list of materials shown in the Contract Documents and the actual quantities required to complete Work required by Contract Documents, will be resolved in favor of the actual quantities.

D. All Technical Specifications included in the Project manual shall be included within the Contract Documents unless identified otherwise.

ARTICLE 2 - PRE-BID INVESTIGATIONS

2.1 Pre-Bid Investigations Required

A. Prior to and as a condition of submitting a Bid and executing Document 00 5200 (Agreement), Contractor shall investigate fully the Work of the Contract. Contractor shall visit the Site, examine thoroughly and understand fully the nature and extent of the Contract Documents, Work, Site, locality, actual conditions and as-built conditions.

B. During performance of the Contract, Contractor will be charged with knowledge of all information that it should have learned in performing these pre-bid investigations and other obligations, and shall not be entitled to Change Orders (time or compensation) due to any information, error, inconsistency, omission, or conditions that Contractor should have known as a part of this Work. Contractor shall be responsible for the resultant losses, including, without limitation, the cost of correcting Defective Work.

2.2 Limited Reliance Permitted On Owner's Existing Conditions Data

A. Regarding aboveground and as-built conditions shown on the Contract Documents or supplied by Owner, such information has been compiled in good faith, however, Owner does not expressly or impliedly warrant or represent that such information is correctly shown or indicated, or otherwise complete for construction purposes. Contractor must independently verify such information as part of its pre-bid investigations, and where conditions are not reasonably verifiable or

discrepancies are identified, bring such matters to Owner's attention through written question issued during the bid period. In executing Document 00 5200 (Agreement), Contractor shall rely on the results of its own independent investigation and shall not rely on Owner-supplied information regarding aboveground conditions and as-built conditions, and Contractor shall accept full responsibility for its verification work sufficient to complete the Work as intended.

B. Regarding subsurface conditions other than Underground Facilities shown on the Contract Documents or otherwise supplied by Owner, Contractor may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated in the Contract Documents. Owner is not responsible for the completeness of any subsurface condition information, Contractor's conclusions or opinions drawn from any subsurface condition information, or subsurface conditions that are not specifically shown. (For example, Owner is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is shown.)

2.3 Pre-Bid Investigation Requirements For Excavation And Utilities Relocation Projects

A. As part of its pre-bid investigations for Projects involving excavation and/or relocation of existing utilities, Contractor shall verify information regarding Underground Facilities, including but not limited to, requesting additional information or verification of information as necessary.

B. Because of the nature and location of the Project, the existence of Underground Facilities is deemed inherent in the Work of the Contract, as is the fact that Underground Facilities are not always accurately shown or completely shown on as-built records, both as to their depth and location. Contractor shall, therefore, take care to note the existence and potential existence of Underground Facilities, in particular, above and below grade structures, drainage lines, storm drains, sewers, water, gas, electrical, chemical, hot water, and other similar items and utilities. Contractor shall carefully consider all supplied information, request additional information Contractor may deem necessary, and visually inspect the Site for above ground indications of Underground Facilities (such as, for example not by way of limitation, the existence of existing service laterals, appurtenances or other types of utilities, indicated by the presence of an underground transmission main or other visible facilities, such as buildings, new asphalt, meters and junction boxes, on or adjacent to the Site). Contractor shall also consider local underground conditions and typical practices for Underground Facilities, either through its own direct knowledge or through its subcontractors, and fully consider this knowledge in assessing the existing information and the reasonableness of its reliance.

ARTICLE 3 - SUBCONTRACTORS

3.1 Subcontractor Listing Law

A. Contractor shall comply with the Subcontractor Listing law, California Public Contract Code §§4101 et seq. Contractor shall not substitute any other person or firm in place of any Subcontractor listed in the Bid except as may be allowed by law.

B. Subcontractors shall not assign or transfer their subcontracts or permit them to be performed by any other contractor without Owner's written approval. At Owner's request, Contractor shall provide Owner with a complete copy of all executed subcontracts or final commercial agreements with Subcontractors and/or suppliers.

3.2 Subcontracts

A. Subcontract agreements shall preserve and protect the rights of Owner under the Contract Documents so that subcontracting will not prejudice such rights. To the extent of the Work to be performed by a Subcontractor, Contractor shall require the Subcontractor's written agreement (1) to be bound to the terms of Contract Documents and (2) to assume all the obligations and responsibilities that Contractor assumes toward Owner under the Contract Documents. (These agreements include for example, and not by way of limitation, all warranties, claims procedures and rules governing submittals of all types to which Contractor is subject under the Contract Documents.)

B. Contractor shall provide for the assignment to Owner of all rights any Subcontractor (of any tier) may have against any manufacturer, supplier, or distributor for breach of warranties and guarantees relating to the Work performed by the Subcontractor under the Contract Documents. Subcontracts shall provide and acknowledge Owner as an intended third-party beneficiary of each subcontract and supply contract (of any tier).

ARTICLE 4 - DRAWINGS AND SPECIFICATIONS

4.1 Intent Of Drawings And Specifications

A. Contractor shall interpret words or phrases used to describe Work (including services), materials, or equipment that have well-known technical or construction industry or trade meaning in accordance with that meaning. Drawings' intent specifically includes the intent to depict construction that complies with all applicable laws, codes and standards.

B. As part of the "Work," Contractor shall provide all labor, materials, equipment, machinery, tools, facilities, services, employee training and testing, hoisting facilities, Shop Drawings, storage, testing, security, transportation, disposal, the securing of all necessary or required field dimensions, the cutting or patching of existing materials, notices, permits, documents, reports, agreements and any other items required or necessary to timely and fully complete Work described and the results intended by Contract Documents and, in particular, Drawings and Specifications. Divisions and Specification Sections and the identification on any Drawings shall not control Contractor in dividing Work among Subcontractors or suppliers or delineating the Work to be performed by any specific trade.

C. Contractor shall perform reasonably implied parts of Work as "incidental work" although absent from Drawings and Specifications. Incidental work includes any work not shown on Drawings or described in Specifications that is necessary or normally or customarily required as a part of the Work shown on Drawings or described in Specifications. Incidental work includes any work necessary or required to make each installation satisfactory, legally operable, functional, and consistent with the intent of Drawings and Specifications or the requirements of Contract Documents. Contractor shall perform incidental work without extra cost to Owner. Incidental work shall be treated as if fully described in Specifications and shown on Drawings, and the expense of incidental work shall be included in price Bid and Contract Sum.

4.2 Checking Of Drawings And Specifications

A. Before undertaking each part of Work, Contractor shall carefully study and compare Contract Documents and check and verify pertinent figures shown in the Contract Documents and all applicable field measurements. Contractor shall be responsible for any errors that might have been avoided by such comparison. Figures shown on Drawings shall be followed; Contractor shall not scale measurements. Contractor shall promptly report to Owner, in writing, any conflict, error, ambiguity or discrepancy that Contractor may discover. Contractor shall obtain a written interpretation or clarification from Owner before proceeding with any Work affected thereby. .

4.3 Interpretation Of Drawings And Specifications

A. A typical or representative detail on Drawings shall constitute the standard for workmanship and material throughout corresponding parts of Work. Where necessary, and where reasonably inferable from Drawings, Contractor shall adapt such representative detail for application to such corresponding parts of Work. The details of such adaptation shall be subject to prior approval by Owner. Repetitive features shown in outline on Drawings shall be in exact accordance with corresponding features completely shown.

B. Should any discrepancy appear or any misunderstanding arise as to the import of anything contained in Drawings and Specifications, or should Contractor have any questions or requests relating to Drawings or Specifications, Contractor shall refer the matter to Owner, in writing, with a copy to the Architect/Engineer, where applicable. Owner will issue with reasonable promptness written responses, clarifications or interpretations as Owner may determine necessary, which shall be consistent with the intent of and be reasonably inferable from Contract Documents. Such written clarifications or interpretations shall be binding upon Contractor. If Contractor believes that

a written response, clarification or interpretation justifies an adjustment in the Contract Sum or Contract Time, Contractor shall give Owner prompt written notice. If the parties are unable to agree to the amount or extent of the adjustment, if any, then Contractor shall perform the Work in conformance with Owner's response, clarification, or interpretation and may make a written claim for the adjustment as provided in Article 12.

C. The following general specifications shall apply wherever in the Specifications, or in any directions given by Owner in accordance with or supplementing Specifications, it is provided that Contractor shall furnish materials or manufactured articles or shall do Work for which no detailed specifications are shown. Materials or manufactured articles shall be of the best grade, in quality and workmanship, obtainable in the market from firms of established good reputation. If not ordinarily carried in stock, the materials or manufactured articles shall conform to industry standards for first class materials or articles of the kind required, with due consideration of the use to which they are to be put. Work shall conform to the usual standards or codes, such as those cited herein, for first class work of the kind required. Contractor shall specify in writing to Owner the materials to be used or Work to be performed under this Paragraph ten Working Days prior to furnishing such materials or performing such Work.

4.4 Use Of Drawings And Specifications.

A. Drawings, Specifications and other Contract Documents were prepared for use for Work of Contract Documents only. No part of Contract Documents shall be used for any other construction or for any other purpose except with the written consent of Owner. Any unauthorized use of Contract Documents is prohibited and at the sole liability of the user.

4.5 Standard Specifications.

A. Standard Specifications refers to the most recent edition of the Standard Specifications of the State of California, Business and Transportation Agency, Department of Transportation.

B. In case of conflict between the Standard Specifications and these General Conditions or the Division 1 Specifications, the General Conditions and Division 1 Specifications shall take precedence over and be used in lieu of the conflicting provisions of the Standard Specifications.

ARTICLE 5 - COMMENCEMENT OF THE WORK

5.1 Submission Of Required Schedules

A. Contractor shall submit to Owner in draft for review and discussion at the Preconstruction Conference, and in final prior to the first payment application, the following schedules:

1. Schedule of Values
2. Critical Path Method Construction Schedule
3. Schedule of Submittals.

B. No progress payment shall be due or owing to Contractor until such schedules are submitted to and acceptable to Owner and/or Architect/Engineer as meeting the requirements of the Contract Documents. In Owner's sole discretion, Owner may elect to instead withhold a portion of any progress payment for unacceptable compliance with contract requirements for such schedules.

C. Owner's acceptance of Contractor's schedules will not create any duty of care or impose on Owner any responsibility for the sequencing, scheduling or progress of Work nor will it interfere with or relieve Contractor from Contractor's full responsibility therefore.

5.2 Commencement Date Of Contract Time

A. The Contract Time will commence ten (10) Working Days following execution of the Agreement by the Owner or, if a Notice to Proceed is given, on the date indicated in the Notice to Proceed.

ARTICLE 6 - CONTRACTOR'S ORGANIZATION AND EQUIPMENT

6.1 Contractor's Legal Address

A. Address, facsimile number, and email address given in Contractor's Bid are hereby designated as Contractor's legal address, facsimile number, and email address. Contractor may change its legal address, facsimile number, and email address by notice in writing, delivered to Owner, which in conspicuous language advises Owner of a change in legal address, facsimile number, or email address, and which Owner accepts in writing. Delivery to Contractor's legal address or depositing in any post office or post office box regularly maintained by the United States Postal Service, in a wrapper with postage affixed, directed to Contractor at legal address, or of any drawings, notice, letter or other communication, shall be deemed legal and sufficient service thereof upon Contractor. Facsimile or email to Contractor's designated facsimile number or email address of any letter, memorandum, or other communication on standard or legal sized paper, with proof of facsimile transmission or email confirmation, shall be deemed legal and sufficient service thereof upon Contractor.

6.2 Contractor's Superintendents Or Forepersons

A. Contractor shall at all times be represented on Site by one or more superintendents or forepersons authorized and competent to receive and carry out any instructions that Owner may give and shall be liable for faithful observance of instructions delivered to Contractor or to authorized representative or representatives on Site. The Superintendent shall not be changed except with the consent of the Owner unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in its' employ. If the Superintendent proves to be unsatisfactory to Owner, they shall be replaced within ten (10) Calendar Days after written notice from Owner to Contractor.

6.3 Proficiency In English

A. Supervisors, security guards, safety personnel and employees who have unescorted access to the Site shall possess proficiency in the English language in order to understand, receive and carry out oral and written communications or instructions relating to their job functions, including safety and security requirements.

6.4 Contractor's And Subcontractors' Employees

A. Contractor shall employ, and shall permit its Subcontractors to employ, only competent and skillful personnel to do Work. If Owner notifies Contractor that any of its employees, or any of its Subcontractors' employees on Work is incompetent, unfaithful, disorderly or profane, or fails to observe customary standards of conduct or refuses to carry out any provision of the Contract Documents, or uses threatening or abusive language to any person on Work representing Owner, or violates sanitary rules, or is otherwise unsatisfactory, and if Owner requests that such person be discharged from Work, then Contractor or its Subcontractor shall immediately discharge such person from Work and the discharged person shall not be re-employed on the Work except with consent of Owner.

6.5 Contractor's Use Of The Site

A. Contractor shall not make any arrangements with any person to permit occupancy or use of any land, structure or building within the limits of the Work, for any purpose whatsoever, either with or without compensation, in conflict with any agreement between Owner and any Owner, former Owner or tenant of such land, structure or buildings. Contractor may not occupy Owner-owned property outside the limit of the Work as indicated on the Drawings unless it obtains prior approval from Owner.

ARTICLE 7 - OWNER'S ADMINISTRATION OF WORK

7.1 Owner's Representative(s)

A. Owner's Representative(s) will have limited authority to act on behalf of Owner as set forth in the Contract Documents.

B. Except as otherwise provided in these Contract Documents or subsequently identified in writing by Owner, Owner will issue all communications to Contractor through Owner's Representative,

and Contractor shall issue all communications to Owner through Owner's Representative in a written document delivered to Owner.

C. Should any direct communications between Contractor and Owner's consultants, architects or engineers not identified in Article 2 of Document 00 5200 (Agreement) occur during field visits or by telephone, Contractor shall immediately confirm them in a written document copied to Owner.

7.2 Owner's Observation Of The Work

A. Work shall be performed under Owner's general observation and administration. Contractor shall comply with Owner's directions and instructions in accordance with the terms of Contract Documents, but nothing contained in these General Conditions shall be taken to relieve Contractor of any obligations or liabilities under the Contract Documents. Owner's failure to review or, upon review, failure to object to any aspect of Work reviewed, shall not be deemed a waiver or approval of any non-conforming aspect of Work.

B. Subject to those rights specifically reserved in the Contract Documents, Owner will not supervise, or direct, or have control over, or be responsible for, Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or Contractor's failure to comply with laws and regulations applicable to the furnishing or performance of Work. Owner will not be responsible for Contractor's failure to perform or furnish the Work in accordance with Contract Documents.

7.3 Architect/Engineer's Observation Of Work

A. Owner may engage an Architect/Engineer, an independent consultant or Project Manager (collectively for purposes of this Paragraph, "Project Manager/Engineer") to assist in administering the Work. If so engaged, Project Manager/Engineer will advise and consult with Owner, but will have authority to act on behalf of Owner only to the extent provided in the Contract Documents or as set forth in writing by Owner. Project Manager/Engineer will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with Work. Project Manager/Engineer will not be responsible for or have control over the acts or omissions of Contractor, Subcontractors or their agents or employees, or any other persons performing Work.

B. Project Manager/Engineer may review Contractor's Submittals, such as Shop Drawings, Product Data, and Samples, but only for conformance with design concept of Work and with information given in the Contract Documents.

C. Project Manager/Engineer may visit the Site at intervals appropriate to stage of construction to become familiar generally with the progress and quality of Work and to determine in general if Work is proceeding in accordance with Contract Documents. Based on its observations, Project Manager/Engineer may recommend to Owner disapproval or rejection of Work that Project Manager/Engineer believes to be Defective or will not produce a complete Project that conforms to Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by Contract Documents. Owner will also have authority to require special inspection or testing of Work, whether or not the Work is fabricated, installed or completed.

7.4 Owner's And Architect/Engineer's Exercise Of Contract Responsibilities

A. Owner, Project Manager, Architect/Engineer and all Owner's representatives, in performing their duties and responsibilities under the Contract Documents, accept no duties, responsibilities or duty of care, nor may the same be implied or inferred, towards Contractor, any Subcontractor, sub-Subcontractor or supplier, except those set forth expressly in the Contract Documents.

7.5 Owner's Right Of Access To The Work

A. During performance of Work, Owner and its agents, consultants, and employees may at any time enter upon Work, shops or studios where any part of the Work may be in preparation, or factories where any materials for use in Work are being or are to be manufactured, and Contractor shall provide proper and safe access and facilities for this purpose, and shall make arrangements with manufacturers to facilitate inspection of their processes and products to such extent as Owner's

interests may require. Other contractors performing work for Owner may also enter upon Work for all purposes required by their respective contracts. Subject to the rights reserved in the Contract Documents, Contractor shall have sole care, custody, and control of the Site and its Work areas.

7.6 Owner's Right Of Separate Construction

A. Owner may perform with its own forces, construction or operations related to the Project, or the Site during Contractor's operations. Owner may also award separate contracts in connection with other portions of the Project or other construction or operations, on the Site or areas contiguous to the Site, under conditions similar to these Contract Documents, or may have utility Owners perform other work.

B. Contractor shall adjust its schedule and fully coordinate with and shall afford all other contractors, utility districts and Owner (if Owner is performing work with its own forces), proper and safe access to the Site, and reasonable opportunity for the installation and storage of their materials. Contractor shall ensure that the execution of its Work properly connects and coordinates with others' work, do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work, and shall cooperate with them to facilitate the progress of the Work.

C. To the extent that any part of Contractor's Work is to interface with work performed or installed by other contractors or utility owners, Contractor shall inspect and measure the in-place work. Contractor shall promptly report to Owner in writing any defect in in-place work that will impede or increase the cost of Contractor's interface unless corrected.

ARTICLE 8 - CONTRACTOR'S PROSECUTION AND PROGRESS OF THE WORK

8.1 Contractor To Supervise The Work

A. Subject to those rights specifically reserved in the Contract Documents, Contractor shall supervise, direct, have control over, and be responsible for, Contractor's means, methods, techniques, sequences or procedures of construction, safety precautions and programs incident thereto, and compliance with laws and regulations applicable to the furnishing or performance of Work.

B. Contractor shall keep on the Site at all times during Work progress a competent resident Superintendent, who shall not be replaced without Owner's express written consent. The Superintendent shall be Contractor's representative at the Site and shall have complete authority to act on behalf of Contractor. All communications to and from the Superintendent shall be as binding as if given to or by Contractor.

C. Contractor shall supervise, inspect, and direct Work competently and efficiently, devoting the attention and applying such personal skills and expertise as may be required and necessary to perform Work in accordance with Contract Documents. Contractor shall be solely responsible for and have control and charge of construction means, methods, techniques, sequences and procedures, safety precautions and programs in connection with the Work. Contractor shall be responsible to see that the completed Work complies accurately with Contract Documents.

D. Contractor is fully responsible for Contractor's own acts and omissions. Contractor is responsible for all acts and omissions of its Subcontractors, suppliers, and other persons and organizations performing or furnishing any of the Work, labor, materials, or equipment under a direct or indirect contract with Contractor.

E. Contractor shall conduct monthly Contractor Safety Committee meetings, and weekly toolbox safety talks.

8.2 Contractor To Maintain Cost Data

A. Contractor shall maintain full and correct information as to the number of workers employed in connection with each subdivision of Work, the classification and rate of pay of each worker in form of certified payrolls, the cost to Contractor of each class of materials, tools and appliances used by Contractor in Work, and the amount of each class of materials used in each subdivision

of Work. Contractor shall provide summaries or reports comparing actual Project costs with Bid estimates or budgets, upon Owner's request.

B. Contractor shall maintain daily job reports recording all significant activity on the job, including the number of workers on Site, Work activities, problems encountered and delays. Contractor shall provide Owner with copies for each Day Contractor works on the Project, to be delivered to Owner either the same Day or the following morning before starting work at the Site. Contractor shall take pre-construction and monthly progress photographs of all areas of the Work. Contractor shall maintain copies of all correspondence with Subcontractors and records of meetings with Subcontractors.

C. Owner shall have the right to audit and copy Contractor's books and records of any type, nature or description relating to the Project (including but not limited to financial records reflecting in any way costs claimed on the Project), and to inspect the Site, including Contractor's trailer, or other job Site office, and this requirement shall be contained in the subcontracts of Subcontractors working on Site. By way of example, Owner shall have the right to inspect and obtain copies of all Contract Documents, planning and design documents, Bid proposal and negotiation documents, cost records and job cost variance reports, design modification proposals, value engineering or other cost reduction proposals, revisions made to the original design, job progress reports, photographs, and as-built drawings maintained by Contractor. Owner and any other applicable governmental entity shall have the right to inspect all information and documents maintained hereunder at any time during the Project and for a period of five years following Final Completion, in accordance with the provisions of Section 8546.7 of the California Government Code. This right of inspection shall not relieve Contractor of its duties and obligations under the Contract Documents. This right of inspection shall be specifically enforceable in a court of law, either independently or in conjunction with enforcement of any other rights in the Contract Documents.

8.3 Contractor To Supply Sufficient Workers And Materials

A. Unless otherwise required by Owner under the terms of Contract Documents, Contractor shall at all times keep on the Site materials and employ qualified workers sufficient to prosecute Work at a rate and in a sequence and manner necessary to complete Work within the Contract Time. This obligation shall remain in full force and effect notwithstanding disputes or claims of any type.

8.4 Contractor To Maintain Project Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Contract Modifications, Change Orders, Work Directives, Force Account orders, and written interpretations and clarifications in good order and annotated to show all as-built changes made during construction. These Project Record Documents, together with all approved Samples and a counterpart of all approved Shop Drawings, shall be maintained and available to Owner for reference. Upon completion of the Work, Contractor shall deliver to Owner, the Project Record Documents, Samples and Shop Drawings and as-built drawings.

B. Throughout Contractor's performance of the Work of the Project, Contractor shall maintain construction records to include: shop drawings; product data/material data sheets; samples; submittal; purchases; materials; equipment; inspections; applicable handbooks; applicable codes and standards; maintenance and operating manuals and instructions; RFI Log; Submittal Log; other related documents and revisions which arise out of the Construction Contracts. Contractor shall maintain records of principal building layout lines, elevations for the bottom of footings, floor levels, and key site elevations (certified by a qualified surveyor or professional engineer). Contractor shall make all records available to Owner. At the completion of the Project, Contractor shall deliver all such records to the Owner to have a complete set of record as-built drawings.

8.5 Contractor To Not Disrupt Owner Operation

A. Contractor shall schedule and execute all Work in a manner that does not interfere with or disrupt Owner operations, including but not limited to, parking, utilities (electricity, gas, water), noise, access by employees and administration, access by vendors, physicians, patients and any other person or entity using Owner facilities or doing business with Owner. Contractor shall produce

and supply coordination plans and requests to Owner, following Owner procedures, for all necessary interference of construction with Owner, which Owner will reasonably cooperate with.

8.6 Contractor To Provide Temporary Facilities And Controls

A. Unless expressly provided otherwise in the Contract Documents, Contractor shall provide all temporary utilities (including without limitation electricity, water, natural gas), lighting, heating, cooling and ventilating devices, telephone, sanitary facilities, barriers, fences and enclosures, tree and plant protection, fire protection, pollution, erosion, Storm Water Pollution Prevention controls, noise and traffic control, and any other necessary services required for construction, testing or completion of the Work.

ARTICLE 9 - WARRANTY, GUARANTY, AND INSPECTION OF WORK

9.1 Warranty And Guaranty

A. General Representations and Warranties: Contractor represents and warrants that it is and will be at all times fully qualified and capable of performing every Phase of the Work and to complete Work in accordance with the terms of Contract Documents. Contractor warrants that all construction services shall be performed in accordance with generally accepted professional standards of good and sound construction practices and all requirements of the Contract Documents. Contractor warrants that Work, including but not limited to each item of materials and equipment incorporated therein, shall be new, of suitable grade of its respective kind for its intended use, and free from defects in design, engineering, materials, construction and workmanship. Contractor warrants that Work shall conform in all respects with all applicable requirements of federal, state and local laws, applicable construction codes and standards, licenses, and permits, Drawings and Specifications and all descriptions set forth therein, and all other requirements of Contract Documents.

B. Extended Guarantees: Any guarantee exceeding one year provided by the supplier or manufacturer of any equipment or materials used in the Project shall be extended for such term. Contractor shall supply Owner with all warranty and guarantee documents relative to equipment and materials incorporated in the Project and guaranteed by their suppliers or manufacturers.

C. Environmental and Toxics Warranty: The covenants, warranties and representations contained in this Paragraph are effective continuously during Contractor's Work on the Project and following cessation of labor for any reason including, but not limited to, Project completion. Contractor covenants, warrants and represents to Owner that:

1. To Contractor's knowledge after due inquiry, no lead or Asbestos-containing materials were installed or discovered in the Project at any time during Contractor's construction thereof. If any lead or Asbestos-containing materials were discovered, Contractor made immediate written disclosure to Owner.
2. To Contractor's knowledge after due inquiry, no electrical transformers, light fixtures with ballasts or other equipment containing PCBs are or were located on the Project at any time during Contractor's construction thereof. If any such materials were discovered, Contractor made immediate written disclosure to Owner.
3. To Contractor's knowledge after due inquiry, no storage tanks for gasoline or any other toxic substance are or were located on the Project at any time during Contractor's construction thereof. If any such materials were discovered, Contractor made immediate written disclosure to Owner.
4. Contractor's operations concerning the Project are and were not in violation of any applicable environmental federal, state, or local statute, law or regulation dealing with hazardous materials substances or toxic substances and no notice from any governmental body has been served upon Contractor claiming any violation of any such law, ordinance, code or regulation, or requiring or calling attention to the need for any Work, repairs, construction, alteration, or installation on or in connection with the Project in order to comply with any such laws, ordinances, codes, or regulations, with which Contractor has

not complied. If there are any such notices with which Contractor has complied, Contractor shall provide Owner with copies thereof.

9.2 Inspection Of Work

A. Work and materials, and manufacture and preparation of materials, from beginning of construction until Final Completion and acceptance of Work, shall be subject to inspection and rejection by Owner, its agents, representatives or independent contractors retained by Owner to perform inspection services, or governmental agencies with jurisdictional interests. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and program so that they may comply therewith as applicable. Upon request or where specified, Owner shall be afforded access for inspection at the source of supply, manufacture or assembly of any item of material or equipment, with reasonable accommodations supplied for making such inspections.

B. Contractor shall furnish, in such quantities and sizes as may be required for proper examination and tests, Samples or test specimens of all materials to be used or offered for use in connection with Work, in addition to tests and submittals required in the individual material or equipment specification sections. Contractor shall prepare Samples or test specimens at its expense and furnish them to Owner. Contractor shall submit all Samples in ample time to enable Owner to make any necessary tests, examinations, or analyses before the time it is desired to incorporate the material into the Work.

C. Contractor shall give Owner no less than 48 hours notice of readiness of Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

D. If applicable laws or regulations of any authority having jurisdiction require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, and furnish Owner with the required certificates of inspection, or approval. Owner will pay the cost of initial testing and Contractor shall pay all costs in connection with any follow-up or additional testing. Contractor shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for the acceptance of materials or equipment to be incorporated in the Work, or of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

E. If Contractor covers any Work, or the work of others, prior to any required inspection, test or approval without written approval of Owner, Contractor shall uncover the Work at Owner's request. Contractor shall bear the expense of uncovering Work and replacing Work.

F. Contractor shall furnish tools, labor and materials necessary to make examination of Work that may be completed or in progress, even to the extent of uncovering or taking down portions of finished Work. Cost of making examination and of reconstruction shall be borne by Contractor.

G. Inspection of the Work by or on behalf of Owner, or Owner's failure to do so, shall not under any circumstances be deemed a waiver or approval of any non-conforming aspect of the Work. Contractor shall have an absolute duty, in the absence of a written Change Order signed by Owner, to perform Work in conformance with the Contract Documents and to immediately correct Defective Work immediately upon Contractor's knowledge.

H. Any inspection, evaluation, or test performed by or on behalf of Owner relating to the Work is solely for the benefit of Owner, and shall not be relied upon by Contractor. Contractor shall not be relieved of the obligation to perform Work in accordance with the Contract Documents, nor relieved of any guaranty, warranty, or other obligation, as a result of any inspections, evaluations, or tests performed by Owner, whether or not such inspections, evaluations, or tests are permitted or required under the Contract Documents. Contractor shall be solely responsible for testing and inspecting Work already performed to determine whether such Work is in proper condition to receive later Work.

9.3 Correction Of Defective Work

A. Owner may direct Contractor to correct any Defective Work or remove it from the Site and replace it with Work that is not Defective and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting from the correction or removal. Contractor shall be responsible for any and all claims, costs, losses and damages caused by or resulting from such correction or removal. Owner's rights under this Paragraph shall be in addition to any other rights it may have under the Contract Documents or by law.

B. If Contractor fails to supply sufficient skilled workers, suitable materials or equipment, or to furnish or perform the Work in such a way that the completed Work will conform to Contract Documents, Owner may order Contractor to replace any such Defective Work, or stop any portion of Work to permit Owner (at Contractor's expense) to replace such Defective Work. These Owner rights are entirely discretionary on the part of Owner, and shall not give rise to any duty on the part of Owner to exercise the rights for the benefit of Contractor or any other party.

9.4 Acceptance And Correction Of Defective Work By Owner

A. Owner may in its sole discretion elect to accept Defective Work. Contractor shall pay all claims, costs, losses and damages attributable to Owner's evaluation of and determination to accept such Defective Work. If Owner accepts any Defective Work prior to final payment, a Change Order may be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may deduct from monies due Contractor, all claims, costs, losses, damages, expenses and liabilities attributable to the Defective Work. If Contractor disagrees with Owner's calculations, Contractor may make a claim as provided in Article 12 of this Document 00 7200. If Owner accepts any Defective Work after final payment, Contractor shall pay to Owner, an appropriate amount as determined by Owner.

B. Owner may correct and remedy deficiency if, after five (5) Calendar Days of written notice to Contractor, Contractor fails to correct Defective Work or to remove and replace rejected Work; or provide a plan for correction of Defective Work acceptable to Owner; or perform Work in accordance with Contract Documents. In connection with such corrective and remedial action, Owner may exclude Contractor from all or part of the Site; take possession of all or part of Work and suspend Contractor's Work related thereto; and incorporate in Work any materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, its representatives, agents, employees, and other contractors and Project Manager/Engineer's consultants' access to the Site to enable Owner to exercise the rights and remedies under this Paragraph. Contractor shall be responsible for all claims, costs, losses, damages, expenses and liabilities incurred or sustained by Owner in exercising such rights and remedies. A Change Order may be issued incorporating the necessary revisions in the Contract Documents with respect to Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may deduct from monies due Contractor, all claims, costs, losses and damages caused by or resulting from the correction or removal. If Contractor disagrees with Owner's calculations, Contractor may make a claim as provided in Article 12 of this Document 00 7200.

9.5 Rights Upon Inspection, Correction Or Acceptance

A. Contractor shall not be allowed an extension of Contract Time because of any delay in the performance of Work attributable to the exercise by Owner of its rights and remedies under this Article. Where Owner exercises its rights under this Article, it retains and may still exercise all other rights it has by law or under the Contract Documents including, but not limited to, the right to terminate Contractor's right to proceed with the Work under the Contract Documents for cause and/or make a claim or back charge where a Change Order cannot be agreed upon.

B. Inspection by Owner or its authorized agents or representatives shall not relieve Contractor of its obligation to have furnished material and workmanship in accordance with Contract Documents. Payment for Work completed through periodic progress payments, final payment or otherwise shall not operate to waive Owner's right to require full compliance with Contract Documents and shall in no way be deemed as acceptance of any defective Work paid therefor. Contractor's

obligation to complete the Work in accordance with Contract Documents shall be absolute, unless Owner agrees otherwise in writing.

9.6 Proof Of Compliance Of Contract Provisions

A. In order that Owner may determine whether Contractor has complied or is complying with requirements of Contract Documents not readily enforceable through inspection and tests of Work and materials, Contractor shall at any time, when requested, submit to Owner properly authenticated documents or other satisfactory proofs of compliance with all applicable requirements.

B. Before commencing any portion of Work, Contractor shall inform Owner in writing as to time and place at which Contractor wishes to commence Work, and nature of Work to be done, in order that proper provision for inspection of Work may occur, and to assure measurements necessary for record and payment. Information shall be given to Owner a reasonable time in advance of time at which Contractor proposes to begin Work, so that Owner may complete necessary preliminary work without inconvenience or delay to Contractor.

9.7 Correction Period And Project Warranty Period:

A. If within one year after the Date of Completion as identified on the recorded Notice of Completion, or such longer period of time as may be prescribed by laws, regulations or by the terms of Contract Documents or any extended warranty or guaranty, any Work (completed or incomplete) is found to be Defective, Contractor shall promptly without cost to Owner and in accordance with Owner's written instructions, correct such Defective Work. Contractor shall remove any Defective Work rejected by Owner and replace it with Work that is not Defective, and satisfactorily correct and remove and replace any damage to other Work or the work of others resulting therefrom. If Contractor fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the Defective Work corrected or the rejected Work removed and replaced. Contractor shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Contractor fails to correct Defective Work, or defects are discovered outside the correction period, Owner shall have all rights and remedies granted by law.

B. In special circumstances where a part of the Work is occupied or a particular item of equipment is placed in continuous service before the date of completion as identified in the recorded Notice of Completion of all the Work, the correction period for that part of Work or that item may start to run from an earlier date if so provided by Change Order.

C. Where Defective Work or rejected Work (and damage to other Work resulting therefrom) has been corrected, removed, or replaced under this provision after the commencement of the correction period, the correction period hereunder with respect to such Work shall be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

9.8 No Waiver

A. Neither recordation of the Notice of Completion nor final certificate for payment nor provision of the Contract nor partial or entire use or occupancy of premises by Owner shall constitute acceptance of Work not done in accordance with Contract Documents nor relieve Contractor of liability in respect to express warranties or responsibility for faulty materials or workmanship.

B. If, after installation, operation, or use of materials or equipment to be provided under Contract proves to be unsatisfactory to Owner, Owner shall have right to operate and use materials or equipment until said materials and equipment can, without damage to Owner, be taken out of service for correction or replacement. Period of use of Defective materials or equipment pending correction or replacement shall in no way decrease guarantee period required for acceptable corrected or replaced items of materials or equipment.

C. Nothing in the Contract Documents shall be construed to limit, relieve, or release Contractor's, Subcontractors', and equipment suppliers' liability to Owner for damages sustained as result of latent defects in materials or equipment caused by negligence of Contractor, its agents, suppliers, employees, or Subcontractors.

ARTICLE 10 - MODIFICATIONS OF CONTRACT DOCUMENTS

10.1 Owner's Right To Direct Changed Work.

A. Owner may, without notice to the sureties and without invalidating the Contract, make changes in the Work ("Changed Work"), including without limitation: alterations, deviations, additions to, or deletions from Contract Documents; increase or decrease the quantity of any item or portion of the Work; expand, reduce or otherwise change the Contract Time; delete any item or portion of the Work; and require extra Work. Contractor shall perform such Work under applicable provisions of the Contract Documents, unless specifically provided otherwise at the time the change is ordered.

B. If Changed Work is of such a nature as to increase or decrease the time or cost of any part of Work, price fixed in Contract shall be increased or decreased by amount as the Contractor and Owner may agree upon as reasonable and proper allowance for increase or decrease in cost of Work using the cost guidelines set forth in this Article, and absent such agreement, then as Owner may direct (with Contractor retaining its rights under Article 12 herein).

10.2 Required Documentation For Changed Work

A. Changes affecting the Contract Time or Contract Sum of the Work shall be set forth in a written Change Order that shall specify:

1. The Work performed in connection with the change to be made;
2. The amount of the adjustment of the Contract Sum, if any, and the basis for compensation for the Work ordered; and
3. The extent of the adjustment in the Contract Time, if any.

B. A Change Order will become effective when signed by Owner, notwithstanding that Contractor has not signed it. A Change Order will become effective without Contractor's signature, provided Owner indicates same thereon (by indicating it as a "unilateral change order").

10.3 Procedures And Pricing Of Changed Work

A. Procedures for changed work and pricing of changed work, claims and all forms of extra compensation, are set forth in Section 01 2050 (Modification Procedures).

ARTICLE 11 - TIME ALLOWANCES

11.1 Time Allowances

A. Time is of the essence. Contract Time may only be changed by Change Order, and all time limits stated in the Contract Documents are to mean that time is of the essence.

11.2 Excusable Delay And Inexcusable Delay Defined.

A. Excusable Delay. Subject to the provisions on Notice of Delay below, Contract Time may be adjusted in an amount equal to the time lost due to:

1. Changes in the Work ordered by Owner ("**Changes**");
2. Acts or neglect by Owner, Architect/Engineer, any Owner Representative, utility owners or other contractors performing other work, not permitted or provided for in the Contract Documents, provided that Contractor has performed its responsibilities under the Contract Documents (including but not limited to pre-bid investigations) ("**Acts or Neglect**"); or
3. Fires, floods, epidemics, abnormal weather conditions beyond the parameters otherwise set forth in this Article, earthquakes, civil or labor disturbances, or acts of God (together, "force majeure events"), provided damages resulting therefrom are not the result of Contractor's failure to protect the Work as required by Contract Documents ("**Force Majeure**").

B. Inexcusable Delay. Contract Time shall not be extended for any period of time where Contractor (and/or any Subcontractor) is delayed or prevented from completing any part of the Work due to a

cause that is within Contractor's risk or responsibility under the Contract Documents. Delays attributable to or within the control of a Subcontractor, or its subcontractors, or supplier, are deemed delays within the control of Contractor.

C. Float. Float shall be treated as a Project resource. Contractor shall not be entitled to a time extension for impacts that consume float, but do not impact the critical path.

11.3 Notice Of Delay

A. Within five (5) Working Days of the beginning of any delay (excepting adverse weather delays), Contractor shall notify Owner in writing, by submitting a notice of delay that shall describe the anticipated delays resulting from the delay event in question. If Contractor requests an extension of time, Contractor shall submit a TIE within seven (7) Working Days of the notice of delay. Owner will determine all claims and adjustments in the Contract Time. No claim for an adjustment in the Contract Time will be valid and such claim will be waived if not submitted in accordance with the requirements of this subparagraph. In cases of substantial compliance with the seven-day notice requirement here (but not to exceed fifteen (15) Working Days from the beginning of the delay event), Owner may in its sole discretion recognize a claim for delay accompanied with the proper TIE, provided Contractor also shows good faith and a manifest lack of prejudice to Owner from the late notice.

11.4 Compensable Time Extensions

A. Subject to other applicable provisions of the Contract Documents, Contractor may be entitled to adjustment in Contract Sum in addition to Contract Time for:

1. Excusable delay caused solely by Changes in the Work ordered by Owner, as provided above, and/or
2. Excusable delay caused solely by Acts or Neglect by Owner or other person, as provided above.

11.5 Non-Compensable Time Extensions

A. Subject to other applicable provisions of the Contract Documents, Contractor may be entitled to adjustment in Contract Time only, without adjustment in Contract Sum, for

1. Periods of excusable delay caused solely by weather or Force Majeure events as provided above in this Article, or
2. Periods of concurrent delay, where delay results from two or more causes, one of which is compensable (resulting from Changes or Acts or Neglect as set forth above in this Article), and the other of which is non-compensable or inexcusable, such as: acts or neglect of Contractor, Subcontractors or others for whom Contractor is responsible; other acts, omissions and conditions which would not entitle Contractor to adjustment in Contract Time; adverse weather; and/or actions of Force Majeure as provided above in this Article.

11.6 Adverse Weather

A. If the Contractor is delayed in the performance of the Work because of acts of God, fire, strikes, unavailability of materials or similar occurrences beyond his control, the Owner may grant such extension of time to complete the contract as he deems appropriate, providing the contractor has notified the Owner in writing of the causes of the delay within five (5) Working Days of the beginning of the delay.

B. Requests for extensions of time to complete the contract based on delays in the performance of the work due to inclement weather must be submitted in writing to the Owner with appropriate justification on the number of days of delay. The Contractor and Owner will review the inclement weather days weekly. The Contractor will not be entitled to payment for costs incurred as a result of taking such actions.

C. During unfavorable weather, wet ground, or other unsuitable construction conditions, Contractor shall employ best practices to protect the Work, manage the construction site and rainwater during inclement weather and provide requirements of implemented SWPPP and BMP's. Persons performing the Work shall examine surfaces to receive their Work and shall report in

writing to Contractor, with copy to Owner representative and the Architect/Engineer conditions detrimental to the Work. Failure to examine and report discrepancies makes the Contractor responsible, at no increase in Contract Sum, for corrections Owner may require. Commencement of Work constitutes acceptance of surface.

11.7 Liquidated Damages

A. Time is of the essence. Execution of Contract Documents by Contractor shall constitute its acknowledgement that Owner will actually sustain damages in the form of Contract administration expenses (such as Project management and consultant expenses) in the amount fixed in the Contract Documents for each and every Day during which completion of Work required is delayed beyond expiration of time fixed for completion plus extensions of time allowed pursuant to provisions hereof.

ARTICLE 12 - CLAIMS BY CONTRACTOR

12.1 Obligation to File Claims for Disputed Work

A. Should it appear to Contractor that the Work to be performed or any of the matters relative to the Contract Documents are not satisfactorily detailed or explained therein, or should any questions arise as to the meaning or intent of the Contract Documents, or should any dispute arise regarding the true value of any work performed, work omitted, extra work that the Contractor may be required to perform, time extensions, payment to the Contractor during performance of this Contract, performance of the Contract, and/or compliance with Contract procedures, or should Contractor otherwise seek extra time or compensation FOR ANY REASON WHATSOEVER, then Contractor shall first follow procedures set forth in the Contract (including but not limited to other Articles of this Document 00 7200 and Section 01 2050). If a dispute remains, then Contractor shall give written notice to Owner that expressly invokes this Article 12. Owner shall decide the issue in writing within 15 Working Days; and Owner's written decision shall be final and conclusive. If Contractor disagrees with Owner's decision, or if Contractor contends that Owner failed to provide a decision timely, then Contractor's SOLE AND EXCLUSIVE REMEDY is to promptly file a written claim setting forth Contractor's position as required herein.

12.2 Form And Contents Of Claim

A. Contractor's written claim must identify itself as a "Claim" under Article 12 and must include the following: (1) a narrative of pertinent events; (2) citation to contract provisions; (3) theory of entitlement; (4) complete pricing of all cost impacts; (5) a time impact analysis of all time delays that shows actual time impact on the critical path; (6) documentation supporting items 1 through 5; a verification under penalty of perjury of the claim's accuracy. The Claim shall be submitted to Owner within thirty (30) Calendar Days of receiving Owner's written decision, or the date Contractor contends such decision was due, and shall be priced like a change order according to Section 01 2050, and must be updated monthly as to cost and entitlement if a continuing claim. Routine contract materials, for example, correspondence, RFI, Change Order requests, or payment requests shall not constitute a claim. Contractor shall bear all costs incurred in the preparation and submission of a claim.

12.3 Administration During/After Claim Submission

A. Owner may render a final determination in writing based on the Claim or may in its discretion conduct an administrative hearing on Contractor's claim, in which case Contractor shall appear, participate, answer questions and inquiries, and present any further evidence or analysis requested by Owner prior to rendering a final determination in writing. Should Owner take no action on the Claim within 45 Calendar Days of submission, it shall be deemed denied. The parties may extend this 45 day period by mutual agreement upon submission of a claim.

B. Notwithstanding and pending the resolution of any claim or dispute, Contractor shall diligently prosecute the disputed work to final completion in accordance with Owner's determination.

C. After their submission, claims that total less than $375,000 in the aggregate at Contract closeout shall also be subject to the Local Agency Disputes Act.

D. Owner shall issue payment on any undisputed portion of the Claim within 60 days of Owner's final determination in writing. Failure by Owner to issue a written statement shall result in the claim being rejected in its entirety. A Claim that is denied by reason of Owner's failure to respond shall not constitute an adverse finding with regard to the merits of the Claim

12.4 Informal Conference and Mediation

A. If the Contractor disputes the Owner's written statement, or if the Owner fails to respond to a Claim issued pursuant to this Article within the time prescribed, the Contractor 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 Owner shall schedule a meet and confer conference within thirty (30) calendar days of the demand.

B. Within ten (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 Owner shall provide the Contractor with 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 made within sixty (60) days after the Owner issues this written statement.

C. Any remaining disputed portion of the Claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the Owner and the Contractor sharing the associated costs equally. The Owner and Contractor shall mutually agree to a mediator within ten (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 selected 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 a neutral mediator.

D. 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 Article.

E. If mediation is unsuccessful, the parts of the Claim remaining in dispute shall be subject to applicable procedures outside this Article.

F. Unless otherwise agreed to by the Owner and the Contractor in writing, the mediation conducted pursuant to this Article shall excuse any further obligation under Section 20104.4 of the Public Contract Code to mediate after litigation has been commenced.

G. The Claim resolution procedures in this Article do not preclude Owner from requiring arbitration of disputes under private arbitration if mediation under this Article does not resolve the parties' dispute.

H. Amounts not paid in a timely manner as required by this Article shall bear interest at 7 percent per annum**.**

12.5 Claims by Subcontractors

A. If a Subcontractor or a lower tier Subcontractor lacks legal standing to assert a Claim against Owner because privity of contract does not exist, the Contractor may present to the Owner 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 Owner shall furnish reasonable documentation to support the Claim. Within forty-five (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 Owner and, if the original

Contractor did not present the Claim, provide the Subcontractor with a statement of the reasons for not having done so**.**

12.6 Compliance

A. The provisions of this Article 12 constitute a non-judicial claim settlement procedure that, pursuant to Section 930.2 of the California Government Code, shall constitute a condition precedent to submission of a valid Government Code Section 910 Claim under the California Government Code. Contractor shall bear all costs incurred in the preparation, submission and administration of a claim. Any claims presented thereafter in accordance with the Government Code must affirmatively indicate Contractor's prior compliance with the claims procedure herein and the previous dispositions under Paragraph 12.03 above of the claims asserted. Pursuant to Government Code Section 930.2, the one-year period in Government Code section 911.2 shall be reduced to 150 Calendar Days from either accrual of the cause of action, substantial completion or termination of the contract, whichever occurs first; in all other respects, the requirements of the Government Code shall apply unchanged, including, without limitation, Contractor's obligation to file a Government Code Section 910 Claim.

B. Failure to submit and administer claims as required in Article 12 shall waive Contractor's right to claim on any specific issues not included in a timely submitted claim. Claim(s) or issue(s) not raised in a timely protest and timely claim submitted under this Article 12 may not be asserted in any subsequent litigation, Government Code Section 910 Claim, or legal action.

C. Owner shall not be deemed to waive any provision under this Article 12, if at Owner's sole discretion, a claim is administered in a manner not in accord with this Article 12. Waivers or modifications of this Article 12 may only be made a signed change order approved as to form by legal counsel for both Owner and Contractor; oral or implied modifications shall be ineffective.

12.7 Civil Actions; Consistency with Public Contract Code Section 9204 and 20104 et seq.

A. If the Government Code claim is denied, Contractor may file an action in court. Such action shall be subject to Public Contract Code sections 9204 or 20104.4. This Section applies only to Claims subject to Public Contract Code Sections 9204 or 20104; if a Claim is not subject to those sections, the Contractor's rights to file a civil action shall be as otherwise provided by law.

B. If any Claim arising under this Contract is subject to the provisions of Public Contract Code sections 9204 or 20104 et seq., and if the provisions of that article require a procedure or procedural element different from that established herein, then the provisions of that article shall apply in place of the conflicting procedure or procedural element established herein.

ARTICLE 13 - UNDERGROUND CONDITIONS

13.1 Contractor To Locate Underground Facilities.

A. During construction, Contractor shall comply with Government Code Sections 4216 to 4216.9, and in particular Section 4216.2 which provides, in part: "Except in an emergency, every person planning to conduct any excavation shall contact the appropriate regional notification center at least two (2) Working Days, but no more than ten (10) Working Days, prior to commencing that excavation, if the excavation will be conducted in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the excavator, and, if practical, the excavator shall delineate with white paint or other suitable markings the area to be excavated. The regional notification center shall provide an inquiry identification number to the person who contacts the center and shall notify any member, if known, who has a subsurface installation in the area of the proposed excavation."

B. Contractor shall contact Underground Service Alert (USA) or the appropriate regional notification center and schedule the Work to allow ample time for the center to notify its members and, if necessary, for any member to field locate and mark its facilities. Contractor is charged with knowledge of all subsurface conditions reflected in underground utility records. Contractor shall advise Owner of any conflict between information provided in Document 00 3100 (Geotechnical

Data and Existing Conditions), the Drawings and that provided by underground utility records. Contractor's excavation shall be subject to and comply with the Contract Documents.

C. Contractor shall also investigate the existence of existing service laterals, appurtenances or other types of utilities, indicated by the presence of an underground transmission main implied by the presence of visible facilities, such as buildings, new asphalt, meters and junction boxes, on or adjacent to the Site, even if not shown or indicated in Document 00 3100 (Geotechnical Data and Existing Conditions), or the Drawings or that provided by underground utility records. Contractor shall immediately secure all such available information and notify Owner and the utility owner, in writing, of its discovery.

13.2 Contractor To Protect Underground Facilities.

A. At all times during construction, all operating Underground Facilities shall remain in operation, unless the Contract Documents expressly indicate otherwise. Contractor shall maintain such Underground Facilities in service where appropriate; shall repair any damage to them caused by the Work; and shall incorporate them into the Work, including reasonable adjustments to the design location (including minor relocations) of the existing or new installations. Contractor shall take immediate action to restore any in service installations damaged by Contractor's operations.

B. Prior to performing Work at the Site, Contractor shall lay out the locations of Underground Facilities that are to remain in service and other significant known underground installations indicated by the Underground Facilities Data. Contractor shall further locate, by carefully excavating with small equipment, potholing and principally by hand, all such utilities or installations that are to remain and that are subject to damage. If additional utilities whose locations are unknown are discovered, Contractor shall immediately report to Owner for disposition of the same. Additional compensation or extension of time on account of utilities not shown or otherwise brought to Contractor's attention, including reasonable action taken to protect or repair damage, shall be determined as provided in this Document 00 7200.

C. If during construction, an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated in the materials supplied by Owner for bidding or in information provided through USA or otherwise reasonably available to Contractor, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby (and in no event later than five (5) Working Days), and prior to performing any Work in connection therewith (except in an emergency), identify the owner of such Underground Facility and give written notice to Underground Facility owner and Owner. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

D. The cost of all of the following will be included in the Contract Sum and Contractor shall have full responsibility for (a) reviewing and checking all available information and data including, but not limited to, information made available for bidding and information provided through USA; (b) locating all Underground Facilities shown or indicated in the Contract Documents, available information, or indicated by visual observation including, but not limited to, and by way of example only, engaging qualified locating services and all necessary backhoeing and potholing; (c) coordination of the Work with the owners of such Underground Facilities during construction; and (d) the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

E. Consistent with California Government Code §4215, as between Owner and Contractor, Owner will be responsible for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Site only if such utilities are not identified in the Contract Documents or information made available for bidding. Owner will compensate for the cost of locating and repairing damage not due to Contractor's failure to exercise reasonable care, removing and relocating such main or trunk line utility facilities not indicated in the Contract Documents or information made available for bidding with reasonable accuracy, and equipment on the Project necessarily idled during such Work. Contractor shall not be assessed liquidated damages for delay in completion of the Project, when such delay was caused by the failure of Owner or the utility to provide for removal or relocation of such utility facilities.

13.3 Concealed Or Unknown Conditions

A. If either of the following conditions is encountered at Site when digging trenches or other excavations that extend deeper than four feet below the surface, Contractor shall give a written Notice of Differing Site Conditions to Owner promptly before conditions are disturbed, except in an emergency as set forth in this Document 00 7200, and in no event later than five (5) Working Days after first observance of:

1. Subsurface or Latent physical conditions which differ materially from those indicated in the Contract Documents; or
2. Unknown physical conditions of an unusual nature or which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

B. In response to Contractor's Notice of Differing Site Conditions under this Paragraph, Owner will investigate the identified conditions, and if they differ materially and cause increase or decrease in Contractor's cost of, or time required for, performance of any part of the Work, Owner will negotiate the appropriate change order following the procedures set forth in the Contract Documents. If Owner determines that physical conditions at the Site are not Latent or are not materially different from those indicated in Contract Documents or that no change in terms of the Contract Documents is justified, Owner will so notify Contractor in writing, stating reasons (with Contractor retaining its rights under Article 12 of this Document 00 7200.)

C. Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed Latent or materially different Site conditions (whether above or below grade) if Contractor knew or should have known of the existence of such conditions at the time Contractor submitted its Bid, failed to give proper notice, or relied upon information, conclusions, opinions or deductions of the kind that the Contract Documents preclude reliance upon.

D. Regarding Underground Facilities, Contractor shall be allowed an increase in the Contract Sum or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility that is owned and was built by Owner only where the Underground Facility:

1. Was not shown or indicated in the Contract Documents or in the information supplied for bidding purposes or in information provided through USA; and
2. Contractor did not know of it; and
3. Contractor could not reasonably have been expected to be aware of it or to have anticipated it from the information available. (For example, if surface conditions such as pavement repairs, valve covers, or other markings, indicate the presence of an Underground Facility, then an increase in the Contract Sum or an extension of the Contract Time will not be due, even if the Underground Facility was not indicated in the Contract Documents, in the information supplied to Contractor for bidding purposes, information provided through USA, or otherwise reasonably available to Contractor.)

E. Contractor shall bear the risk that Underground Facilities not owned or built by Owner may differ in nature or locations shown in information made available by Owner for bidding purposes, in information provided through USA, or otherwise reasonably available to Contractor. Underground Facilities are inherent in construction involving digging of trenches or other excavations on Owner's Project, and Contractor is to apply its skill and industry to verify the information available.

F. Contractor's compensation for claimed Latent or materially different Site conditions shall be limited to the actual, reasonable, incremental increase in cost of that portion of the Work, resulting from the claimed Latent or materially different Site conditions. Such calculation shall take into account the estimated value of that portion of the Work and the actual value of that portion of the Work, using for guidance Contractor's or its subcontractor's bid amount and actual amounts incurred for that portion of the Work and the reasonable expectation (if any) of differing or difficult site conditions in the Work area based on the available records and locale of the Work. For example, if Contractor excavates in an area unexpected, then such costs would be recoverable entirely; while if Contractor extends an existing excavation, then such costs would be recoverable if the resulting excavation costs in that work area exceeded the reasonable expectations therefore.

13.4 Notice Of Hazardous Waste Or Materials Conditions

A. Contractor shall give a written Notice of Hazardous Materials Condition to Owner promptly, before any of the following conditions are disturbed (except in an emergency as set forth in this Document 00 7200), and in no event later than 24 hours after first observance of any:

1. Material that Contractor believes may be hazardous waste or hazardous material, as defined in Section 25117 of the Health and Safety Code (including, without limitation, Asbestos, lead, PCBs, petroleum and related hydrocarbons, and radioactive material) that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law ("hazardous material"); or
2. Other material that may present an imminent substantial danger to persons or property exposed thereto in connection with Work at the Site ("other materials").

B. Except as otherwise provided in the Contract Documents or as provided by applicable law, Contractor shall not be required to give any notice for the disturbance or observation of any such hazardous materials or other materials where such matter is disturbed or observed as part of the scope of Work under the Contract Documents (such as hazardous waste or hazardous material investigation, remediation or disposal activities which are identified as the subject of Work under the Contract Documents), where Contractor complies with all requirements in the Contract Documents and applicable law respecting such materials.

C. Contractor's Notice of Hazardous Materials Condition shall indicate whether the hazardous materials or other materials were shown or indicated in the Contract Documents to be within the scope of Work, and whether the hazardous materials or other materials were brought to the Site by Contractor, its Subcontractors, suppliers, or anyone else for whom Contractor is responsible.

D. Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed hazardous waste or materials if:

1. Contractor knew of the existence of such hazardous materials or other materials at the time Contractor submitted its Bid; or
2. Contractor should have known of the existence of such hazardous material or other materials as a result of its having the responsibility to obtain additional or supplementary examinations, investigation, explorations, tests, studies, and data concerning the conditions at or contiguous to the Site prior to submitting its Bid; or
3. Contractor failed to give the written notice within the required timeframe set forth below.

E. If Owner determines that conditions involve hazardous materials or other materials and that a change in Contract Document terms is justified, Owner may issue either a Request for Proposal or Construction Change Order under the procedures described in the Contract Documents. If Owner determines that conditions do not involve hazardous materials or other materials or that no change in Contract Document terms is justified, Owner will notify Contractor in writing, stating the reasons for its determination.

F. In addition to the parties' other rights under this Document 00 7200, if Contractor does not agree to resume Work based on a reasonable belief that it is unsafe, or does not agree to resume Work under special conditions, Owner may order the disputed portion of Work deleted from the Work, or performed by others, or Owner may invoke its right to terminate Contractor's right to proceed under the Contract Documents in whole or in part, for convenience or for cause as the facts may warrant.

G. If Contractor does not agree with any Owner determination of any adjustment in the Contract Sum or Contract Time under this Article, Contractor may make a claim as provided in Article 12 of this Document 00 7200.

ARTICLE 14 - LEGAL AND MISCELLANEOUS

14.1 Laws And Regulations

A. Contractor shall keep fully informed of and shall comply with all laws, ordinances, regulations and orders of any properly constituted authority affecting the Contract Documents, Work and persons

connected with Work, and shall protect and indemnify Owner and its officers, employees, consultants and agents against any claim or liability, including attorney's fees, arising from or based on violation of law, ordinance, regulation or order, whether by Contractor or by Subcontractors, employees or agents. Authorized persons may at any time enter upon any part of Work to ascertain compliance of all applicable laws, ordinances, regulations and orders.

14.2 Permits And Taxes

A. Contractor shall procure all permits and licenses applicable to the Work (including environmental matters to the extent applicable); pay all charges and fees, including fees for street opening permits; comply with, implement and acknowledge effectiveness of all permits; initiate and cooperate in securing all required notifications or approvals therefore, and give all notices necessary and incident to due and lawful prosecution of Work, unless otherwise provided herein. Owner will pay applicable building permits, sanitation and water fees for the completed construction, except as otherwise provided in the Contract Documents. Contractor shall pay all sales and/or use taxes levied on materials, supplies, or equipment purchased and used on or incorporated into Work, and all other taxes properly assessed against equipment or other property used in connection with Work, without any increase in the Contract Sum. Contractor shall make necessary arrangements with proper authorities having jurisdiction over roads, streets, pipelines, navigable waterways, railroads, and other works in advance of operations, even where Owner may have already obtained permits for the Work.

14.3 Communications And Information Distribution

A. All communications recognized under the Contract Documents shall be in writing, in the form of a serialized document, by type of communication. For example, RFI's shall be serialized beginning with RFI No. 1; payment applications shall be serialized beginning with Payment Application No. 1, submittals shall be serialized per specification section and transmitted with transmittal sheets beginning with Transmittal No. 1; and correspondence shall be serialized beginning with letter No. 1. Contractor may propose other record management and identification systems or protocols, intended to facilitate orderly transmittal of project information, storage and retrieval of such information, which Owner will review consistent with these stated objectives, and accept or reject in its sole discretion.

B. Documents Requiring Signatures. All documents requiring signatures for approval prior to implementing action, as stipulated in other portions of Contract Documents, shall require a manually signed, serialized letter delivered to the other party at its address for notice otherwise specified in the Contract Documents, either personally or by mail.

C. Electronic data transfer of such correspondence will serve to expedite preliminary concurrence of information, only. Receipt of "hard copy" signature on forms is required prior to implementing action or work as the conditions may require. For example, change orders and authorizations for extra cost, require signatures. A party may acknowledge receipt of portable document file (PDF) copies of required correspondence by e-mail, but in the absence of such acknowledgment, mail or personal delivery is required.

D. All emails shall be copied to Owner's and Contractor's Project Representative. Owner reserves the right to preclude e-mail communication, in whole or in part, as Project needs may require. Communication between Owner and Contractor shall not be via Twitter, Facebook, or other types of instant text message systems. Any such communications shall be inadmissible for any purpose related to this Contract.

14.4 Suspension Of Work

A. Owner may, without cause, order Contractor in writing to suspend, delay or interrupt Work in whole or in part for such period of time as Owner may determine. An adjustment shall be made for increases in cost of performance of Work of the Contract Documents caused by any such suspension, delay or interruption, calculated using the measures set forth in Section 01 2050 (Modification Procedures). No adjustment shall be made to extent that performance is, was or would have been so suspended, delayed or interrupted by another cause for which Contractor is responsible.

14.5 Termination Of Contract For Cause

A. The Contractor shall be in default of the Contract Documents and Owner may terminate the Contractor's right to proceed under the Contract Documents, for cause, in whole or in part, should the Contractor commit a material breach of the Contract Documents and not cure such breach within ten (10) Calendar Days of the date of notice from Owner to the Contractor demanding such cure; or, if such breach is curable but not curable within such ten (10) day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for the Contractor to avail itself of a time period in excess of ten (10) Calendar Days, the Contractor must provide Owner within the ten (10) day period with a written plan acceptable to Owner that demonstrates actual resources, personnel and a schedule to promptly to cure said breach, and then diligently commence and continue such cure according to the written plan).

B. In the event of termination by Owner for cause as provided herein, the Contractor shall deliver to Owner possession of the Work in its then condition, including but not limited to, all designs, engineering, Project records, cost data of all types, plans and specifications and contracts with vendors and subcontractors, all other documentation associated with the Project, and all construction supplies and aids dedicated solely to performing the Work which, in the normal course of construction, would be consumed or only have salvage value at the end of the construction period. The Contractor shall remain fully liable for the failure of any Work completed and materials and equipment provided through the date of such termination to comply with the provisions of the Contract Documents. The provisions of this Section shall not be interpreted to diminish any right which Owner may have to claim and recover damages for any breach of the Contract Documents or otherwise, but rather, the Contractor shall compensate Owner for all loss, cost, damage, expense, and/or liability suffered by Owner as a result of such termination and/or failure to comply with the Contract Documents.

C. In the event a termination for cause is later determined to have been made wrongfully or without cause, then the termination shall be treated as a termination for convenience, and the Contractor shall have no greater rights than it would have had following a termination for convenience. Any Contractor claim arising out of a termination for cause shall be made in accord with Article 12 herein. No other loss, cost, damage, expense or liability may be claimed, requested or recovered by the Contractor.

14.6 Termination Of Contract For Convenience

A. Owner may terminate performance of the Work under the Contract Documents in accordance with this clause in whole, or from time to time in part, whenever Owner shall determine that termination is in Owner’s best interest. Termination shall be effected by Owner delivering to the Contractor notice of termination specifying the extent to which performance of the Work under the Contract Documents is terminated, and the effective date of the termination.

B. Contractor shall comply strictly with Owner’s direction regarding the effective date of the termination, the extent of the termination, and shall stop work on the date and to the extent specified.

C. Contractor shall be entitled to a total payment on account of the Contract work so terminated measured by (i.) the actual cost to Contractor of Work actually performed, up to the date of the termination, with profit and overhead limited to twelve percent (12%) of actual cost of work performed, up to but not exceeding the actual contract value of the work completed as measured by the Schedule of Values and Progress Schedule, (ii.) offset by payments made and other contract credits. In connection with any such calculation, however, Owner shall retain all rights under the Contract Documents, including but not limited to claims, indemnities, or setoffs.

D. Under no circumstances may Contractor recover legal costs of any nature, nor may Contractor recover costs incurred after the date of the termination or lost profits on terminated Work.

14.7 Remedies

A. Subject to Contract Documents provisions regarding Contractor claims, claim review, and claim resolution, and subject to the limitations therein, the exclusive jurisdiction and venue for resolving all claims, counter claims, disputes and other matters in question between Owner and Contractor

arising out of or relating to Contract Documents, any breach thereof or the Project shall be the applicable court of competent jurisdiction located in the State and County where the Project is located.

B. All Owner remedies provided in the Contract Documents shall be taken and construed as cumulative and not exclusive; that is, in addition to each and every other remedy herein provided; and in all instances Owner shall have any and all other equitable and legal rights and remedies which it would have according to law.

14.8 Contract Integration and Non-Waiver

A. The Contract Documents, any Contract Modifications and Change Orders, shall represent the entire and integrated agreement between Owner and Contractor regarding the subject matters hereof and thereof and shall constitute the exclusive statement of the terms of the parties' agreement. The Contract Documents, and any Contract Modifications and Change Orders, shall supersede any and all prior negotiations, representations or agreements, written or oral, express or implied, that relate in any way to the subject matter of the Contract Documents or written Modifications. Owner and Contractor represent and agree that, except as otherwise expressly provided in the Contract Documents, they are entering into the Contract Documents and any subsequent written Modification in sole reliance upon the information set forth or referenced in the Contract Documents or Contract Modifications; the parties are not and will not rely on any other information, which shall be inadmissible in any proceeding to enforce these documents.

B. Either party's waiver of any breach or failure to enforce any of the terms, covenants, conditions or other provisions of the Contract Documents at any time shall not in any way affect, limit, modify or waive that party's right thereafter to enforce or compel strict compliance with every term, covenant, condition or other provision hereof, any course of dealing or custom of the trade or oral representations notwithstanding.

C. Neither acceptance of the whole or any part of Work by Owner nor any verbal statements on behalf of Owner or its authorized agents or representatives shall operate as a waiver or modification of any provision of the Contract Documents, or of any power reserved to Owner herein nor any right to damages provided in the Contract Documents.

14.9 Interpretation

A. Should any part, term or provision of this Agreement or any of the Contract Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality or unenforceability may be waived, they are hereby waived to the end that this Agreement and the Contract Documents may be deemed valid and binding agreements, enforceable in accordance with their terms to the greatest extent permitted by applicable law. In the event any provision not otherwise included in the Contract Documents is required to be included by any applicable law, that provision is deemed included herein by this reference (or, if such provision is required to be included in any particular portion of the Contract Documents, that provision is deemed included in that portion).

B. Contract Documents shall not be construed to create a contractual relationship of any kind between (1) Project Manager or any Owner's representative and Contractor; (2) Owner and/or its Representatives and a Subcontractor, sub-Subcontractor, or supplier of any Project labor, materials, or equipment; or (3) between any persons or entities other than Owner and Contractor.

14.10 Patents

A. Fees or claims for any patented invention, article or arrangement that may be used upon or in any manner connected with performance of the Work or any part thereof shall be included in the Bid price for doing the Work. Contractor shall defend, indemnify and hold harmless Owner and each of its officers, employees, consultants and agents, including, but not limited to, the Board and each Owner's Representative, from all damages, claims for damages, costs or expenses in law or equity, including attorney's fees, arising from or relating to any claim that any article supplied or to be supplied under the Contract Documents infringes on the patent rights, copyright, trade name,

trademark, service mark, trade secret or other intellectual property right of any person or persons or that the person or entity supplying the article does not have a lawful right to sell the same. Such costs or expenses for which Contractor agrees to indemnify and hold harmless the above indemnities include but are not limited to any and all license fees, whether such fees are agreed by any indemnitee or ordered by a court or administrative body of any competent jurisdiction.

14.11 Substitution For Patented And Specified Articles

A. Except as noted specifically in the instructions to Bidders or in Contract Documents, whenever in Specifications, material or process is designated by patent or proprietary name or by name of manufacturer, such designation shall be deemed to be used for purpose of facilitating description of material and process desired, and shall be deemed to be followed by the words "or Approved Equal" and Contractor may offer any substitute material or process that Contractor considers "equal" in every respect to that so designated and if material or process offered by Contractor is, in opinion of Owner, Equal in every respect to that so designated, its use will be approved. However, Contractor may utilize this right only by timely submitting Document 01 6000-A (Substitution Request Form) as provided in Document 00 2113 (Instructions to Bidders). A substitution will be approved only if it is a true "or equal" item in every aspect of its design and quality, including but not limited to its dimensions, weights, materials of construction, service requirements, durability, functioning, impact on contiguous construction elements, overall schedule and design.

14.12 Interest Of Public Officers

A. No representative, officer, or employee of Owner no member of the governing body of the locality in which the Project is situated, no member of the locality in which Owner was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the Project, during the tenure of the official or for one year thereafter, shall, as principal, agent, attorney or otherwise, be directly or indirectly interested, in the Contract Documents or the proceeds thereof.

14.13 Limit Of Liability

A. OWNER, AND EACH OF ITS OFFICERS, BOARD MEMBERS, EMPLOYEES, CONSULTANTS AND AGENTS INCLUDING, BUT NOT LIMITED TO, PROJECT MANAGER AND EACH OTHER OWNER REPRESENTATIVE, SHALL HAVE NO LIABILITY TO CONTRACTOR FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, EXCEPT TO THE LIMITED EXTENT THAT THESE CONTRACT DOCUMENTS OR APPLICABLE PUBLIC CONTRACTING STATUTES MAY SPECIFY THEIR RECOVERY.

ARTICLE 15 - WORKING CONDITIONS AND PREVAILING WAGES

15.1 Use Of Site/Sanitary Rules

A. All portions of the Work shall be maintained at all times in neat, clean and sanitary condition. Contractor shall furnish toilets for use of Contractor's and Subcontractors' employees on the Site where needed, and their use shall be strictly enforced. All toilets shall be properly secluded from public observation, and shall be located, constructed and maintained subject to Owner's approval.

B. Contractor shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Site and land areas identified in and permitted by Contract Documents and other land and areas permitted by applicable laws and regulations, rights of way, permits and easements or as designated by Owner, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, any improvement located thereon, or to Owner or occupant thereof resulting from the performance of Work.

C. During the progress of the Work, Contractor shall keep the Site and the Project free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, Contractor shall clean the site, remove all waste materials, rubbish and

debris from and about the Site as well as all tools, appliances, construction equipment and machinery and surplus materials. Contractor shall leave the premises clean and ready for occupancy by Owner at Completion of Work. Contractor shall restore to original condition all property not designated for alteration by Contract Documents.

D. Contractor shall not load nor permit any part of any structure or pavement to be loaded in any manner that will endanger the structure or pavement, nor shall Contractor subject any part of Work or adjacent property to stresses or pressures that will endanger it. Contractor shall conduct all necessary existing conditions investigation regarding structural, mechanical, electrical or any other system existing, shall perform Work consistent with such existing conditions, and shall have full responsibility for insufficiencies or damage resulting from insufficiencies of existing systems, equipment or structures to accommodate performing the Work.

15.2 Protection Of Work, Persons, And Property

A. Contractor shall be responsible for initiating, maintaining and supervising all safety and site security precautions and programs in connection with Work, and shall develop and implement a site security and safety plan throughout construction. Contractor shall comply with all safety requirements specified in any safety program established by Owner, or required by state, federal or local laws and ordinances. Contractor shall be responsible for remedying all theft or damage to Work, property or structures, and all injuries to persons, either on the Site or constituting the Work (e.g., materials in transit), arising from the performance of Work of the Contract Documents from a cause.

B. Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owners of adjacent property and of Underground Facilities and utility Owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.

C. Contractor shall remedy all damage, injury or loss to any property referred to above in this Article, caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, supplier, or any other person or organization directly or indirectly employed by any of them to perform or furnish any Work or anyone for whose acts any of them may be liable. Contractor's duties and responsibility for safety and for protection of Work shall continue until such time as all the Work is completed and Final Acceptance of the Work. Owner and its agents do not assume any responsibility for collecting any indemnity from any person or persons causing damage to Contractor's Work.

D. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

E. Owner may, at its option, retain such moneys due under the Contract Documents as Owner deems necessary until any and all suits or claims against Contractor for injury to persons or property shall be settled and Owner receives satisfactory evidence to that effect.

F. Work within the right-of-way lines of the city and/or Owner and/or State shall be done in accordance with the standards and specifications of the controlling agency. Permit for such work shall be obtained and paid for by the Contractor before executing the work within such right-of-ways.

15.3 Responsibility For Safety And Health

A. Contractor shall ensure that its and each tier of Subcontractors' employees, agents and invitees comply with applicable health and safety laws while at the Site. These laws include the Occupational Safety and Health Act of 1970 and rules and regulations issued pursuant thereto, and Owner's safety regulations as amended from time to time. Contractor shall comply with all Owner directions regarding protective clothing and gear.

B. Contractor shall be fully responsible for the safety of its and its Subcontractors' employees, agents and invitees on the Site. Contractor shall notify Owner, in writing, of the existence of hazardous conditions, property or equipment at the Site that are not under Contractor's control.

Contractor shall be responsible for taking all the necessary precautions against injury to persons or damage to the property of Contractor, Subcontractors or persons from recognized hazards until the responsible party corrects the hazard.

C. Contractor shall confine all persons acting on its or its Subcontractors' behalf to that portion of the Site where Work under the Contract Documents is to be performed, Owner-designated routes for ingress and egress thereto, and any other Owner-designated area. Except those routes for ingress and egress over which Contractor has no right of control, within such areas, Contractor shall provide safe means of access to all places at which persons may at any time have occasion to be present.

15.4 Emergencies

In emergencies affecting the safety or protection of persons or Work or property at the Site or adjacent thereto, Contractor, without special instruction or authorization from Owner, is obligated to act to prevent threat and damage, injury or loss, until directed otherwise by Owner. Contractor shall give Owner prompt written notice of actions taken due to emergency.

15.5 Use Of Roadways And Walkways

A. Contractor shall not unnecessarily interfere with use of any roadway, walkway or other facility for vehicular or pedestrian traffic. Before beginning any interference and only with Owner's prior concurrence, Contractor may provide detour or temporary bridge for traffic to pass around or over the interference, which Contractor shall maintain in satisfactory condition as long as interference continues. Unless otherwise provided in the Contract Documents, Contractor shall bear the cost of these temporary facilities.

15.6 Nondiscrimination

A. No person or entity shall discriminate in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sexual preference, or gender of such persons, except as provided in Section 12940 of the California Government Code. Every contractor for public works violating the provisions of Section 1735 of the California Labor Code is subject to all the penalties imposed for a violation of Chapter 1, Part 7, Division 2 of the California Labor Code.

15.7 Prevailing Wages And Working Hours

A. Contractor shall pay to persons performing labor in and about Work provided for in the Contract Documents an amount equal to or more than the general prevailing rate of per diem wages for (1) work of a similar character in the locality in which the Work is performed and (2) legal holiday and overtime work in said locality. The per diem wages shall be an amount equal to or more than the stipulated rates contained in a schedule that has been ascertained and determined by the Director of the State Department of Industrial Relations and Owner to be the general prevailing rate of per diem wages for each craft or type of workman or mechanic needed to execute this Contract. Contractor shall also cause a copy of this determination of the prevailing rate of per diem wages to be posted at each Site. The Director's schedule of prevailing rates is on file and open for inspection at Rosamond Community Services District, 3179 35th Street West, Rosamond, California 93560, and is incorporated herein by this reference.

B. Contractor shall forfeit, as a penalty to Owner, Fifty Dollars ($50.00) for each laborer, workman, or mechanic employed in performing labor in and about the Work provided for in the Contract Documents for each Day, or portion thereof, that such laborer, workman or mechanic is paid less than the said stipulated rates for any Work done under the Contract Documents by him or her or by any Subcontractor under him or her, in violation of Articles 1 and 2 of Chapter 1 of Part 7 of Division II of the California Labor Code. The sums and amounts which shall be forfeited pursuant to this Paragraph and the terms of the California Labor Code shall be withheld and retained from payments due to Contractor under the Contract Documents, pursuant to this Document 00 7200 and the California Labor Code, but no sum shall be so withheld, retained or forfeited except from the final payment without a full investigation by either the State Department of Industrial Relations

or by Owner. The Labor Commissioner pursuant to California Labor Code §1775 shall determine the final amount of forfeiture.

C. Contractor shall insert in every subcontract or other arrangement which Contractor may make for performance of Work or labor on Work provided for in the Contract, provision that Subcontractor shall pay persons performing labor or rendering service under subcontract or other arrangement not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed in the California Labor Code.

D. Contractor stipulates that it shall comply with all applicable wage and hour laws, including without limitation, California Labor Code §§ 1776 and 1810-1815. Failure to so comply shall constitute a default under this Contract.

E. Contractor and its Subcontractors shall be responsible for compliance with Labor Code §§ 1810-1815.

1. Eight hours of labor performed in execution of the Contract constitutes a legal day's work. The time of service of any workman employed on the Project is limited and restricted to 8 hours during any one calendar day, and 40 hours during any one calendar week.
2. Contractor and its Subcontractors shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him or her in connection with the Project. The record shall be kept open at all reasonable hours for inspection by Owner and the Division of Labor Standards Enforcement.
3. Contractor or its Subcontractors shall, as a penalty to Owner, forfeit twenty-five dollars ($25) for each worker employed in the execution of the Contract Documents by the respective Contractor or Subcontractor for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of Labor Code §§ 1810-1815.
4. Work performed on the Project by employees of Contractor or its Subcontractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of 8 hours per day at not less than 1 1/2 times the basic rate of pay.

F. Contractor and its Subcontractors shall be responsible for compliance with Labor Code Section 1776.

1. Contractor and Subcontractors must keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the Work of the Contract Documents. Each payroll record shall contain or be verified by a written declaration as required by Labor Code Section 1776.
2. The payroll records enumerated above must be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor as required by Labor Code Section 1776.

    a. Contractor shall inform Owner of the location of records enumerated above, including the street address, city and county, and shall, within five (5) Working Days, provide a notice of a change of location and address.
    b. Contractor or Subcontractor has ten (10) Working Days in which to comply subsequent to receipt of a written notice requesting the records enumerated above. In the event that the Contractor or Subcontractor fails to comply with the ten-day period, he or she shall, as a penalty to Owner on whose behalf the contract is made or awarded, forfeit $25.00 for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. Contractor is not

subject to a penalty assessment pursuant to this Paragraph due to the failure of a Subcontractor to comply with this Paragraph.

3. Contractor shall also deliver certified payrolls to Owner with each Application for Payment as set forth above in this Document 00 7200 (General Conditions).
4. This project may be subject to monitoring and enforcement by the Department of Industrial Relations (DIR), including the obligation to submit certified payroll records directly to the DIR Compliance Monitoring Unit (CMU) at least monthly in a format prescribed by the Labor Commissioner. The contractor must post job site notices as prescribed by DIR regulation.

15.8 Environmental Controls

A. Contractor shall comply with all rules, regulations, ordinances, and statutes that apply to any Work performed under the Contract Documents including, without limitation, any toxic, water, stormwater management and soil pollution controls and air pollution controls specified in California Government Code §11017. Contractor shall be responsible for insuring that Contractor's Employees, Subcontractors, and the public are protected from exposure to airborne hazards or contaminated water, soil, or other toxic materials used during or generated by activities on the Site or associated with the Project.

15.9 Shoring Safety Plan

A. Any conflict between this Paragraph and Division 2 or Division 31 of the Specifications shall be resolved in favor of the most stringent requirement.
B. At least five (5) Working Days in advance of any excavation five feet or more in depth, Contractor shall submit to Owner a detailed plan showing the shoring, bracing and sloping design (including calculations) and other provisions to be made for worker protection from the hazard of caving ground during the excavation, as required by California Labor Code §6705. A civil or structural engineer registered in California shall prepare and sign any plan that varies from the shoring system standards established by the State Construction Safety Orders.
C. During the course of Work, Contractor shall be responsible for determining where sloping, shoring, and/or bracing is necessary and the adequacy of the design, installation, and maintenance of all shoring and bracing for all excavation, including any excavation less than five feet in depth. Contractor will be solely responsible for any damage or injuries that may result from excavating or trenching. Owner's acceptance of any drawings showing the shoring or bracing design or Work schedule shall not relieve Contractor of its responsibilities under this Paragraph.
D. Appoint a qualified supervisory employee who shall be responsible for determining the sloping or shoring system to be used depending on local soil type, water table, stratification, depth, etc.

15.10 Required Registration with the State of California Department of Industrial Relations

A. Pursuant to California Labor Code 1725.5, all contractors and subcontractors must be registered with the Department of Industrial Relations (DIR) in order to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code or engage in the performance of any public work contract. Detailed information about contractor's responsibilities and online registration may be obtained on the State of California Department of Industrial Relations, Public Works website, http://www.dir.ca.gov/Public-Works/PublicWorks.html.

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DOCUMENT 00 7280
APPRENTICESHIP PROGRAM

ARTICLE 1 - COMPLIANCE REQUIRED

1.01 Contractor and Subcontractors shall comply with the requirements of California Labor Code §§1776, 1777.5, and 1777.6 concerning the employment of apprentices by Contractor or Subcontractors. Willful failure to comply may result in penalties, including loss of the right to Bid on or receive public works contracts.

ARTICLE 2 - CERTIFICATION OF APPROVAL

2.01 California Labor Code §1777.5, as amended, requires a Contractor or Subcontractor employing tradespersons in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of a public works project and which administers the apprenticeship program in that trade for a certification of approval. The certificate shall also fix the ratio of apprentices to journeypersons that will be used in performance of the Contract. The ratio of work performed by apprentices to journeypersons in such cases shall not be less than one *hour* of apprentices work for every five *hours* of labor performed by journeypersons (the minimum ratio for the land surveyor classification shall not be less than one apprentice for each five journeypersons), except:

A. When unemployment for the previous three-month period in the area exceeds an average of 15 percent;
B. When the number of apprentices in training in the area exceeds a ratio of one to five;
C. When a trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis state-wide or locally; or
D. Assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyperson.

ARTICLE 3 - FUND CONTRIBUTIONS

3.01 Contractor is required to make contributions to funds established for administration of apprenticeship programs if Contractor employs registered apprentices or journeypersons in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.

ARTICLE 4 - APPRENTICESHIP STANDARDS

4.01 Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of the California Department of Industrial Relations, or from the Division of Apprenticeship Standards and its branch offices.

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DOCUMENT 00 7300
SUPPLEMENTARY CONDITIONS – INSURANCE AND INDEMNIFICATION

ARTICLE 1 - INSURANCE

1.01 At or before the date specified in Document 00 2113 (Instructions to Bidders), Contractor, in order to protect the Rosamond Community Services District ("Owner") and its board members, officials, agents, officers, and employees against all claims and liability for death, injury, loss and damage as a result of Contractor's actions in connection with the performance of Contractor's obligations, as required in the Contract Documents, shall secure and maintain insurance as described below. Contractor shall not perform any work under the Contract Documents until Contractor has obtained all insurance required under this section and the required certificates of insurance and all required endorsements have been filed with Owner. Receipt of evidence of insurance that does not comply with all applicable insurance requirements shall not constitute a waiver of the insurance requirements set forth herein. The required documents must be signed by the authorized representative of the insurance company shown on the certificate**.** Upon request, Contractor shall supply proof that such person is an authorized representative thereof, and is authorized to bind the named underwriter(s) and their company to the coverage, limits and termination provisions shown thereon. Contractor shall promptly deliver to Owner a certificate of insurance, and all required endorsements, with respect to each renewal policy, as necessary to demonstrate the maintenance of the required insurance coverage for the term specified herein. Such certificates and endorsements shall be delivered to Owner prior to the expiration date of any policy and bear a notation evidencing payment of the premium thereof if so requested. Contractor shall immediately pay any deductibles and self-insured retentions under all required insurance policies upon the submission of any claim by Contractor or Owner as an additional insured.

A. Workers' Compensation and Employers Liability Insurance Requirement -- In the event Contractor has employees who may perform any services pursuant to the Contract Documents, Contractor shall submit written proof that Contractor is insured against liability for workers' compensation in accordance with the provisions of section 3700 of the California Labor Code.

By signing the Agreement, Contractor makes the following certification, required by section 1861 of the Labor Code:

> I am aware of the provisions of section 3700 of the Labor Code which 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 the work pursuant to the Contract Documents.

Contractor shall require any sub-contractors to provide workers' compensation for all of the subcontractors' employees, unless the sub-contractors' employees are covered by the insurance afforded by Contractor. If any class of employees engaged in work or services performed under this Agreement is not covered by California Labor Code section 3700, Contractor shall provide and/or require each sub-contractor to provide adequate insurance for the coverage of employees not otherwise covered.

Contractor shall also maintain employer's liability insurance with limits of one million dollars ($1,000,000) for bodily injury or disease.

B. General Liability Insurance Requirements – Contractor shall maintain in full force and effect, at all times during the term of the Agreement Commercial General Liability Insurance including, but not limited to, Contractual Liability Insurance (specifically concerning the indemnity provisions of the

Contract Documents), Products-Completed Operations Hazard, Personal Injury (including bodily injury and death), and Property Damage for liability arising out of Contractor's performance of work under the Agreement. Contractor shall maintain the Products-Completed Operations Hazard coverage for the longest period allowed by law following termination of the Agreement. The amount of said insurance coverage required by the Contract Documents shall be the policy limits, which shall be at least five million dollars ($5,000,000) each occurrence. Commercial General Liability Insurance shall continue coverage for a minimum of five (5) years after completion of the Work.

C. Automobile Liability Insurance Requirements – Contractor shall maintain Automobile Liability Insurance against claims of Personal Injury (including bodily injury and death) and Property Damage covering any vehicle and/or all owned, leased, hired and non-owned vehicles used in the performance of services pursuant to the Contract Documents with coverage equal to the policy limits, which shall be at least one million dollars ($5,000,000) each occurrence.

D. Builder's Risk (Course of Construction) – Contractor shall maintain insurance utilizing an "All Risk" (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions.

1.02 The Commercial General Liability and Automobile liability Insurance required in sub-paragraphs B. and C. above shall include an endorsement naming the Rosamond Community Services District and District's board members, officials, officers, agents, employees and volunteers as additional insureds for liability arising out of the Agreement and any operations related thereto. Said endorsement shall be provided using one of the following three options: (i) on ISO form CG 20 10, CG 11 85; or (ii) both ISO form CG 20 10, CG 20 26, CG 20 33, or CG 20 38 and CG 20 37.

1.03 Self-insured retentions shall be declared to and approved by the Owner. The Owner may require the Contractor to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or Owner. The CGL and any policies, including Excess liability policies, shall not be subject to a self-insured retention (SIR) or deductible that exceeds $25,000 unless approved in writing by Owner. Any and all deductibles and SIRs shall be the sole responsibility of Contractor or subcontractor who procured such insurance and shall not apply to the Indemnified Additional Insured Parties. Owner may deduct from any amounts otherwise due Contractor to fund the SIR/deductible. Policies shall NOT contain any self-insured retention (SIR) provision that limits the satisfaction of the SIR to the Named Insured. The policy shall also provide that Defense costs, including the Allocated Loss Adjustment Expenses, will satisfy the SIR or deductible. Owner reserves the right to obtain a copy of any policies and endorsements for verification.

1.04 If any coverage required is written on a claims-made coverage form:

1. The retroactive date shall be shown, and this date must be before the execution date of the contract or the beginning of contract work.
2. Insurance shall be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
3. If coverage is cancelled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective, or start of work date, the Contractor shall purchase extended reporting period coverage for a minimum of five (5) years after completion of contract work.
4. A copy of the claims reporting requirements shall be submitted to the Owner for review.
5. If the services involve lead-based paint or asbestos identification/remediation, the Contractors Pollution Liability policy shall not contain lead-based paint or asbestos

exclusions. If the services involve mold identification/remediation, the Contractors Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

1.05 Cancellation of Insurance -- The above stated insurance coverages required to be maintained by Contractor shall be maintained until the completion of all of Contractor's obligations under the Contract Documents except as otherwise indicated herein. Each insurance policy supplied by Contractor shall not be suspended, voided, modified, canceled, or reduced in coverage or in limits except after ten (10) days notice by Contractor in the case of non-payment of premiums, or on thirty (30) days prior written notice in all other cases. This notice requirement does not waive the insurance requirements stated herein. Contractor shall immediately obtain replacement coverage for any insurance policy that is terminated, canceled, non-renewed, or whose policy limits have been exhausted or upon insolvency of the insurer that issued the policy.

1.06 The Contractor may use Umbrella or Excess Policies to provide the liability limits as required in this agreement. This form of insurance will be acceptable provided that all of the Primary and Umbrella or Excess Policies shall provide all of the insurance coverages herein required, including, but not limited to, primary and non-contributory, additional insured, Self-Insured Retentions (SIRs), indemnity, and defense requirements. The Umbrella or Excess policies shall be provided on a true "following form" or broader coverage basis, with coverage at least as broad as provided on the underlying Commercial General Liability insurance. No insurance policies maintained by the Additional Insureds, whether primary or excess, and which also apply to a loss covered hereunder, shall be called upon to contribute to a loss until the Contractor's primary and excess liability policies are exhausted.

1.07 All insurance shall be issued by a company or companies admitted to do business in California and listed in the current "Best's Key Rating Guide" publication with a minimum rating of A: VII. Any exception to these requirements must be pre-approved by the Owner.

1.08 Waiver of Subrogation – Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the Owner for all work performed by the Contractor, its employees, agents and subcontractors.

1.09 If Contractor is, or becomes during the term of the Agreement, self-insured or a member of a self-insurance pool, Contractor shall provide coverage equivalent to the insurance coverages and endorsements required above. Owner will not accept such coverage unless Owner determines, in its sole discretion and by written acceptance, that the coverage proposed to be provided by Contractor is equivalent to the above-required coverages.

1.10 All insurance afforded by Contractor pursuant to the Contract Documents shall be primary to and not contributing to any other insurance or self-insurance maintained by Owner. An endorsement shall be provided on all policies which shall waive any right of recovery (waiver of subrogation) against Owner. A waiver of right of recovery (waiver of subrogation) is only required when Contractor's personnel deliver services or perform service for the Owner while on Owner property.

1.11 Insurance coverages in the minimum amounts set forth herein shall not be construed to relieve Contractor for any liability, whether within, outside, or in excess of such coverage, and regardless of solvency or insolvency of the insurer that issues the coverage; nor shall it preclude Owner from taking such other actions as are available to it under any other provision of the Contract Documents or otherwise in law.

1.12 Failure by Contractor to maintain all such insurance in effect at all times required by the Contract Documents shall be a material breach of the Contract by Contractor. Owner, at its sole option, may terminate the Contract and obtain damages from Contractor resulting from said breach. Alternatively, Owner may purchase such required insurance coverage, and without further notice to Contractor, Owner shall deduct from sums due to Contractor any premiums and associated costs advanced or paid by Owner for such insurance. If the balance of monies obligated to Contractor pursuant to the Contract are insufficient to reimburse Owner for the premiums and any associated costs, Contractor agrees to reimburse Owner for the premiums and pay for all costs associated with the purchase of said insurance. Any failure by Owner to take this alternative action shall not relieve Contractor of its obligation to obtain and maintain the insurance coverages required by the Contract Documents.

1.13 If injury occurs to any employee of Contractor, Subcontractor or sub-subcontractor for which the employee, or the employee's dependents in the event of employee's death, is entitled to compensation from Owner under provisions of the Workers' Compensation Insurance and Safety Act, as amended, or for which compensation is claimed from Owner, Owner may retain out of sums due Contractor under the Contract Documents, an amount sufficient to cover such compensation, as fixed by the Workers' Compensation Insurance and Safety Act, as amended, until such compensation is paid, or until it is determined that no compensation is due. If Owner is compelled to pay compensation, Owner may, in its discretion, either deduct and retain from the Contract Sum the amount so paid, or require Contractor to reimburse Owner.

1.14 Nothing herein shall be construed as limiting in any way the extent to which Contractor or any Subcontractor may be held responsible for payment of damages resulting from their operations.

1.15 All Subcontractors shall maintain the same insurance required to be maintained by Contractor with respect to their portions of the Work unless otherwise indicated in the Contract Documents, and Contractor shall cause the Subcontractors to furnish proof thereof to Owner within ten Days of Owner's request.

ARTICLE 2 - RESPONSIBILITY OF CONTRACTOR AND INDEMNIFICATION

2.01 Owner and each of its officers, employees, consultants and agents including, but not limited to, the Board, Project Manager and each Owner's Representative, shall not be liable or accountable in any manner for loss or damage that may happen to any part of the Work; loss or damage to materials or other things used or employed in performing the Work; injury, sickness, disease, or death of any person; or damage to property resulting from any cause whatsoever except their sole negligence, willful misconduct or active negligence, attributable to performance or character of the Work, and Contractor releases all of the foregoing persons and entities from any and all such claims.

2.02 To the furthest extent permitted by law (including without limitation California Civil Code §2782), Contractor shall assume defense of, and indemnify and hold harmless, Owner and each of its officers, employees, consultants and agents, including but not limited to the Board, Project Manager and each Owner's Representative, from claims, suits, actions, losses and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies and attorney's fees of counsel retained by Owner, expert fees, costs of staff time, and investigation costs, directly or indirectly arising out of, connected with or resulting from performance of the Work, failure to perform the Work, or condition of the Work which is caused in whole or part by any act or omission of Contractor, Subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, resulting from any cause whatsoever.

2.03 With respect to third-party claims against Contractor, Contractor waives any and all rights to any type of express or implied indemnity against Owner and each of its officers, employees, consultants and agents including, but not limited to Owner, the Board, Project Manager and each

Owner's Representative. Owner shall provide timely notice to Contractor of any third-party claim relating to the Contract Documents, in accordance with Section 9201 of the California Public Contract Code.

2.04 Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of Contractor, its Subcontractors of any tier, or the officers or agents of any of them.

2.05 To the furthest extent permitted by law (including, without limitation, Civil Code §2782), the indemnities, releases of liability and limitations of liability, claims procedures, and limitations of remedy expressed throughout the Contract Documents shall apply even in the event of breach of Contract, negligence (active or passive), fault or strict liability of the party(ies) indemnified, released, or limited in liability, and shall survive the termination, rescission, breach, abandonment, or completion of the Work or the terms of the Contract Documents. If Contractor fails to perform any of these defense or indemnity obligations, Owner may in its discretion back charge Contractor for Owner's costs and damages resulting therefrom and withhold such sums from progress payments or other Contract moneys which may become due.

2.06 The indemnities in the Contract Documents shall not apply to any indemnified party to the extent of its sole negligence or willful misconduct; nor shall they apply to Owner or other indemnified party to the extent of its active negligence.

END OF DOCUMENT

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DOCUMENT 00 9111

ADDENDUM NO. _____
Date: _____

ROSAMOND COMMUNITY SERVICES DISTRICT

ADMIN BUILDING STANDBY GENERATOR REPLACEMENT

3179 35th Street West, Rosamond, CA 93560

Project No. 12609, 22609

Item No. 1:

Item No. 2:

Item No. 3:

The following Addenda were issued, modifying the Project Manual:

Addendum No. ___, issued on _____.

_____
Patrik Tsang, PE
Architect/Engineer

Contractor	Signature
Date	Name/Title

END OF DOCUMENT

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MASTER SPECIFICATIONS
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DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 1000

SUMMARY OF THE WORK

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes Summary of Work and Work Restrictions including:

1. Work Covered By Contract Documents
2. Base Bid
3. Work Under Other Contracts
4. Future Work
5. Work Days and Hours
6. Cooperation of Contractor and Coordination with Other Work
7. Partial Occupancy/Utilization Requirements
8. Contractor Use of Site
9. Air Quality Standards
10. Construction Staking and Monument Protection
11. Protection of Existing Structures and Underground Facilities
12. Permits

1.02 WORK COVERED BY CONTRACT DOCUMENTS

A. Work comprises of the replacement of the Rosamond Community Services District (hereinafter "Owner") **ADMIN BUILDING STANDBY GENERATOR located at the Rosamond Community Services District, 3179 35th Street West, Rosamond, CA 93560.**

The Project consists of replacing the existing standby generator unit and automatic transfer switch including all appurtenances required for a fully operational and regulatory compliant unit.

B. The Work of this Contract comprises construction of all the Work indicated, described in the Specifications, or otherwise required by the Contract Documents. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Contractor until Final Acceptance of the Work. Cost of maintenance of systems and equipment prior to Final Acceptance will be considered as included in prices Bid and no direct or additional payment will be made therefore.

C. For all Bid items, furnish and install all Work, including connections to existing systems, indicated and described in Specifications and all other Contract Documents. Work and requirements applicable to each individual Bid item, or unit of Work, shall be deemed incorporated into the description of each Bid item (whether Lump Sum or Unit Price). Any Bid item may be deleted from the Work and Contract Sum, in total or in part, prior to or after award of Contract without compensation in any form or adjustment of other Bid items or prices therefore.

D. Modifications to allowance Work dollar values shall be done as Change Orders and as specified in Section 00 2050 (Modification Procedures). Identify Allowance Items (See Document 00 4100 Bid Form) work on the Progress Schedules and on Applications for Payment. The Amount given on Document 00 4100 (Bid Form) under each Allowance Item is the sum of money set aside for each Allowance Item. These amounts shall be included in the Contract Sum on the Bid Form. If the cost of Work done under any Allowance Item is less than the amount given on the Bid Form under that Allowance Item, the Contract Sum shall be reduced by the difference between the amount given in the Bid Form and the cost of Work actually done.

1.03 BASE BID

A. Descriptions of Base Bid Item: Provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements as therein set forth.

1.04 WORK SEQUENCE

A. Construct Work in stages and at times to accommodate Owner operation requirements during the construction period; coordinate construction schedule and operations with Owner.

1.05 WORK DAYS AND HOURS

A. Work Days and hours: Monday-Friday inclusive, **7:00 a.m. - 4:30 p.m.** local time or as allowed by permit requirements from the County of Kern.

B. Work at the Site on weekends or holidays is not permitted, unless Contractor requests otherwise from Owner in writing at least 48 hours in advance and Owner approves in its sole discretion. Any work performed outside normal work days and hours will cause the contractor to pay all overtime inspection and testing costs, as determined by the Owner.

1.06 SHUTDOWN FOR DISCOVERY OF CULTURAL RESOURCES

A. If discovery is made of items of historical archaeological or paleontological interest, immediately cease all Work in the area of discovery. Archaeological indicators may include, but are not limited to, dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, human bones, and fossils. After cessation of excavation, immediately contact Owner. Do not resume Work until authorization is received from Owner. When resumed, excavation or other activities shall be as directed by Owner.

1.07 COOPERATION OF CONTRACTOR AND COORDINATION WITH OTHER WORK

A. Coordinate with Owner and any Owner forces, or other contractors and forces, as required by 00 7200 (General Conditions).

B. Contractor shall review Contract Documents, submittals, changes, and prepare overlay drawings as necessary to avoid conflicts, errors, omissions and untimely construction.

1.08 PARTIAL OCCUPANCY/UTILIZATION REQUIREMENTS

A. Allow Owner to take possession of and use any completed or partially completed portion of the Work during the progress of the Work as soon as is possible without interference to the Work.

B. Possession, use of Work, and placement and installation of equipment by Owner shall not in any way evidence the completion of the Work or any part of it.

C. Contractor shall not be held responsible for damage to the occupied part of the Work resulting from Owner occupancy.

D. Use and occupancy by Owner prior to acceptance of Work does not relieve Contractor of its responsibility to maintain insurance and bonds required under the Contract until entire Work is completed and accepted by Owner.

E. Prior to date of recordation of the Notice of Completion, all necessary repairs or renewals in Work or part thereof so used, not due to ordinary wear and tear, but due to Defective materials or workmanship or to operations of Contractor, shall be made at expense of Contractor, as required in Document 00 7200 (General Conditions).

F. Use by Owner of Work or part thereof as contemplated by this Section 01 1000 shall in no case be construed as constituting acceptance of Work or any part thereof. Such use shall neither relieve Contractor of any responsibilities under Contract, nor act as waiver by Owner of any of the conditions thereof.

1.09 CONTRACTOR USE OF SITE

A. **Project Site: The Project is located in Rosamond Community Services District, 3179 35th Street West, Rosamond, CA 93560.**

B. Confine operations at Project Site to areas permitted by Contract Documents, permits, ordinances, and laws. Do not unreasonably encumber Project Site with materials or equipment.

C. Assume full responsibility for protection and safekeeping of products stored on premises. Move any stored products that interfere with operations of Owner or other contractor.

D. The Contractor is responsible for securing parking, storage, staging, and Work areas. Comply with Kern County encroachment permit requirements.

E. Prior to commencement of Work or excavation, Contractor and Owner shall jointly survey the area adjacent to the Project Site making permanent note and record of such existing damage such as cracks, sags or other similar damage. Contractor shall supplement record with photographs indexed on a key map or drawing. This record and photographs shall serve as a basis for determination of subsequent damage to structures, conditions or other existing improvements due to Contractor's operations. All parties making the survey shall sign the official record of existing damage. Cracks, sags or damage of any nature to the adjacent Project area, not noted in the original survey but subsequently noted, shall be reported immediately to Owner.

F. The Contractor shall follow all applicable county and local jurisdictional ordinances in force during the duration of this Contract.

G. It is essential that the Contractor perform the Work with as little interference and disturbance as possible to the surrounding neighborhoods.

H. When suspect materials, outside the scope of Work, are encountered during the Work or restoration process, the Contractor shall immediately contact the Owner or Owner's representative for evaluation and approval of the methods for dealing with the material.

1.010 AIR QUALITY STANDARDS

A. Ensure that idling time for all heavy equipment is minimized to reduce on-Site emissions.

B. Maintain equipment in good mechanical condition.

C. Cover the loads of trucks hauling dirt.

D. Limit work generating dust emissions during periods of high winds (greater than 15 miles per hour).

E. Replace ground cover in disturbed areas as soon as possible.

F. Enclose, cover, water, or apply soil binders to exposed stockpiles.

G. Remove earth tracked onto neighboring paved roads at least once daily.

H. Limit equipment speed to 10 miles per hour in unpaved areas.

I. Implement Storm Water Pollution Prevention Plan as required.

J. Follow applicable air district requirements.

1.011 CONSTRUCTION STAKING AND MONUMENT PROTECTION

A. **Contractor** shall provide engineering surveys to establish construction stakes that in Owner's judgment are necessary to enable Contractor to proceed with the Work.

B. Contractor shall be responsible for laying out the Work, shall protect and preserve the established construction stakes and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Whenever Contractor knows or reasonably should know that any Work activity is likely to damage or destroy any construction stakes or property monuments, or require relocation because of necessary changes in grades or locations, provide at least 2 Business Days advance notice to Owner. In any event, notify Owner whenever any construction stakes or property monuments are lost or destroyed or require relocation because of necessary changes in grades or locations. Contractor shall employ a registered professional to replace or repair construction stakes or property monuments at Contractor's expense.

C. When Contractor performs construction staking, provide Owner with Contractor's survey staking information in writing within 3 Working Days after it becomes available to Contractor.

1.012 GEOTECHNICAL DATA AND EXISTING CONDITIONS

A. Available Documentation: In accordance with, and subject to, the provisions of Document 00 3100 (Geotechnical Data and Existing Conditions), the following documentation is available for review. This information is not part of the Contract Documents.

1. Administration – Operations center, Rosamond Community Services District, Project no.0203 by Carlson Architecture Company, Dated 03/28/02.

1.013 PROTECTION OF EXISTING STRUCTURES AND UNDERGROUND FACILITIES

A. The Drawings may indicate existing above- and below-grade structures, drainage lines, storm drains, sewers, water lines, gas lines, electrical lines, and other similar items and Underground Facilities that are known to Owner. The owner operates potable water and sewer facilities within the District. At least 2 Business Days, or as otherwise noted, prior to commencement of excavation, notify the Owner and the representatives of the following Underground Facilities in addition to contacting Underground Service Alert.:

1. **Power: Southern California Edison**
2. **Gas: Southern California Gas**
3. **Water: Rosamond Community Services District**
4. **Sewer: Rosamond Community Services District**

B. Attention is directed to power and telephone lines where overhead service to a structure, known to receive service, does not exist, then underground service shall be assumed to exist.

C. Perform pot-holing by hand within 24 inches (in any direction) of the Underground Facilities. This may be done on an area-by-area basis, but shall be accomplished at least 7 Days in advance of the date of construction within such area.

D. No attempt has been made to locate private utilities on private property such as sprinkler irrigation systems or electrical conduits. Verify with the facility operator prior to construction.

E. In addition to reporting, if a utility is damaged, Contractor must take appropriate action as provided in Document 00 7200 (General Conditions).

F. Additional compensation or extension of time on account of utilities not indicated or otherwise brought to Contractor's attention including reasonable action taken to protect or repair damage shall be determined as provided in 00 7200 (General Conditions).

1.014 PERMITS

A. Permits, agreements, or written authorizations that may apply to this project include, but are not limited to the following:

1. Kern County Encroachment Permit

B. All other permits that may be required, such as air district, electrical, mechanical, fire prevention, irrigation, grading, slope protection, tree cutting, etc., have not been applied for and shall be obtained by Contractor. Applicable permit fees will be reimbursed to the extent specified in Document 00 7200 (General Conditions).

1.015 ACTUAL DAMAGES FOR PERMIT VIOLATIONS

A. Contractor shall be liable for and shall pay Owner the amount of any actual losses due to permit violations, in addition to liquidated damages or other remedies provided by the Contract Documents.

B. The amount of liquidated damages provided in Document 00 5200 (Agreement) and Document 00 7200 (General Conditions) is not intended to include, nor does the amount include, any damages incurred by Owner for reasons other than those listed in that paragraph. Any money due or to become due to Contractor may be retained by Owner to cover both the liquidated and the actual damages described above and, should such money not be sufficient to cover such damages, Owner shall have the right to recover the balance from Contractor or its sureties.

PART 2 – PRODUCTS

2.01 OWNER-FURNISHED PRODUCTS

A. Owner-Furnished Products

B. Owner's Responsibilities:

1. Arrange for and deliver Owner-reviewed Shop Drawings, Product Data, and Samples, to Contractor.
2. Arrange and pay for delivery to Site.
3. On delivery, inspect products jointly with Contractor.
4. Submit claims for transportation damage and replace damaged, Defective, or deficient items.
5. Arrange for manufacturers' warranties, inspections, and service.

C. Contractor's Responsibilities:

1. Review Owner-reviewed Shop Drawings, and Product Data, and Samples.
2. Receive products at Site; inspect for completeness or damage jointly with Owner.
3. Install and finish products.
4. Repair or replace items damaged after receipt.
5. Install into Project per Contract Documents.

PART 3 – EXECUTION – NOT USED

END OF SECTION

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SECTION 01 2000

PRICE AND PAYMENT PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes description of requirements and procedures for determining amount of Work performed and for obtaining payment for Work performed.

1.02 REFERENCES

A. A current version of the following shall be used:

1. California Public Contract Code
2. Code of Civil Procedures
3. Government Code

1.03 COMPOSITION AND SCOPE OF CONTRACT SUM

A. **Scope of Contract Sum**

1. The Contract Sum for performance of the Work under Contract Documents, or under any Bid item, allowance, or Alternate, shall include full compensation for all Work required under the Contract Documents, including without limitation, all labor, materials, taxes, transport, handling, storage, supervision, administration, and all other items necessary for the satisfactory completion of the Work, whether or not expressly specified or indicated, incidental work and expenses, and all terms, conditions, requirements and limitations set forth in the Contract Documents.
2. Contract Sum may be expressed as lump sum, unit price, allowance, or combination thereof.

B. **Unit Price items**

1. Quantity of Work to be paid for under any item for which a unit price is fixed in Contract Documents shall be determined by Owner based on, so far as practicable, actual number of units satisfactorily completed, as certified by Contractor, and reviewed by Owner, within prescribed or ordered limits, and no payment will be made for Work unsatisfactorily performed or done outside of limits.

C. **Lump Sum Items**

1. When estimated quantity for specific portion of Work is not indicated and/or Work is designated as lump sum, payment will be on a lump sum basis for Work satisfactorily completed in accordance with Contract Documents.
2. Payment for lump sum Work, or items of Work subject to a lump sum (e.g. without limitation, change order work), shall be made on the basis of satisfactory completion of such Work or work item, earned in progressive stages in accordance with the Contract Documents, up to but not exceeding 95% of the Contractor's percentage completion of the Work or item.
3. Lump sum items shall be paid based upon the approved Schedule of Values, which shall be used to measure progressive payments based upon satisfactory progress towards completion of the item.

1.04 PAYMENT PROCEDURES

A. **Schedule of Values:**

1. Within ten Days from issuance of Notice of Award and prior to the Contractor's first Application for Payment, Contractor shall submit a detailed breakdown of its Bid by scheduled Work items and/or activities, in the accepted Owner format, including coordination responsibilities and Project Record Documents responsibilities. Where more than one Subcontractor comprises the work of a Work item or activity, the Schedule of Values shall show a separate line item for each subcontract. Contractor shall furnish such breakdown of the total Contract Sum by assigning dollar values (cost estimates) to each applicable Progress Schedule network activity, which cumulative sum equals the total Contract Sum. This breakdown shall be referred to as the Schedule of Values.
2. Along with each applicable Progress Schedule network activities, General Conditions, scheduling, record documents and quality assurance control shall be separate line items in the Schedule of Values, which cumulative sum equals the total Contract value. Owner will review the breakdown in conjunction with the Progress Schedule to ensure that the dollar amounts of this Schedule of Values are, in fact, reasonable cost allocations for the Work items listed. Upon favorable review by Owner, Owner will accept this Schedule of Values for use. Owner shall be the sole judge of fair market cost allocations.
3. Owner will reject any attempt to increase the cost of early activities, i.e., "front loading," resulting in a complete reallocation of moneys until such "front loading" is corrected. Repeated attempts at "front loading" may result in suspension or termination of the Work for default, or refusal to process progress payments until such time as the Schedule of Values is acceptable to Owner.

B. **Contractor's Requests for Progress Payments**

1. If requested by Contractor, progress payments will be made monthly, under the following conditions:
2. On or before the 25th Day of each monthly billing cycle, Contractor shall submit to Owner an Application for Payment for the cost of the Work put in place during the period from the last Day of the previous month to the end of the current month, along with one copy of an updated Progress Schedule. Such Applications for Payment shall be for the expected total value of activities completed or partially completed, based upon Schedule of Values prices (or Bid item prices if unit price) of all labor and materials incorporated in the Work up until midnight of the last Day of that one month period, less the aggregate of previous payments. Accumulated retainage shall be shown as separate item in payment summary. Owner and Contractor will reconcile any differences in the field, based on the reconciled monthly report sheets. Except as otherwise provided in a labor compliance program applicable to the Work (if any) or as otherwise required by Owner, concurrently with each Application for Payment, Contractor shall submit to the Owner the Contractor's and its Subcontractors' certified payroll records required to be maintained pursuant to Labor Code Section 1776 for all labor performed during pay periods ending during the period covered by the Application for Payment.
3. No progress payment will be processed prior to Owner receiving all requested, acceptable schedule update information, updated as-built drawings, and certified payrolls, and in Owner's sole and absolute discretion, Owner may deny the entire Application for Payment for noncompliance.
4. Each Application for Payment shall list each Change Order executed prior to date of submission, including the Change Order Number, and a description of the Work activities, consistent with the descriptions of original Work activities. Contractor shall submit a monthly Change Order status log to Owner.
5. If Owner requires substantiating data, Contractor shall submit information requested by

Owner, with cover letter identifying Project, Application for Payment number and date, and detailed list of enclosures. Contractor shall submit one copy of substantiating data and cover letter for each copy of Application for Payment submitted.

6. If Contractor fails or refuses to participate in monthly Work reconciliations or other construction progress evaluation with Owner, Contractor shall not receive current payment until Contractor has participated fully in providing construction progress information and schedule update information to Owner.

C. **Owner's Review of Progress Payment Applications**

1. Owner will review Contractor's Application for Payment. If adjustments need to be made to percent of completion or completed quantities of each activity, Owner will make appropriate notations and return to Contractor. Contractor shall revise and resubmit. All parties shall update percentage of completion values in the same manner, i.e., express value of an accumulated percentage of completion to date.
2. If Owner determines that portions of the Application for Payment are not proper or not due under the Contract Documents, then Owner may approve the other portions of the Application for Payment, and in the case of disputed items or Defective Work not remedied, may withhold up to 150 percent of the disputed amount from the progress payment.
3. Pursuant to California Public Contract Code §20104.50, if Owner fails to make any progress payment within 30 Days after receipt of an undisputed and properly submitted Application for Payment from Contractor, Owner shall pay interest to the Contractor equivalent to the legal rates set forth in subdivision (a) of Section 685.010 of the California Code of Civil Procedure. The 30-Day period shall be reduced by the number of Days by which Owner exceeds the seven-Day return requirement set forth herein.
4. As soon as practicable after approval of each Application for Payment for progress payments, Owner will pay to Contractor in manner provided by law, an amount equal to 95 percent of the amounts otherwise due as provided in the Contract Documents, or a lesser amount if so provided in Contract Documents and by law, provided that payments may at any time be withheld if, in judgment of Owner, Work is not proceeding in accordance with Contract, or Contractor is not complying with requirements of Contract, or to comply with labor compliance, stop notices or to offset liquidated damages accruing or expected.
5. Before any progress payment or final payment is due or made, Contractor shall submit satisfactory evidence that Contractor is not delinquent in payments to employees, Subcontractors, suppliers, or creditors for labor and materials incorporated into Work. This specifically includes, without limitation, conditional lien release forms for the current progress payment and unconditional release forms for past progress payments. This also includes copies of certified payroll from contractor and subcontractors for the current payment period.

D. **Payment for Material and Equipment Not Yet Incorporated Into the Work**

1. No payment shall be made for materials or equipment not yet incorporated into the Work, except as specified elsewhere in the Contract Documents or as may be agreed to by Owner in its sole discretion. Where Contractor requests payment on the basis of materials and equipment not incorporated in the Work, Contractor must satisfy the following conditions:
2. The materials and/or equipment shall be delivered and suitably stored at the Site or at another local location agreed to in writing, for example, a mutually acceptable bonded and insured warehouse.
3. Full title to the materials and/or equipment shall vest in Owner at the time of delivery to the Site, warehouse or other storage location. Obtain a negotiable warehouse receipt, endorsed over to Owner for materials and/or equipment stored in an off-site warehouse. No payment will be made until such endorsed receipts are delivered to Owner.
4. Stockpiled materials and/or equipment shall be available for Owner inspection, but Owner shall have no obligation to inspect them and its inspection or failure to inspect shall not

relieve Contractor of any obligations under the Contract Documents. Materials and/or equipment shall be segregated and labeled or tagged to identify these specific Contract Documents.

5. After delivery of materials and/or equipment, if any inherent or acquired defects are discovered, defective materials and/or equipment shall be removed and replaced with suitable materials and/or equipment at Contractor's expense.
6. At Contractor's expense, ensure the materials and/or equipment against theft, fire, flood, vandalism, and malicious mischief, as well as any other coverages required under the Contract Documents.
7. Contractor's Application for Payment shall be accompanied by a bill of sale, invoice or other documentation warranting that Owner has received the materials and equipment free and clear of all liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner interest therein, all of which must be satisfactory to Owner. This documentation shall include, but not be limited to, conditional releases of mechanics' liens and stop notices from all those providing materials and equipment as to which the Application for Payment relates, as well as unconditional releases of the same from the same as to the previous Application for Payment for which they have not already been provided. Amounts previously paid for materials and equipment prior to incorporation into the Work shall be deducted from amounts otherwise due Contractor as they are incorporated.

1.05 FINAL PAYMENT

A. **Final Payment**

1. As soon as practicable after all required Work is completed in accordance with Contract Documents, including punchlist, testing, record documents and Contractor maintenance after Final Acceptance, Contractor shall submit its Application for Final Payment.
2. Provided Contractor has met all conditions required for Final payment, Owner will pay to Contractor, in manner provided by law, unpaid balance of Contract Sum of Work (including, without limitation, retentions), or whole Contract Sum of Work if no progress payment has been made, determined in accordance with terms of Contract Documents, less sums as may be lawfully retained under any provisions of Contract Documents or by law.

B. **Final Accounting**

1. Prior progress payments and change orders shall be subject to audit and correction in the final payment.
2. Contractor and each assignee under an assignment in effect at time of final payment shall execute and deliver at time of final payment, and as a condition precedent to final payment, Document 00590 (Agreement and Release of Claims).

1.06 SUBSTITUTION OF SECURITIES

A. **Public Contract Code Section 22300.** In accordance with the provisions of Public Contract Code Section 22300, substitution of securities for any moneys withheld under Contract Documents to ensure performance is permitted under following conditions:

1. At request and expense of Contractor, securities listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Contractor and Owner which are equivalent to the amount withheld under retention provisions of Contract shall be deposited with Controller or with a state or federally chartered bank in California, as the escrow agent, who shall then pay such moneys to Contractor. Upon satisfactory completion of Contract, securities shall be returned to Contractor.
2. Alternatively, Contractor may request and Owner shall make payment of retentions earned directly to the escrow agent at the expense of Contractor. At the expense of Contractor, Contractor may direct the investment of the payments into securities and receive the interest earned on the investments upon the same terms provided for securities deposited

by Contractor. Upon satisfactory completion of the work of the Contract Documents, Contractor shall receive from escrow agent all securities, interest, and payments received by the escrow agent from Owner. Contractor shall then pay to each Subcontractor, not later than seven (7) Days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention withheld to insure the performance of Contractor.

3. Contractor shall be beneficial owner of securities substituted for moneys withheld and shall receive any interest thereon.
4. Contractor may enter into an escrow agreement, form included in Contract Documents, as authorized under Public Contract Code Section 22300, specifying amount of securities to be deposited, terms and conditions of conversion to cash in case of default of Contractor, and termination of escrow upon completion of Contract Documents.
5. Public Contract Code Section 22300, in effect on Bid Day, is hereby incorporated in full by this reference and shall supersede anything inconsistent therewith.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

ATTACHMENT 01 2000-A

PERIODIC ESTIMATE FOR PARTIAL PAYMENT

PROJECT: _____ Invoice or Estimate No. _____

CONTRACTOR: _____

PROJECT NO: _____ PERIOD: _____ TO: _____

ITEM NO.	DESCRIPTION	SCHEDULED VALUE	PREVIOUS ESTIMATE	COMPLETED THIS PERIOD	TOTAL TO DATE	%
1			0.00	0.00	0.00	
2			0.00	0.00	0.00	
3			0.00	0.00	0.00	
4			0.00	0.00	0.00	
5			0.00	0.00	0.00	
6			0.00	0.00	0.00	
7			0.00	0.00	0.00	
8			0.00	0.00	0.00	
9			0.00	0.00	0.00	
10			0.00	0.00	0.00	
11			0.00	0.00	0.00	
12			0.00	0.00	0.00	
13			0.00	0.00	0.00	
14			0.00	0.00	0.00	
15			0.00	0.00	0.00	
16			0.00	0.00	0.00	
17			0.00	0.00	0.00	
18			0.00	0.00	0.00	
19			0.00	0.00	0.00	
20			0.00	0.00	0.00	
	SUBTOTAL ORIGINAL CONTRACT	**$0.00**	**$0.00**	**$0.00**	**$0.00**	
CO1		0.00	0.00	0.00	0.00	
CO2		0.00	0.00	0.00	0.00	
CO3		0.00	0.00	0.00	0.00	
CO4		0.00	0.00	0.00	0.00	
	TOTAL ADJUSTED CONTRACT	**$0.00**	**$0.00**	**$0.00**	**$0.00**	

A.	Notice to Proceed Date	(Enter as text, i.e.: January 1, 2023)		
B.	Original Contract Time (Working Days)	(Enter as number)	0	Days
C.	Additional Contract Time due to Change Orders (Working Days)	(Enter number)	0	Days
D.	Contract Completion Date	<Completion Date Calculated Here>		

SUMMARY OF VALUE OF COMPLETED WORK

1.	Value of work completed to date	$0.00
2.	Less: Retention - 5%	$0.00
3.	Less: Deductions/Labor Non-Compliance	$0.00
4.	Net amount payable on work performed to date	$0.00
5.	Less: Amount of previous payment requests	$0.00
6.	Amount due this payment	$0.00

Approved by Contractor: _____ Date: _____

Approved by Owner: _____ Date: _____

ATTACHMENT 01 2000B: REQUEST FOR PAYMENT CERTIFICATION

1. CERTIFICATION BY CONTRACTOR:

According to the best of my knowledge and belief, I certify that all items and amounts shown on the attached Periodic Estimate for Partial Payment are correct; that all work has been performed in accordance with the terms and conditions of the contract between the Rosamond Community Services District and _____, dated _____.

I further certify that all just and lawful bills against the undersigned have been paid, or will be paid from funds received from this payment, in full accordance with the terms and conditions of said contract.

By _____ By _____
Contractor (Name of Company) Authorized Agent (Signature)

Date _____ Title _____

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2. CERTIFICATION BY OWNER:

I certify that I have reviewed the attached Periodic Estimate for Partial Payment No. _____for the period ending _____; that to the best of my knowledge and belief it is a true statement of value of work performed to date and that such work has been performed in full accordance with Plans and Specifications and the terms and conditions of the construction contract. I further certify that all work included in the Periodic Estimate for Partial Payment has been inspected by a duly authorized representative and/or qualified staff. I therefore approve the amount of $_____ as the balance due this payment.

Rosamond Community Services District By:_____

Date _____ Title: _____

THIS SECTION FOR USE WITH FEDERALLY FUNDED PROJECTS

3. CERTIFIED PAYROLL AUDIT CERTIFICATION

☐ I hereby certify that I have reviewed the weekly payroll forms and related material for this project and find them to be up-to-date, satisfactory and in compliance with the monitoring regulations included in OMB A-87, A-102 and CRF24.

☐ I hereby certify that I have reviewed the weekly payroll forms and related material for this project and find them to contain discrepancies. A sufficient amount has been withheld to cover any problems that may arise. In addition, the final retention will be held until all discrepancies are resolved.

☐ I hereby certify that weekly payroll forms for the subject project are not required to be submitted.

By: _____ Signature _____

Title: _____ Date _____

END OF DOCUMENT

SECTION 01 2050

MODIFICATION PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes requirements that supplement the paragraphs of Document 00 7200 (General Conditions).

B. Description of procedures for modifying the Contract Documents and determining costs for changes in contract amounts.

C. Contractor shall submit construction related documentation in accordance with Section 01 3000.

1.02 PROCEDURES FOR CONTRACTOR INITIATED CHANGES

A. Contractor-Initiated Request for Information ("RFI") Procedures, Requirements and Limitations:

1. Contractor may submit RFIs for clarifications in Owner-prepared Contract Documents, which may result in a change in Work, Contract Price, or Contract Time.
2. Whenever Contractor requires information regarding the Project or Owner-prepared Contract Documents, or receives a request for such information from a Subcontractor, Contractor may prepare and deliver an RFI to Owner. Contractor shall use the RFI format provided by Owner. Contractor shall not issue an RFI to Owner solely to clarify Owner-prepared Construction Documents. Contractor must submit time critical RFIs at least 30 days before scheduled start date of the affected Work activity. Contractor shall reference each RFI to an activity of Progress Schedule and shall note time criticality of the RFI, indicating time within which a response is required. Contractor's failure to reference RFI to an activity on the Progress Schedule and note time criticality on the RFI shall constitute Contractor's waiver of any claim for time delay or interruption to the Work resulting from any delay in responding to the RFI.
3. Contractor shall be responsible for its costs to implement and administer RFIs throughout the Contract duration. Regardless of the number of RFIs submitted, Contractor shall not be entitled to additional compensation for the effort required to submit the RFIs. Contractor shall be responsible for Owner's administrative costs for answering RFIs where the answer could reasonably be found by reviewing the Contract Documents, as determined by Owner; at Owner's discretion, such costs may be deducted from progress payments or final payment.
4. Owner will provide a written response in the form of an Instruction Bulletin ("**IB**") to Contractor within 14 days from receipt of RFI. Contractor shall distribute the response to all appropriate Subcontractors.
5. If Contractor is satisfied with the response and does not request a change in Contract Sum or Contract Time, then the response shall be executed without a change.
6. If Contractor believes the response is incomplete, Contractor shall issue another RFI (with the same RFI number with the letter "A" indicating it is a follow-up RFI) to Owner clarifying original RFI. Contractor shall reference the IB issued by the Owner. Additionally, Owner may return the RFI requesting additional information if the original RFI is inadequate in describing the condition.

B. Contractor Cost Proposal:

1. Contractor may initiate changes by submitting a Cost Proposal ("**CP**") in response to an Instruction Bulletin.
2. Whenever Contractor elects or is entitled to submit a CP, Contractor shall prepare and submit to Owner for consideration a CP using the form included in this Project Manual. All

CPs must contain a complete breakdown of costs or credits, deducts and extras; itemizing materials, labor, taxes, markup and any requested changes to Contract Time. All Subcontractor Work shall be so indicated. Individual entries on the CP form shall include applicable Schedule of Values code, with all amounts determined as provided herein. After receipt of a CP with a detailed breakdown, Owner will act promptly through issuance of an Instruction Bulletin.

3. If Owner accepts a CP, Owner will prepare a Change Order for Owner and Contractor signatures.
4. If CP is not acceptable to Owner because Owner does not agree with Contractor's proposed cost and/or time, Owner will provide comments. Contractor will then, within seven Days (except as otherwise provided herein), submit a revised CP.
5. The Contractor will forfeit compensation for costs and/or time for proceeding with changes to the Work without written authorization from the Owner. The Contractor shall notify the Owner in writing and request an evaluation whenever it appears a change is necessary. The written notice shall be made within 24 hours of such discovery. If the Owner concurs with the Contractor's request for a change to the Work, the Owner will follow the procedures described above.

C. Time Requirements:

1. If Contractor believes that an Owner response to an RFI, submittal, or other Owner direction, results in change in Contract Sum or Contract Time, Contractor shall notify Owner with the issuance of a preliminary CP within seven Days after receiving Owner's response or direction, and in no event after starting the disputed work or later than the time allowed under Article 12 of Document 00 7200 (General Conditions). If Contractor also requests a work time extension, or has issued a notice of delay or otherwise requests a time extension with a CP, then Contractor shall submit the TIE as described in Section 01 3216 concurrently with the CP and in no event later than ten Days after providing the notice of delay.
2. If Contractor requires more time to accurately identify the required changes to the Contract Sum or Contract Time, Contractor may submit an updated and final CP and TIE within 14 Days of submitting the preliminary CP.
3. If Owner agrees with Contractor's CP and/or TIE, then Owner will prepare a Change Order. If Owner disagrees with Contractor, then Contractor may give notice of potential claim as provided in Article 12 of Document 00 7200 (General Conditions), and proceed thereunder.
4. Contractor must submit CPs, notices of potential claim, or Claims within the required time periods. Any failure to do so waives Contractor's right to submit a CP or file a Claim.

D. Cost Estimate Information:

1. Contractor and subcontractors shall, upon Owner's request, permit inspection of the original unaltered cost estimates, subcontract agreements, purchase orders relating to the change, and documents substantiating all costs associated with its CP or Claims arising from changes in the Work.

1.03 PROCEDURES FOR OWNER INITIATED CHANGE ORDERS

A. Owner Initiated Changes

1. Owner may initiate changes in the Work or Contract Time by issuing an Instruction Bulletin. Owner may issue an IB to Contractor. Any IB will detail all proposed changes in the Work and may request a quotation of changes in Contract Sum and Contract Time from Contractor.
2. In response to an IB, Contractor shall furnish a CP within 21 Days. For time sensitive changes and upon Owner's approval of CP, Owner may direct contractor to proceed with extra work in writing ahead of inclusion in a Change Order. Upon approval of CP, Owner may issue an Instruction Bulletin directing Contractor to proceed with extra Work.

3. If the parties agree on price and time for the Work, the Owner will issue a Contract Change Order. If the parties do not agree on the price or time for a CP, Owner may either issue an Instruction Bulletin, order the work done by force account or decide the issue per Article 12 of Document 00 7200 (General Conditions). Contractor shall perform the changed Work notwithstanding any claims or disagreements of any nature.

B. Force Account

1. The Contractor, provided he received an order for force account work, shall proceed with the work on a force account basis as defined in Section 9 of the Standard Specifications and as modified by this Section 01 2050.
2. A daily time and material record of all force account work shall be kept by the Contractor, as directed by the Owner. The daily record shall be signed by the Contractor and submitted daily to the Owner.
3. In any case, the Owner shall certify to the amount, including markup, due to the Contractor and any subcontractor submitting for extra under the proposed change. For this purpose, markup shall include, but not be limited to overhead, profit, home office overhead, bonds, insurance, labor pool, remobilization, and escalation. In no instance shall mark up to Contractor be more than 15%. Pending final determination of value, payments on account of changes shall be made on the Contractor's estimate.

1.04 PROCEDURES THAT APPLY TO CONTRACTOR- AND OWNER-INITIATED CHANGES

A. Adjustment of Schedules to Reflect Change Orders:

1. Contractor shall revise Schedule of Values and Application for Payment forms to record each authorized Change Order ("**CO**") as a separate line item and adjust the Contract Sum as shown thereon prior to the next monthly pay period.
2. Contractor shall revise the Progress Schedules prior to the next monthly pay period, to reflect CO.
3. Contractor shall enter changes in Project Record Documents prior to the next monthly pay period.

B. Required Documentation for Adjustments to Contract Amounts:

1. For all changes and cost adjustments requested, Contractor shall provide documentation of change in Contract Amounts asserted, with sufficient data to allow evaluation of the proposal.
2. In all requests for compensation, cost proposals, estimates, claims, and any other calculation of costs made under the Contract Documents, Contractor shall break out and quantify costs of labor, equipment and materials identified herein, for Contractor and subcontractors of any tier.
3. Contractor shall, on request, provide additional data to support computations for:

    a. Quantities of products, materials, labor, and equipment.
    b. Taxes, insurance, and bonds.
    c. Justification for any change in Contract Time and new Progress Schedule showing revision due, if any.
    d. Credit for deletions from Contract, similarly documented.

4. Contractor shall support each claim or computation for additional cost, with additional information including:

    a. Origin and date of claim or request for additional compensation.
    b. Dates and times Work was performed and by whom.
    c. Time records and wage rates paid.
    d. Invoices and receipts for products, materials, equipment and subcontracts, similarly documented.
    e. Credit for deletions from Contract, similarly documented.

C. Responses and Disputes:

1. For all responses for which the Contract Documents do not provide a specific time period, recipients shall respond within a reasonable time.
2. For all disputes arising from the procedures herein, Contractor shall follow Article 12 of Document 00 7200 (General Conditions).

1.05 COST DETERMINATION FOR CHANGES IN CONTRACT AMOUNTS

A. Calculation of Total Cost of Extra Work:

1. Total cost of changed Work, extra Work, or of Work omitted shall be the sum of three components defined immediately below as: Component 1 (Direct Cost(s)); Component 2 (Markup); and, Component 3 (bonds, insurance, taxes)
2. Component 1: Direct Cost(s) of labor, equipment and materials, is calculated based upon actually incurred (or omitted) labor costs, material costs and equipment rental costs, as defined herein;
3. Component 2: Markup on such actually incurred Direct Costs, is applied in the percentages identified below; and
4. Component 3: Actual additional costs for any additionally required insurance, bonds, and/or taxes, defined herein, is calculated without Markup.

1.06 MEASUREMENT OF DIRECT COST OF CONSTRUCTION (COST COMPONENT NO. 1)

A. Composition of Component 1 (Direct Cost of Construction):

1. Component 1 has four subcomponents, also referred to as **"LEMS"**:

   a. Labor (Component 1A)
   b. Equipment (Component 1B)
   c. Materials (Component 1C)
   d. Subcontractors (Component 1D)

B. Measurement of Cost of Labor (Component 1A):

1. Cost of Labor shall be calculated as: Cost of labor for workers (including forepersons when authorized by Owner) used in actual and direct performance of the subject work, whether employer is Contractor, Subcontractor, or other forces, in the sum of the following:

   a. Actual Wages: Actual wages paid shall include any employer payments to or on behalf of workers for health and welfare, pension, vacation, and similar purposes.
   b. Labor surcharge: Payments imposed by local, county, state, and federal laws and ordinances, and other payments made to, or on behalf of, workers, other than actual wages as defined, such as worker's compensation insurance. Such labor surcharge shall not exceed generally accepted standards in the State for labor rates in effect on date upon which extra Work is accomplished.
   c. Cost of Labor shall include no other costs, fees or charges.

2. Labor cost for operators of equipment owned and operated by Contractor or any Subcontractor, shall be no more than rates of such labor established by collective bargaining agreements for type of worker and location of Work, whether or not owner-operator (i.e., Contractor or Subcontractor) is actually covered by such an agreement.
3. Cost of Labor shall be recorded and documented in certified payroll records, maintained in the form customary and/or required in the State, delivered to Owner weekly.

C. Measurement of Cost of Equipment (Component 1B):

1. Measurement of Component 1B (Cost of Equipment). Cost of Equipment shall be calculated as: Cost of Equipment used in actual and direct performance of the subject Work, whether by Contractor, Subcontractor, or other forces. Cost of Equipment shall be calculated as herein described.

2. For rented equipment, cost will be based on actual rental invoices, appropriate for the use and duration of the Work. Equipment used on extra Work shall be of proper size and type. If, however, equipment of unwarranted size or type and cost is used, cost of use of equipment shall be calculated at rental rate for equipment of proper size and type, as determined by Owner.
3. Equipment rental cost for Contractor or Subcontractor-owned equipment, shall be determined by reference to, and not in excess of, the generally accepted standards in the State for equipment rental rates in effect on the date upon which extra Work is accomplished. If there is no applicable rate for an item of equipment, then payment shall be made for Contractor- or Subcontractor-owned equipment at the rental rate listed in the most recent edition of the CalTrans Standard Schedules and Specifications, and absent a rental rate therein, then the Association of Equipment Distributors (AED) book.
4. In all cases, rental rates paid shall be deemed to cover cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.
5. Unless otherwise specified, manufacturer's ratings, and manufacturer-approved modifications, shall be used to classify equipment for determination of applicable rental rates. Individual pieces of equipment or tools not listed in said publication and having a replacement value of $100 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor as payment is included in payment for labor. Rental time will not be allowed while equipment is inoperative due to breakdowns.
6. For equipment on Site, rental time to be paid for equipment shall be the time that equipment is in operation on extra Work being performed or on standby as approved by Owner. The following shall be used in computing rental time of equipment:

    a. When hourly rates are listed, less than 30 minutes of operation shall be considered to be ½ hour of operation.
    b. When daily rates are listed, less than four hours of operation shall be considered to be ½ Day of operation.
    c. Rates shall correspond to actual rates paid by Contractor, i.e., if Contractor pays lower weekly or monthly rates, then same shall be charged to Owner.

7. For equipment that must be brought to Site to be used exclusively on extra Work, cost of transporting equipment to Site and its return to its original location shall be determined as follows:

    a. Owner will pay for costs of loading and unloading equipment.
    b. Cost of transporting equipment in low bed trailers shall not exceed hourly rates charged by established haulers.
    c. Cost of transporting equipment shall not exceed applicable minimum established rates of California Public Utilities Commission or appropriate State Dept. of Transportation.
    d. Owner will not make any payment for transporting and loading and unloading equipment if equipment is used on Work in any other way than upon extra Work.
    e. Rental period may begin at time equipment is unloaded at Site of extra Work and terminate at end of the performance of the extra Work or Day on which Owner directs Contractor to discontinue use of equipment, whichever first occurs. Excluding Saturdays, Sundays, and Owner legal holidays, unless equipment is used to perform extra Work on such Days, rental time to be paid per Day shall be four hours for zero hours of operation, six hours for four hours of operation and eight hours for eight hours of operation, time being prorated between these parameters. Hours to be paid for equipment that is operated less than eight hours due to breakdowns, shall not exceed eight less number of hours equipment is inoperative due to breakdowns.

8. Employee vehicles are not part of Component 1A, rather, are included within Component 2 (Markup).
9. Equipment costs shall include no other costs, fees, or charges.

D. Measurement of Cost of Material (Component 1C):

1. Cost of material shall be calculated as herein described. Cost of such materials will be cost to purchaser (Contractor, Subcontractor, or other forces) from supplier thereof, except as the following are applicable:
2. If cash or trade discount by actual supplier is offered or available to purchaser, it shall be credited to Owner notwithstanding fact that such discount may not have been taken.
3. For materials salvaged upon completion of Work, salvage value of materials shall be deducted from cost, less discounts, of materials.
4. If cost of a material is, in opinion of Owner, excessive, then cost of material shall be deemed to be lowest current wholesale price at which the material is available in quantities concerned delivered to Site, less any discounts as provided in this Paragraph 1.06.
5. Material costs shall include no other costs, fees, or charges.

E. Measurement of Cost of Subcontractors (Component 1D):

1. Where reimbursed or calculated per the terms of the Contract Documents, Change Order, , cost of Subcontractors shall be calculated as amounts earned by Subcontractors procured in compliance with the Contract Documents and approved by the Owner, provided such subcontractor-earned amounts meet the following requirements:

    a. Such amounts are earned under the terms of the Subcontracts and the Work complies with the terms of the Contract Documents;
    b. Such amounts are properly requested, documented and permitted under the terms of the Subcontract(s) and the Contract Documents.
    c. Total cost to Owner of Direct Costs of Construction (labor, equipment, materials), Markup, and costs of bonds, insurance, and taxes, conform to contract limitations (i.e., totals paid by Owner do not exceed the 20% Markup limitation.).

1.07 **MEASUREMENT AND PAYMENT OF MARKUP (COST COMPONENT 2)**

A. Markup Percentages for Changed Work (Component 2):

1. Markup on Direct Cost of labor and materials for extra Work shall be 15%. Markup on Direct Cost of equipment for extra Work shall be 15%.
2. When extra Work is performed by Subcontractors, regardless of the number of tiers, total Markup on “Component 1” Direct Costs shall not exceed 20%. Contractor and its Subcontractors shall divide the 20% as they may agree.
3. Under no circumstances shall the total Markup on any extra Work exceed 20 percent, stated as a percent of the Direct Cost of labor, equipment, and materials. This limitation shall apply regardless of the actual number of subcontract tiers.
4. On proposals covering both increases and decreases in Contract Sum, Markup shall be allowed on the net increase only as determined above. When the net difference is a deletion, no percentage for Markup shall be allowed, but rather an appropriate percentage deduction shall be issued in the amount of the net difference.

B. Measurement and Payment of MarkUp (Component 2):

1. Mark Up (Component 2) provides complete compensation to Contractor for:

    a. All Contractor profit;
    b. All Contractor home-office overhead;
    c. All Contractor assumption of risk assigned to Contractor under the Contract Documents;
    d. Subject to the qualifications below regarding self-performed work, all General Conditions and General Requirements.

2. Profit. Compensation for profit included within Component 2 (Mark Up), includes without limitation: Fees of all types, nature and description; and Profit and margins of all types, nature and description.
3. Home Office Expenses. Compensation for home office expenses included within Component 2 (Mark Up), includes without limitation: Salaries and other compensation of any type of Contractor's personnel (management, administrative, and clerical), and all direct and indirect operating, travel, payroll, safety, storage, quality control, maintenance, and overhead costs of any nature whatsoever, incurred by Contractor at any location other than the Project-specific site office, including without limitation, Contractor's principal or branch offices; insurance premiums other than those for Project-specific insurance directed by the Owner in a change order; all hardware, software, supplies and support personnel necessary or convenient for Contractor's capture, documentation and maintenance of its costs and cost accounting data and cost accounting and control systems and work progress reporting.
4. Assumption of Risk. Compensation for Contractor's assumption of risk under the Contract Documents, included within Component 2 (Mark Up), includes without limitation loss, cost, damage, expense, or liability resulting directly or indirectly from any of the following causes ("**Unallowable Costs**"), for Contractor and subcontractors of any tier: noncompliance with the Contract Documents, fault or negligence, defective or non-comforming Work, by Contractor or any Subcontractor or Vendor of any tier or anyone directly or indirectly employed by any of them, or for whose acts or omissions any of them are responsible or liable at law or under the Contract Documents; cost overruns of any type; costs in excess of any lump sum, not to exceed amount or Guaranteed Maximum Price (GMP); costs resulting from bid or "buy out" errors, unallocated scope, or incomplete transfer of scope or contract terms to subcontractors; any costs incurred by Contractor relating to a Change in the Work without a Change Order in accordance with the Contract Documents; costs for work or materials for which no price is fixed in the Contract Documents, unless it is expressly specified that such work or material is to be paid for as extra Work.
5. General Conditions and Division 01 General Requirements. Compensation for Contractor's General Conditions and General Requirements Costs included within Component 2 (Mark Up), includes compensation to Contractor for: Contractor's direct costs, without overhead or profit, for salaries and related forms of compensation and employer's costs for labor and personnel costs, of Contractor's employees and Subconsultant's employees (if any), while and only to the extent they are performing Work at the Project Site. Personnel and Work compensated by this Component include without limitation: All required Project management responsibilities; all on-site services; monthly reporting and scheduling; routine field inspection of Work; general superintendence; general administration and preparation of cost proposals, schedule analysis, change orders and other supporting documentation as necessary; salaries of project superintendent, project engineers, project managers, safety manager, other manager, timekeeper, and secretaries; all cost estimates and updates; development, validation, and updates to the project schedule; surveying; and estimating. Compensation for Contractor's General Requirements Costs included within Component 2 (Mark Up), compensates Contractor for its "General Requirements" Costs, including without limitation: all scheduling hardware, software, licenses, equipment, materials, and supplies; purchase, lease or rental, build out, procurement, supporting equipment and maintenance of temporary on-Site facilities, Project field and office trailers and other temporary facilities, office equipment and supporting utilities; platforms, fencing, cleanup and jobsite security; temporary roads, parking areas, temporary security or safety fencing and barricades; all Contractor's motor vehicles used by any Contractor's personnel, and all costs thereof; all health and safety requirements, required by law or Owner procedures; all surveying; all protection of Work; handling and disposal fees; final cleanup; repair or maintenance; other incidental Work; all items, activities and function similar to any of those described above; all travel, entertainment, lodging, board.

6. Personnel compensated by the Markup Component do not include workers of foreman level or below in the case of self-performed work; rather, such personnel shall be treated as a Direct Cost of Construction. Costs compensated by the Markup component do not include temporary measures specifically required by the changed work, not otherwise required or ongoing in the prosecution of the Work, that commence specifically to support the changed work and conclude with the completion of the changed work. Such costs shall be treated as Direct Costs of Construction. Examples of General Requirements costs that this component may not cover are the following: temporary barricades or fencing of specific areas required specifically for the changed work; cranes required specifically for the changed work; extra security required specifically for the changed work.

1.08 **MEASUREMENT AND PAYMENT OF BONDS INSURANCE TAXES (COMPONENT 3)**

A. Measurement of Bonds, Insurance, Taxes (Component 3):

1. Component 3 (Bonds, Insurance, Taxes) consists of the cost of bonds, insurance and taxes, also referred to as **"BIT".** All State sales and use taxes, applicable County and applicable City sales taxes, shall be included. Federal and Excise tax shall not be included.
2. There is no mark up on BIT.

1.09 **EFFECT OF PAYMENT**

A. Change Order Compensation is All Inclusive.

1. Except as provided expressly below regarding changes that extend the Contract Time, payment of calculated cost of extra work constitutes full and complete compensation for costs or expense arising from the extra Work, and is intended to be all inclusive.
2. Payment for Direct Cost of Construction (Component 1 or LEMS) is intended to be all-inclusive. Any costs or risks not delineated within cost of labor, equipment, or materials herein, shall be deemed to be within the costs and risks encompassed by the applicable Markups and unallowable in any separate amount.
3. Payment of Markup (Component 2) is intended to be all-inclusive. Contractor waives claims for any further or different payment of cost and risk items delineated herein, other than the allowable percentage markup on costs set forth in the Contract Documents; such separate, further or different cost or risk items shall be unallowable, waived and liquidated within the allowable percentage markup.
4. Contractor shall recover no other costs or markups on extra work of any type, nature or description.

B. Exception for Changes Extending the Contract Time.

1. Where a change in the Work extends the Contract Time, Contractor may request and recover additional, actual direct costs, provided Contractor can demonstrate such additional costs are (i.) actually incurred performing the Work, (ii.) not compensated by the Markup allowed, and (iii) directly result from the extended Contract Time. Contractor shall make such request and provide such documentation following all required procedures, documentation and time requirements in the Contract Documents, and subject to all contract limitations of liability. Contractor may not seek or recover such costs using formulas (e.g., Eichleay).

C. Limits of Liability / Accord and Satisfaction.

1. The foregoing limits of compensation apply in all cases of claims for changed Work, whether calculating Cost Proposals or Change Orders, or calculating claims and/or damages of all types, and applies even in the event of fault, negligence, strict liability, or tort claims of all kinds, including strict liability or negligence. Contractor may recover no other costs arising out of or connected with the performance of extra Work, of any nature.
2. Under no circumstances may Contractor claim or recover special, incidental, or consequential damages against Owner, its representatives or agents, whether arising from

breach of contract, negligence, strict liability or other tort or legal theory, unless specifically and expressly authorized in the Contract Documents.

3. No change in Work shall be considered a waiver of any other condition of Contract Documents. No claim shall be made for anticipated profit, for loss of profit, for damages, or for extra payment whatever, except as expressly provided for in Contract Documents.
4. Accord and Satisfaction: Every Change Order and accepted CP shall constitute a full accord and satisfaction, and release, of all Contractor (and if applicable, Subcontractor) claims for additional time, money or other relief arising from or relating to the subject matter of the change including, without limitation, impacts of all types, cumulative impacts, inefficiency, overtime, delay and any other type of claim. Contractor may elect to reserve its rights to disputed claims arising from or relating to the changed Work at the time it signs a Change Order or approves a CP, but must do so expressly in a writing delivered concurrently with the executed Change Order or approved CP, and must also submit a Claim for the reserved disputed items pursuant to Article 12 of Document 00 7200 (General Conditions) no later than 30 days after Contractor's first written notice of its intent to reserve rights. Execution of any Change Order or CP shall constitute Contractor's representation of its agreement with this provision.

1.010 **MISCELLANEOUS REQUIREMENTS**

A. Owner-Furnished Materials.

1. Owner reserves right to furnish materials as it deems advisable, and Contractor shall have no claims for costs and Markup on such materials.

B. Records And Certification.

1. All charges shall be recorded daily and summarized in Cost Proposal form attached hereto. Contractor or authorized representative shall complete and sign form each day. Contractor shall also provide with the form: the names and classifications of workers and hours worked by each; an itemization of all materials used; and a list by size type and identification number of equipment and hours operated.
2. Owner shall have the right to audit all records in possession of Contractor relating to activities covered by Contractor's claims for modification of Contract, including CP Work. This right shall be specifically enforceable, and any failure of Contractor to voluntarily comply shall be deemed an irrevocable waiver and release of all claims then pending that were or could have been subject to Article 12 of Document 00 7200 (General Conditions).

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

COST PROPOSAL AND RFI FORMS INCLUDED ON FOLLOWING PAGES
(Electronic forms are available upon request)

COST PROPOSAL (CP)

Project Name _____
Project Number _____

CP Number: _____
Date: _____
In Response To _____
IB#, etc.

To: Rosamond Community Services District
Attention: **[**_____**]**
3179 35th Street West
Rosamond, California 93560
Phone: (661) 256-3411
Fax: (661) 256-2557

From: [*Insert Contractor's Name/Address*]
_____
_____

This Cost Proposal is in response to the above-referenced _____ **[*Insert RFP, etc. as applicable*]**.
Brief description of change(s): _____
_____

ITEM DESCRIPTION	PRIME CONTRACTOR	SUB 1	SUB 2	SUB 3	SUB 4	TOTAL
LABOR						
EQUIPMENT						
MATERIAL						
Other (Specify)						
TOTAL COST						
Subcontractor's Overhead & Profit 15 percent max.						
Contractor's Overhead & Profit 15 percent max.						
Overhead & Profit to Contractor for Subcontractor's Work						
(percent of Total Cost above not including any Overhead & Profit – may not exceed 20%)						
GRAND TOTAL						
REQUESTED CHANGE IN CONTRACT TIME (DAYS) (Time Impact Evaluation Enclosed)						

_____

By Contractor: Signature: Date:

REQUEST FOR INFORMATION (RFI)

PROJECT:	ADMIN BUILDING STANDBY GENERATOR REPLACEMENT	**RFI NO.:**
OWNER:	Rosamond Community Services District 3179 35th Street West Rosamond, CA 93560	**DATE:**
CONTRACTOR:		
PROJECT NO.:		

Send all RFI's to Owner's Representative

DRAWING REFERENCE:	**SPECIFICATION REFERENCE:**

BRIEF TITLE:

DESCRIPTION OF CLARIFICATION REQUIRED (attach sheets as necessary):

CONTRACTOR'S PROPOSED SOLUTION:

INITATOR:	**SIGNATURE:**
DATE RESPONSE REQUIRED:	

OWNER ACTIONS

RECEIVED ON: _____

FORWARDED TO: _____ ***DATE:*** _____

RESPONSE:

REFER TO INSTRUCTION BULLETIN NO. _____ ***ATTACHED.***

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SECTION 01 3000

ADMINISTRATIVE REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes description of requirements and procedures for submittals, project meetings and other project documentation requirements.

1.02 SUBMITTALS

A. Schedule of Submittals.

1. Contractor shall prepare a schedule of submittals (also referred to as a submittal register) required to complete the Work for Owner review and use. Schedule of submittals will include, for each submittal: the specification or drawing reference requiring the submittal, if applicable; the material, item, or process for which the submittal is required; the submittal number and identifying title of the submittal; and a preliminary submission schedule.

2. The technical specifications may list several individual items required to be submitted for Owner review. The Schedule of Submittals shall list each individual item required to be submitted so that all required submittals can be tracked by Contractor and Owner.

3. Preparation by Contractor of schedule of submittals does not excuse Contractor of obligation to supply, schedule and coordinate all submittals required by the Contract Documents.

4. Schedule of Submittals shall be provided in Microsoft Excel format or, if Contractor utilizes Project Management software platform, through said software platform. Contractor shall provide Owner access to the platform at no additional cost to the Owner.

B. Contractor to Submit Shop Drawings, Product Data and Submittals

1. Contractor shall review for compliance with Contract Documents, approve and submit to Owner Shop Drawings, Product Data, Samples and similar submittals required by Contract Documents. Contractor shall provide documents electronically, by providing an electronic copy in portable document format (pdf) for Owner for review, unless otherwise directed by Owner. Samples submitted for Owner's consideration shall be delivered to Owner in accordance with the individual Technical Specifications. Submittals and re-submittals shall be transmitted via electronic mail, unless otherwise directed by Owner.

2. Contractor's approval shall be indicated by a stamp or written statement on the cover sheet of the submittal with submittal identifying number clearly labeled: "This submittal is approved by <Contractor's Name> for conformance with the contract requirements for <project name>". Approval shall be signed and dated by Contractor's representative.

3. Contractor shall schedule and submit concurrently submittals covering component items forming a system or items that are interrelated. Contractor shall include certifications to be submitted with the pertinent drawings and product information at the same time.

4. Contractor shall coordinate scheduling, sequencing, preparing and processing of all submittals with performance of work so that work will not be delayed by submittal processing.

5. Submittals shall specifically identify any work depicted that does not conform to the Contract Documents with and explanation for the deviation on a separate sheet entitled "Submittal Exceptions to Contract Documents."

C. Owner Review of Shop Drawings, Product Data and Submittals

1. Schedule submittals at least 3 weeks before dates reviewed submittals will be needed. Except as may be provided in other specification sections, a submittal will be returned in no more than 21 calendar days, as each is accepted or not accepted. When a submittal cannot be returned within that period, Owner will, within a reasonable time after receipt of submittal, give notice of the date by which that submittal will be returned.

2. After review by Owner of each submittal, Owner will return an electronic scan in portable document format (pdf) of the reviewed submittal via electronic mail to Contractor with actions defined as follows:

    a. NO EXCEPTIONS TAKEN - Accepted subject to its compatibility with general design concept of the Work, future Submittals and additional partial Submittals for any portions of the Work not covered in this Submittal. Does not constitute acceptance or deletion of specified or required items not shown on the Submittal.

    b. MAKE CORRECTIONS NOTED (NO RESUBMISSIONS REQUIRED) - Same as item (a) above, except that minor corrections as noted shall be made by Contractor.

    c. REVISE AS NOTED AND RESUBMIT - Rejected because of major inconsistencies or errors that shall be resolved or corrected by Contractor prior to subsequent review by Owner.

    d. REJECTED - RESUBMIT - Submitted material does not conform to drawings and/or specifications in major respect, i.e.: wrong size, model, capacity, or material.

    Contractor shall print out and distribute reviewed submittals at his discretion. Contractor shall also provide a hard copy of submittals designated “NO EXCEPTIONS TAKEN” and “MAKE CORRECTIONS NOTED” to Owner or Owner’s representative at the project site for reference. An electronic copy of the reviewed submittal may be provided to Owner or Owner’s representative in lieu of a hard copy if it can be demonstrated that retrieval can be facilitated at the job site.

3. Favorable review will not constitute acceptance by Owner of any responsibility for the accuracy, coordination, or completeness of the Submittals. Accuracy, coordination, and completeness of Submittals shall be sole responsibility of Contractor, including responsibility to back-check comments, corrections, and modifications from Owner’s review before fabrication. Contractor, subcontractors, or suppliers may prepare submittals, but Contractor shall ascertain that submittals meet requirements of Contract Documents, while conforming to structural space and access conditions at point of installation. Owner’s review will be only to assess if the items covered by the Submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed project as indicated by the Contract Documents. Favorable review of Submittal, method of work, or information regarding materials and equipment Contractor proposes to furnish shall not relieve Contractor of responsibility for errors therein and shall not be regarded as assumption of risks or liability by Owner, or any officer or employee thereof, and Contractor shall have no claim under Contract Documents on account of failure or partial failure or inefficiency or insufficiency of any plan or method of work or material and equipment so accepted. Favorable review shall be considered to mean merely that Owner has no objection to Contractor using, upon Contractor’s own full responsibility, plan or method of work proposed, or furnishing materials and equipment proposed.

4. Unless otherwise specified, Owner’s review will not extend to the means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

5. Contractor shall perform no portion of the Work for which the Contract Documents require Submittal and review of Shop Drawings, Product Data, Samples or similar submittals until

the respective submittal has been favorably reviewed by the Owner; otherwise, any such work is at Contractor's sole risk."

1.03 PROJECT MEETINGS

A. Preconstruction Conference. Owner will call for and administer Preconstruction Conference at time and place to be announced (usually the week prior to start of Work at the Site). Contractor shall attend Preconstruction Conference and shall invite Subcontractor's at Contractors discretion. Agenda may include, but not be limited to, the following items:

1. Schedules
2. Personnel and vehicle permit procedures
3. Use of premises
4. Location of the Contractor's on-Site facilities
5. Security
6. Housekeeping
7. Submittal and RFI procedures
8. Inspection and testing procedures, on-Site and off-Site
9. Utility shutdown procedures
10. Control and reference point survey procedures
11. Injury and Illness Prevention Program
12. Contractor's Initial Progress Schedule
13. Contractor's Schedule of Values
14. Contractor's Schedule of Submittals
15. Jurisdictional agency requirements
16. Owner will distribute copies of minutes to attendees. Attendees shall have 7 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Preconstruction Conference.

B. Periodic Project Meetings. Contractor shall coordinate and administer biweekly progress meetings throughout duration of Work unless otherwise directed by Owner. Meetings shall be held at the project site, unless otherwise specified in Contract Documents.

1. Contractor shall prepare agenda and distribute it 4 Calendar Days in advance of meeting to Owner and anticipated meeting participants.
2. Participants with agenda items shall present them.
3. The Architect/Engineer and other responsible entities shall attend meetings unless otherwise specified in Contract Documents or provided by Owner.
4. Contractor shall record and distribute the meeting minutes. Minutes shall be distributed by the Contractor to the Owner and attendees within 3 Working Days after the meeting. Contractor shall distribute the minutes to those affected by decisions made at meeting. Attendees shall have five (5) Working Days to submit comments or additions to the minutes. .
5. Progress meetings shall be attended by Contractor's personnel, Owner, and others as appropriate to agenda topics for each meeting.
6. Agenda may contain, but not be limited to the following items, as appropriate:
    a. Review, revise as necessary, and approve previous meeting minutes
    b. Review of Work progress since last meeting
    c. Status of Progress Schedule, delivery schedules, adjustments
    d. Submittal, RFI, Instruction Bulletin and Change Order status
    e. Review of the Contractor's safety program activities and results, including report on all serious injury and/or damage accidents
    f. Other items affecting progress of Work

C. Progress Schedule And Billing Meetings

1. A meeting will be held on approximately the 20th of each month to review the schedule

update submittal and progress payment application.

2. At this meeting, at a minimum, the following items will be reviewed:

   a. Percent complete or quantity installed of each activity;
   b. Time impact evaluations for Change Orders and Time Extension Request;
   c. Actual and anticipated activity sequence changes;
   d. Actual and anticipated duration changes; and
   e. Actual and anticipated Contractor delays.

3. These meetings are considered a critical component of overall monthly schedule update submittal and Contractor shall have appropriate personnel attend. At a minimum, Contractor's General Superintendent and Scheduler shall attend these meetings.

D. Pre-Installation Conferences

1. When required by a Technical Specification Section, schedule an on-site meeting prior to the actual installation. Attending shall be the Contractor, Installers and others whose Work may be affected by the installation. The Owner will schedule attendees as appropriate.

2. Notify Owner at least four (4) Working Days in advance of meeting date.

3. Contractor shall prepare the agenda and conduct the meeting to cover the following topics:
   a. Review in detail manufacturer's requirements, Specifications, Drawings, installation details, relationships with other components, and other related Work. Anticipated or discovered conflicts, incompatibilities, and inadequacies shall be reviewed and resolved at the meeting.
   b. Review in detail job conditions, environmental requirements, schedule, construction sequence, coordination with other Work, requirements for installation and quality of completed Work, and protection of adjacent Work and property.
   c. Review in detail the means of protecting the completed Work during the remainder of the construction period.

4. The Contractor shall take meeting notes and distribute them within two (2) Working Days after the pre-installation conference to participants, with three (3) copies to the Owner, conference attendees and those affected by decisions made. Attendees taking exception to anything in the meeting notes shall state it in writing to Contractor within five (5) Working Days following receipt of meeting notes.

1.04 PROGRESS REPORTS

A. Daily Log

Contractor shall document the daily construction activities in a daily log. The log shall include, but not be limited to, the following items:

1. Date
2. Observed Weather Conditions (sunrise time, rain/sunny/cloudy, wind speed, temperature, humidity)
3. Scheduled Work (tie to schedule)
4. Daily Construction Report
5. Manpower – Contractor forces and subcontractor forces identified by company name
6. Equipment
7. Deliveries
8. Visitors
9. Productivity including quantities completed
10. Inspections and Testing
11. Accidents and Safety Violations
12. Delays
13. Notes
14. Photographs

B. Monthly Report

Contractor shall combine daily logs in a monthly report summarizing construction progress and submit with monthly progress payment application.

1.05 CONSTRUCTION PHOTOGRAPHS

A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.

1. Maintain key plan with each set of construction photographs that identifies each photographic location.

B. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.

1. Date and Time: Include date and time in file name for each image.
2. Maintain one set of images accessible at Project site, available at all times for reference. Identify images in the same manner as those submitted to Owner's Representative.

C. Preconstruction Photographs: Before starting construction, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Owner's Representative

1. Flag construction limits before taking construction photographs.
2. Take 20 photographs to show existing conditions adjacent to property before starting the Work.
3. Take 20 photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of construction.
4. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.

D. Periodic Construction Photographs: Take photographs daily, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.

E. Directed Construction Photographs: From time to time, Owner's Representative will instruct Contractor about number and frequency of photographs and general directions on vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.

F. Time-Lapse Sequence Construction Photographs: Take photographs as indicated, to show status of construction and progress since last photographs were taken.

1. Frequency: Take photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment.
2. Vantage Points: Following suggestions by Owner's Representative, Contractor to select vantage points. During each of the following construction phases, take not less than two of the required shots from same vantage point each time to create a time-lapse sequence.

G. Final Completion Construction Photographs: Take photographs after date of Substantial Completion for submission as project record documents. Owner's Representative will inform Contractor of desired vantage points.

1. Do not include date stamp.

H. Additional Photographs: Owner’s Representative may request photographs in addition to periodic photographs specified.

1. Three days' notice will be given, where feasible.
2. In emergency situations, take additional photographs within 24 hours of request.
3. Circumstances that could require additional photographs include, but are not limited to, the following:

    a. Special events planned at Project site.
    b. Immediate follow-up when on-site events result in construction damage or losses.
    c. Substantial Completion of a major phase or component of the Work.
    d. Extra record photographs at time of final acceptance.
    e. Owner's request for special publicity photographs.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

SECTION 01 3216

CONSTRUCTION AND PROGRESS SCHEDULES

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes description of requirements and procedures for submitting Critical Path Method ("**CPM**") progress schedules.

B. Contractor shall follow the requirements of Section 8 of the Standard Specifications.

1.02 CONTRACTOR TO SUBMIT PROGRESS SCHEDULES

A. Contractor shall submit proposed Baseline Progress Schedule within 14 days after execution of the Agreement. Within 28 days after execution of the Agreement Contractor shall submit Baseline Progress Scheduling addressing Owner provided comments.

B. Baseline Progress Schedule shall show Contractor's construction and procurement activities, including but not limited to, equipment procurement and delivery (Contractor and Owner supplied), activities with Subcontractors and suppliers, major submittal reviews, commissioning of systems, use of major equipment on site, and necessary interface with Owner and third parties required to complete the Work in a timely manner and in accordance with Contract Time.

1.03 SCHEDULE REQUIREMENTS.

A. Unless Owner agrees in writing otherwise, progress schedule shall be produced with Microsoft Project or Primavera P6, as Owner may specify, which Contractor shall prepare and supply to Owner, with all datapoint entries completed for start dates, necessary work activities, durations (not longer than 21 calendar days), and logic ties. There shall be no activities without predecessors, successors, and logic ties other than start of construction and completion.

B. Contractor's progress schedule shall be in the form of a CPM Gantt diagram or, if Owner, in its sole discretion, agrees in writing, an arrow diagram. The hard copies of the schedule supplied to Owner shall indicate the critical path of the Work in red and shall show a logical progression of the Work through completion within Contract Time.

C. Unless Owner agrees in writing otherwise, progress schedule shall also show early and late start and finish dates and total available float (float to the successor activity's late start date) for each activity. The contract completion date shall be shown as the final completion date on the Contractor's CPM schedule. Owner has no obligation to accept an early completion schedule.

1.04 MONTHLY UPDATES

A. Contractor's progress schedule shall be updated monthly to reflect actual progress. The schedule shall be subject to Owner's review and acceptance for use in monitoring Contractor's Work and evaluating Applications for Payment.

B. Contractor shall supply Owner with an electronic copy of the updated progress schedule with each monthly payment application. Contractor shall provide Owner with two-week lookahead schedules weekly, showing in detail any activities and resources scheduled for the immediate two-week period.

1.05 RECOVERY SCHEDULE

A. Owner may request a recovery schedule if Contractor falls 21 or more Days behind any schedule Milestone. The recovery schedule shall show Contractor's plan and resources committed to retain Contract completion dates.

B. The recovery schedule shall show the intended critical path. If Owner requests, Contractor shall also:

1. Secure and demonstrate appropriate Subcontractor and supplier consent to the recovery schedule.

C. Submit a narrative explaining trade flow and construction flow changes and man-hour loading assumptions for major Work activities and/or Subcontractors. All costs associated with development and implementation of the recovery schedule, including inspection outside of normal working hours, shall be at the Contractor's expense.

1.06 TIME IMPACT EVALUATION ("TIE") FOR CHANGE ORDERS, TIME EXTENSIONS AND DELAYS:

A. When Contractor requests a time extension for any reason, Contractor shall submit a TIE that includes both a written narrative and a schedule diagram depicting how the changed Work or other impact affects other schedule activities. The schedule diagram shall show how Contractor proposes to incorporate the changed Work or other impact in the schedule and how it impacts the current Schedule update critical path or otherwise. Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram shall be tied to the main sequence of scheduled activities to enable Owner to evaluate the impact of changed Work to the scheduled critical path.

B. Contractor is responsible for all costs associated with the preparation of TIEs, and the process of incorporating TIEs into the current schedule update. Contractor shall provide Owner with four copies of each TIE.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

SECTION 01 4000

QUALITY REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. This Section describes Testing and Inspecting to be provided by the Contractor, plus cooperation required from the Contractor with the Owner's selected testing agency and others responsible for testing and inspecting the Work.

1.02 SECTION INCLUDES

A. Related documents.

B. Quality Assurance.

C. Related Work.

D. References.

E. Samples.

F. Mock-up.

G. Selection of testing laboratory.

H. Contractor's convenience testing.

I. Code compliance testing.

J. Manufacturers' field services and reports.

K. Submittals.

L. Air Balance Contractor.

M. Tests and Inspections.

1.03 RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to Work of this Section.

1.04 QUALITY ASSURANCE – CONTROL OF INSTALLATION

A. Contractor shall be present at the Project Site at all times during the execution of the Work.

B. Contractor shall monitor the quality of Work performed by his own forces and subcontractors and shall monitor suppliers, manufacturers, products, services, and site conditions to produce Work of specified quality in accordance with the requirements of the Contract Documents.

C. Work shall be performed by qualified, skilled, and experienced workers.

D. Contractor shall be responsible for the coordination of the Work for all trades and subcontractors under this Contract.

E. Inspection: Inspect each items of materials or equipment immediately prior to installation. Reject damaged and defective items.

F. Dimensions: Recheck measurements and dimensions of the Work, as an integral step of starting each installation.

G. Manufacturers' Instructions: Unless specified otherwise, comply fully with Manufacturers' printed instructions, following each requirement and step in proper sequence. Do not omit any preparatory steps or installation procedures unless specifically modified or exempted in writing. Should manufacturer's instructions conflict with Contract Documents, request written interpretation of requirements from the Architect/Engineer before proceeding.

H. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

I. Secure products in place with position anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.05 RELATED WORK

A. Requirements for testing may be described in various Sections of these Specifications.

B. Where no testing requirements are described, but the Owner decides that testing is required, the Owner may require such testing to be performed under current pertinent standards for testing. Payment for such testing will be made as described in this Section.

1.06 REFERENCES

A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the Reference Standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to the latest edition of Reference Standards as specified in the individual Specification Sections, except where a specific date is established by codes.

C. Obtain copies of Reference Standards where required by product Specification Sections.

D. No Contractual relationship, duty, or responsibility of the parties in Contract, nor those of the Architect/Engineer, shall be altered from the Contract Documents by mention or inference otherwise in any reference documents.

1.07 SAMPLES

A. Take field Samples at the site as required by individual Specifications Sections for review.

B. Acceptable Samples represent a quality level for the Work.

C. Where field Samples are specified in individual Sections to be removed, clear area after field Sample has been accepted by Architect/Engineer.

D. Report samples taken but not tested and special sampling operations as required.

1.08 MOCK-UP

A. Schedule construction and review of the Mock-ups so as not to delay the progress of the Work.

B. Materials and finish shall be as specified in appropriate Sections and Divisions.

C. Test will be performed under provisions identified in this Section and identified in the respective product Specification Section.

D. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

E. Accepted Mock-ups are representative of the quality required for the Work.

F. Where Mock-up has been accepted by the Architect/Engineer and is specified in product Specification Sections to be removed; remove mock-up and clear area when directed to do so.

G. Protect and maintain Mock-ups in clean, undamaged condition until such time as it is incorporated in the Work or removed from the Site.

1.09 SELECTION OF TESTING LABORATORY

A. Owner will appoint, employ and pay for specified initial services of an independent firm to perform inspecting and testing on earthwork, concrete, steel, welding, grout, anchors, bolts and any other items as deemed necessary.

B. The independent firm will perform inspections, tests and other services specified in individual Specification Sections and as required by Architect/Engineer or the Owner.

C. Inspecting, testing, and source quality control may occur on or off the project site. Provide access for off-site inspecting or testing as required by the specifications. Any off-site testing requested to be performed outside normal business hours, Saturday, Sunday or Contract Holidays (unless specified) will cause the Contractor to pay all overtime inspection and testing costs, as determined by the Owner.

D. Reports will be submitted by the independent firm to the Architect/Engineer and Contractor, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.

E. Cooperate with independent firm; furnish samples of materials, concrete design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.

1. Notify Architect/Engineer and independent firm 48 hours prior to expected time for operations.
2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor’s use.
3. Provide access to the Work at all times and at all locations where the Work is in progress.
4. Provide facilities for access to enable the laboratory to perform its functions properly.

F. Testing or inspecting does not relieve the Contractor of the responsibility to perform the Work to Contract requirements.

G. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the Architect/Engineer. Payment for retesting will be charged to Contractor by deducting inspecting or testing charges from the Contract Sum/Price.

H. Unnecessary tests and inspections costs due to Contractor's poor scheduling will be deducted by the Owner from the Contract Sum.

I. The Owner and Architect/Engineer reserve the right to demand for tests, or special examination, any material, item or workmanship or part thereof to assure compliance with specifications and my reject for satisfactory replacement any material, Work or part judged defective or nonconforming as a result thereof. If such tests or examinations indicate the Work does not comply, then the cost of these tests and examinations shall be paid by the Contractor.

J. Limitations of authority of testing laboratory; Laboratory is not authorized to:

1. Release, revoke, alter or enlarge on requirements of Contract Documents.
2. Approve or accept any portion of Work.
3. Perform any duties of Contractor.

1.10 CONTRACTOR'S CONVENIENCE TESTING

A. Inspecting and testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor, including payment of convenience testing.

1.11 CODE COMPLIANCE TESTING

A. Inspections and tests required by codes or ordinances and which are made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.

1.12 MANUFACTURERS' FIELD SERVICES AND REPORTS

A. When specified in individual Specification Sections, require material or product suppliers of manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up equipment, test, and adjust and balance of equipment as applicable, and to initiate instructions when necessary.

B. Submit qualifications of Observer to the Architect/Engineer 15 days in advance of required observation. Observer is subject to approval of the Architect/Engineer.

C. Report observations and site decisions or instructions given to applications or installers that are supplemental or contrary to manufacturers written instructions.

D. Submit report in duplicate within 30 days of observation to the Architect/Engineer for information.

1.13 SUBMITTALS

A. The independent testing agency will furnish copies of licensed Civil Engineer signed test reports to Architect/Engineer, Contractor and Owner's Representative, indicating sampling and testing in accordance with Title 24 and stipulating whether results comply or do not comply with Contract Documents, noting actual results compared to specified design strength.

B. Test Report Content:

1. Date of issue.
2. Project title and number.
3. Name, address and telephone number of testing agency.
4. Dates and locations of samples and tests or inspections.
5. Names of individuals making the inspection or test.
6. Designation of the Work and test method.

7. Identification of product and Specification Section.
8. Complete inspection or test data.
9. Test results and interpretations of test results.
10. Ambient conditions at the time of sample taking and testing
11. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements and the requirements CCR.T24.
12. Name and signature of laboratory Inspector
13. Recommendations on testing.

1.14 AIR BALANCE CONTRACTOR

A. If required by the project, an air balance-testing agency acceptable to the Architect/Engineer on this project shall be hired by the Contractor to conduct air balance testing on the complete Work of the Contractor. Provide information to Architect/Engineer for his review concerning air balance testing agency credentials.

B. HVAC Subcontractor on this project shall not perform or select that Air Balancing testing Contractor or be associated financially with Air Balance Contractor.

1.15 TEST AND INSPECTIONS

A. Provide all tests and inspections required by government agencies having jurisdiction, required by provisions of the Contract Documents, and such other tests and inspections as are directed by the Architect/Engineer.

B. Reports: Shall be executed immediately upon conclusion of each procedure and forwarded to Architect/Engineer, Owner, Contractor, Sub-Contractor, and Governing Agency

PART 2 – PRODUCTS

(Not applicable)

PART 3 – EXECUTION

3.01 INSPECTION

A. The Work of construction in all stages of progress shall be subject to the personal observation of the Owner's Representative. The Owner's Representative shall have free access to any or all parts of the Work at any time. The Contractor shall furnish the Owner's Representative reasonable facilities for obtaining such information as may be necessary to keep the Owner's Representative fully informed respecting the progress and manner of the Work and the character of the material. Owner's Representative observation of the Work shall not relieve the Contractor from any obligations to fulfill this Contract.

3.02 TESTING

A. Cooperation with Testing Laboratory: Representatives of the Testing Laboratory shall have access to the Work at all times. Provide facilities for such access in order that the laboratory may properly perform its functions.

B. Schedules for Testing:

1. Establishing schedule:

a. By advance discussion with Testing Laboratory selected by Owner, determine the time required for the laboratory to perform its tests and to issue each of its findings.

b. Provide all required time within the Construction schedule.

2. Revising Schedule: When changes of construction schedule are necessary during construction, coordinate all changes of schedule with Testing Laboratory as required.
3. Adherence to Schedule: When the Testing Laboratory is ready to test according to the incompleteness of the Work, all extra costs for testing attributable to the delay will be deducted by Owner from the Contract Sum.

C. Taking Specimens: All specimens and samples for testing, unless otherwise provided in these Contract Documents, will be taken by the Testing Laboratory or the Owner.

D. Testing at the Source of Supply:

1. Contractor shall notify the Owner a sufficient time in advance of the manufacture of material to be supplied by the Contractor under the Contract Documents, which by terms of Contract must be tested, so Owner may arrange for testing material at source of supply.
2. Any material shipped by Contractor from the source of supply prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said representative that such testing and inspection will not be required shall not be incorporated in the job.

3.03 SOIL INSPECTING AND TESTING

A. The testing laboratory will perform required inspections and tests including, but not necessarily limited to:

1. Visually inspect on-site and imported fill and backfill, making such tests and retests as necessary to determine compliance Contract requirement compliance and suitability.
2. Make field density tests on samples from in-place material as required.
3. Inspect and test the scarifying and recompacting of cleaned subgrade; inspect the progress of excavating, filling, and grading; make density tests and backfills; and verify compliance with provisions of the Contract Documents and governmental agencies having jurisdiction.

B. Make and distribute necessary reports and certificates.

3.04 CONCRETE INSPECTING AND TESTING

A. Portland cement (Provided by concrete supplier):

1. Provide cement manufacturer Certificates of Compliance and deliver to testing lab
2. The Certificates of Compliance shall positively identify cement as to production lot, bin or silo number, dating and routing of shipment, and compliance with specified standards.
3. If so required by the Architect/Engineer, promptly provide such other specific physical and chemical data as requested.

B. Aggregate (Provided by concrete supplier):

1. Provide one test unless character of material changes, material is substituted, or additional test is requested by the Architect/Engineer.
2. Sample from conveyor belts and batching gates at the ready-mix plant:

a. Sieve analysis to determine compliance with specified standards and grading;
b. Specific gravity test for compliance with specified standards.

C. Laboratory design mix (Provided by concrete supplier):

1. After approval of aggregate, and whenever character or source of materials is changed, provide mix design in accordance with ACI 613.
2. Provide designs for all mixes prepared by a licensed Civil Engineer.

D. Molded concrete cylinders (Performed by Testing Lab):

1. Provide 3 test cylinders for each 50 cu. yds, or fraction thereof, of each class of concrete of each day's placement.
2. Test 1 cylinder at 7 days, 1 at 28 days, and 1 when so directed.
3. Report the mix, slump, gage, location of concrete in the structure, and test results.
4. Take specimens and make tests in accordance with the applicable ASTM Standard Specifications.

E. Core Tests (Performed by Testing Lab):

1. Provide only when specifically so directed by the Architect/Engineer because of low cylinder test results, per Section 2-2604, (d), Title 24.
2. Cut from locations directed by the Architect/Engineer, securing in accordance with ASTM C42, and prepare and test in accordance with ASTM C39.

F. Placement Inspections (Performed by Testing Lab):

1. On concrete over 2000 psi, provide continuous or other inspection as required by governmental agencies having jurisdiction.
2. Throughout progress of concrete placements, make slump tests to verify conformance with specified slump.
3. Using all required personnel and equipment, throughout progress of concrete placement Contractor shall verify that finished concrete surfaces will have the level of slope that is required by the Contract Documents.

3.05 CONCRETE REINFORCEMENT INSPECTING AND TESTING

A. Prior to use, test all reinforcement steel bars for compliance with Specific Standards (provided by steel supplier).

1. Material identified by mill test report, and certified by the testing laboratory, does not require additional testing. Require the supplier to furnish mill test reports to the testing laboratory for certification.
2. Tag identified steel at the supplier's shop. When steel arrives at the job site without such tags, test it as unidentified steel.

B. Unidentified Steel (performed by testing lab):

1. Testing laboratory shall select two samples, each 18 in. long of each size.
2. Testing laboratory shall make one tensile test and one bend test for each 2-1/2 tons or fraction thereof of each size of unidentified steel.

C. Provide continuous inspection for all welding of reinforcement steel.

3.06 STRUCTURAL STEEL INSPECTING AND TESTING

A. Prior to use, test all structural steel for compliance with the specified standards (performed by steel supplier).

1. Material identified by mill test reports, and certified by the testing laboratory, does not require additional testing. Require the supplier to furnish mill test reports to the laboratory for certification.
2. Tag identified steel at the suppliers shop. When steel arrives at the job site without such tags, Owner may require that it is tested as unidentified steel by the testing lab.

B. Unidentified steel:

1. The testing laboratory shall make one tensile test and one bend test for each 5 tons of fraction thereof of each shape and size of unidentified structural steel.

C. Shop Welding (inspection provided by testing lab):

1. Provide qualified testing laboratory inspector approved by Owner.
2. On single pass welds, inspect after completion of welding and prior to painting.
3. On multiple pass welds, and on butt welds with cover pass on the back side, provide continuous inspection.

D. Field Welding (inspection provided by testing lab): Provide continuous inspection by a qualified testing laboratory inspector approved by Owner.

3.07 POWDER DRIVEN CONCRETE FASTENERS

A. Use of Powder Driven Concrete Fasteners for tension loads is limited is limited to support of minor loads like acoustical ceilings, duct work, conduit.

B. Allowable loads:

1. In general, loads should be limited to less than 100 pounds. Greater loads may be permitted for special cases when approved by the checking supervisor or field engineer.

C. Testing:

1. The operator, tool, and fastener shall be pre-qualified by the Owner's Representative, who shall observe the testing of the first 10 fastener installations. A test "pull-out" load of not less than twice the design load, or 200 pounds, whichever is greater, shall be applied to the pin in such a manner as not to resist the spalling tendency of the concrete surrounding the pin. Thereafter, random test under the Owner's Representative supervision shall be made of approximately 1 in 10 pins, except that when the design load exceeds 100 pounds, one half of the pins shall be tested. Should failure occur on any pin tested, all installations must be tested and any pins failing shall be replaced and retested.

3.08 REJECTED WORK

A. The Owner and its representatives shall at all times have access for the purpose of inspection to all parts of the Work and the shops wherein the Work is in preparation.

B. The Owner and its representatives shall have the right to reject materials and workmanship which are defective or to require their correction.

C. The Owner and its representatives, at any time prior to final acceptance of the entire Work, may make an examination of completed Work by requesting the Contractor to furnish all necessary facilities, labor and materials to remove or tear out completed Work.

D. Work found meeting the requirements of the Contract after removal or tearing out, shall result in additional costs for labor and material being paid by the Owner.

E. Rejected workmanship shall be removed for the project, without charge to the Owner, for examination, reconstruction, and removal.

E. Rejected workmanship not corrected by the Contractor within a reasonable time, fixed by written notice, may be corrected by Owner and expense will be deducted by the Owner from the Contract Sum.

3.09 REPAIR AND PROTECTION

A. Comply with requirements of Section 01705 Cutting and Patching.

B. Upon completion of inspection, testing, sample-taking and similar services repair damaged construction and restore substrates and finishes to eliminate deficiencies.

C. Protect repaired construction and Work exposed by or for quality control service activities.

D. Repair and protection is the Contractors responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

F. Work performed by the Contractor which is not in accordance with the Contract Documents and which requires remedial action or changing of the final locations of parts of the Work shall require the following action steps:

1. Contractor confirms finding of Owner within seven days after receipt of Owner's notice.
2. Contractor hires an independent Consultant to review the construction problem and propose an alternated solution within 14 days after step number 1.
3. Contractor agrees to compensate the Owner for any expense the Owner incurs to evaluate the proposed solution.
4. Contractor makes the correction or accepts a negotiated reduction in the Contract sum upon Owner's approval of non-conforming Work.

3.10 UNCOVERING AND CORRECTION OF WORK

A. If a portion of the Work is covered contrary to the Architect/Engineer's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Architect/ Engineer, be uncovered for the Architect/Engineer's observation and be replaced at the Contractor's expense without change in the Contract sum or time.

B. Contractor shall promptly correct Work rejected by the Architect/Engineer and bear costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect/Engineer's services and expenses made necessary due to the correction.

END OF SECTION

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SECTION 01 4100

REGULATORY REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. **Section includes:**

1. Regulatory requirements applicable to Contract Documents
2. Required provisions under Local Agency Disputes Act
3. Required references under federal law

1.02 GENERAL

A. **Compliance with Laws**

1. Conform to all applicable codes, Laws, ordinances, rules, and regulations, which shall have full force and effect as though printed in full in these Specifications. Codes, laws, , rules, regulations, and ordinances ("**Regulatory Requirements**") are not furnished to Contractor, because Contractor is assumed to be familiar with these requirements.
2. Any listing of Regulatory Requirements for Work in the Contract Documents is supplied to Contractor as a courtesy and shall not limit Contractor's responsibility for complying with all applicable Regulatory Requirements having application to the Work. Where conflict among the Regulatory Requirements or with these Specifications occurs, the most stringent requirements shall be used.
3. Specific reference in the Specifications to applicable Laws and Regulatory Requirements shall mean the latest adopted edition by the regulatory agency in effect at the time of the opening of Bids, except as may be otherwise specifically stated in the Contract Documents.

B. **Precedence**

1. Where specified requirements differ from Regulatory Requirements, the more stringent requirements shall take precedence. Where Drawings or Specifications require or describe products or execution of better quality, higher standard, or greater size than required by Regulatory Requirements, then Drawings and Specifications shall take precedence so long as such increase is in compliance with Laws and Regulatory Requirements. Where no requirements are identified on Drawings or in Specifications, Contractor shall comply with all Regulatory Requirements of governing authorities having jurisdiction.
2. Should any conditions develop not covered by the Contract Documents wherein the finished Work will not comply with current codes, a Change Order detailing and specifying the required Work shall be submitted to and approved by Owner before proceeding with the Work.

1.03 REGULATORY REQUIREMENTS

A. **Applicable Codes**

1. Codes that apply to Contract Documents include all current Codes adopted by the Rosamond Community Services District and the County of Kern Building Inspection Department or authority having jurisdiction, applicable to construction, including, but not limited to, the following:

    a. California Building Code (as amended by applicable local ordinances for all construction work.

b. California Green Building Standards Code as amended by applicable local ordinances for all construction work.

c. California Electrical Code as amended by applicable local ordinances for all construction work.

d. California Plumbing Code as amended by applicable local ordinances for plumbing, sewage disposal, and health requirements.

e. California Mechanical Code as amended by applicable local ordinances for all construction work.

f. International Fire Code as amended by applicable local ordinances for all construction work.

g. California Administrative Code Titles 15, 19 and 24 (with California amendments), and Americans with Disabilities Act (ADA) accessibility guidelines, whichever is more stringent.

h. All State laws and City and County Ordinances, rules of the State or City or County Health Departments, rules of the National Board of Fire Underwriters and National Fire Protection Associations, and local utility company regulations for mechanical and electrical work.

B. **Applicable Laws, Statutes, Ordinances, Rules, And Regulations**

1. During prosecution of Work to be done under Contract Documents, Contractor shall comply with applicable codes, laws, orders, ordinances, rules, and regulations, including, but not limited to, the following:

a. Federal:

1) Americans With Disabilities Act of 1990
2) 29 CFR, Section 1910.1001, Asbestos
3) 40 CFR, Subpart M, National Emission Standards for Asbestos
4) Executive Order 11246
5) Federal Endangered Species Act
6) Clean Water Act

b. State of California:

1) California Code of Regulations, Titles 5, 8, 17, 19, 21, 22, 24 and 25
2) California Public Contract Code
3) California Health and Safety Code
4) California Government Code
5) California Labor Code
6) California Civil Code
7) California Code of Civil Procedure
8) CPUC General Order 95, Rules for Overhead Electric Line Construction
9) CPUC General Order 128, Rules for Construction of Underground Electric Supply and Communications Systems
10) Cal/OSHA
11) OSHA: Hazard Communications Standards
12) California Endangered Species Act
13) Water Code
14) Fish and Game Code

c. State of California Agencies:

1) Regulatory Requirements of State and Consumer Services Agency
2) Regulatory Requirements of Office of the State Fire Marshall
3) Regulatory Requirements of Office of Statewide Health Planning and Development
4) Regulatory Requirements of Department of Fish and Game

5) Regulatory Requirements of all Air Quality Management Districts with jurisdiction

6) Regulatory Requirements of Department of Water Resources
7) Regulatory Requirements of all Regional Water Quality Control Boards with jurisdiction
8) Regulatory Requirements of the Division of the State Architect (if having jurisdiction)

d. Regulatory Requirements of all Local Agencies with jurisdiction (including, without limitation, cities, counties, and fire departments)

C. **Change Orders and Claims:**

1. The California Public Contract Code, including but not limited to Section 7105(d)(2), and the California Government Code section 930.2 et seq., apply to all contract procedures for changes, time extensions, change orders (time or compensation), and claims. Federal law (*U.S. v. Holpuch* 326 U.S. 234) shall supplement California law on the enforceability of these requirements.
2. Any change, waiver, or omission to implement contract change order and claim procedures shall have no legal effect unless expressly permitted in a fully executed change order approved by Contractor and Owner and approved as to form by their respective legal counsel.

D. **Required Provisions On Contract Claim Resolution**

1. The California Public Contract Code specifies required provisions on resolving contract claims less than $375,000, which are set forth below, and constitute a part of this Contract.
2. For the purposes of this Section 01 4100, **"Claim"** means a separate demand by Contractor of $375,000 or less for (1) a time extension, (2) payment or money or damages arising from Work done by or on behalf of Contractor arising under the Contract Documents and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (3) an amount the payment of which is disputed by Owner. In order to qualify as a Claim, the written demand must state that it is a Claim submitted under paragraph 12 of Document 00 7200 (General Conditions) and be submitted in compliance with all requirements of Document 00 7200 (General Conditions), paragraph 12. Separate Claims which total more than $375,000 do not qualify as a "separate demand of $375,000 or less," as referenced above, and are not subject to this Section 01 4100,.
3. A voucher, invoice, payment application, or other routine or authorized form of request for payment is not a Claim for purposes of this Section 01 4100. If such request is disputed as to liability or amount, then the disputed portion of the submission may be converted to a Claim under this Section 01 4100, by submitting a separate Claim in compliance with Contract Documents claim submission requirements.
4. Caution. This Section 01 4100, does not apply to tort claims and nothing in this Section 01 4100, is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 and Chapter 2 of Part 3 of Division 3.6 of Title 1 of the California Government Code.
5. Procedure:

a. The Claim must be in writing, submitted in compliance with all requirements of Document 00 7200 (General Conditions), paragraph 12, including, but not limited to, the time prescribed by and including the documents necessary to substantiate the Claim, pursuant to Document 00 7200 (General Conditions), paragraph 12.3. Claims must be filed on or before the day of final payment. Nothing in this Section 01 4100, is intended to extend the time limit or supersede notice requirements for the filing of claims as set forth in Document 00 7200 (General Conditions), paragraph 12 or elsewhere in the Contract Documents.

b. For Claims of $50,000 or less, Owner shall respond in writing within 45 days of receipt of the Claim, or Owner may request in writing within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims Owner may have against claimant. If additional information is thereafter required, it shall be requested and provided in accordance with this Section 01 4100, upon mutual agreement of Owner and claimant. Owner's written response to the Claim, as further documented, shall be submitted to claimant within 15 days after receipt of further documentation or within a period of time no greater than taken by claimant in producing the additional information, whichever is greater.

c. For Claims over $50,000 and less than or equal to $375,000: Owner shall respond in writing within 60 days of receipt of the Claim, or Owner may request in writing within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims Owner may have against claimant. If additional information is thereafter required, it shall be requested and provided in accordance with this Section 01 4100, upon mutual agreement of Owner and claimant; Owner's written response to the Claim, as further documented, shall be submitted to claimant within 30 days after receipt of further documentation or within a period of time no greater than taken by claimant in producing the additional information, whichever is greater.

d. Meet and Confer: If claimant disputes Owner's written response, or Owner fails to respond within the time prescribed above, claimant shall notify Owner, in writing, either within 15 days of receipt of Owner's response or within 15 days of Owner's failure to timely respond, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon demand Owner will schedule a meet and confer conference within 30 days for settlement of the dispute.

e. Following the meet and confer conference, if the Claim or any portion remains in dispute, claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the California Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time claimant submits its written claim as set forth herein, until the time that Claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

E. **Compliance With Americans With Disabilities Act**

1. Contractor acknowledges that, pursuant to the Americans with Disabilities Act ("**ADA**"), programs, services and other activities provided by a public entity to the public, whether directly or through a Contractor, must be accessible to the disabled public. Contractor shall provide the services specified in the Contract Documents in a manner that complies with the ADA and any and all other applicable federal, state, and local disability rights legislation. Contractor agrees not to discriminate against disabled persons in the provision of services, benefits, or activities provided under the Contract Documents and further agrees that any violation of this prohibition on the part of Contractor, its employees, agents, or assigns shall constitute a material breach of the Contract Documents.

F. **Compliance With IRCA**

1. Contractor acknowledges that Contractor, and all subcontractors hired by Contractor to perform services under this Agreement, are aware of and understand the immigration Reform and Control Act ("**IRCA**"). Contractor is and shall remain in compliance with the IRCA and shall ensure that any subcontractors hired by Contractor to perform services under this Agreement are in compliance with the IRCA. In addition, Contractor agrees to indemnify, defend, and hold harmless Owner, its agents, officers and employees, from any liability, damages, or causes of action arising out of or relating to any claims that Contractor's employees, or employees of any subcontractor hired by Contractor, are not authorized to work in the United States for Contractor or its subcontractor and/or any other claims based upon alleged IRCA violations committed by Contractor or Contractor's

subcontractors.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

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SECTION 01 4216

DEFINITIONS

PART 1 - GENERAL

1.01 SUMMARY

A. **Section Includes:**

1. Reference standards, abbreviations, symbols, and definitions used in Contract Documents.
2. Full titles are given in this Section for standards cited in other Sections of Specifications.

1.02 REFERENCE TO STANDARDS AND SPECIFICATIONS OF TECHNICAL SOCIETIES; REPORTING AND RESOLVING DISCREPANCIES

A. **References**

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual, code, or laws or regulations in effect at the time of opening of Bids, except as may be otherwise specifically stated in the Contract Documents.
2. If during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such law or regulation applicable to the performance of the Work or of any such standard, specification, manual, or code or of any instruction of any supplier, Contractor shall report it in writing at once to Owner's Representative and Architect/Engineer, and Contractor shall not proceed with the Work affected thereby until consent to do so is given by Owner.

B. **Precedence**

1. Except as otherwise specifically stated in the Contract Documents or as may be provided by Change Order or Instruction Bulletin, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
   a. The provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
   b. The provisions of any such laws or regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such law or regulation).
2. No provision of any standard, specification, manual, code, or instruction shall be effective to change the duties and responsibilities of Owner, Owner's Representative, Architect/Engineer or Contractor, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents, nor shall it be effective to assign to Owner, Architect/Engineer, or any of their consultants, agents, representatives, or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

C. **Referenced Grades, Classes, and Types:**

1. Where an alternative or optional grade, class, or type of product or execution is included in a reference but is not identified in Drawings or in Specifications, Contractor shall provide

the highest, best, and greatest of the alternatives or options for the intended use and prevailing conditions.

D. **Edition Date of References:**

1. When an edition or effective date of a reference is not given, it shall be understood to be the current edition or latest revision published as of the date of opening Bids.
2. All amendments, changes, errata and supplements as of the effective date shall be included.

E. **AWWA, ASTM and ANSI References:** Specifications and Standards of the American Water Works Association, American Society for Testing and Materials (ASTM) and the American National Standards Institute (ANSI) are identified in the Drawings and Specifications by abbreviation and number only and may not be further identified by title, date, revision, or amendment. It is presumed that Contractor is familiar with and has access to these nationally- and industry-recognized specifications and standards.

1.03 DEFINITIONS

A. **Meaning of Words and Phrases**

Wherever any of the words or phrases defined below, or a pronoun used in place thereof, is used in any part of the Contract Documents, it shall have the meaning here set forth. Where abbreviations and symbols are used, such abbreviations and symbols shall be given their common meaning in the construction industry. In the Contract Documents, the neuter gender includes the feminine and masculine, and the singular number includes the plural.

While Owner has made an effort to identify all defined terms with initial caps, the following definitions shall apply regardless of case unless the context otherwise requires:

1. Addenda: Written or graphic instruments issued prior to the opening of Bids, which clarify, correct, or change the bidding requirements or the Contract Documents. Addenda shall not include the minutes of the Pre-Bid Conference and/or Site Visit.
2. Agreement (Document 00 5200): Agreement is the basic Contract Document that binds the parties to construction Work. Agreement defines relationships and obligations between Owner and Contractor and by reference incorporates Conditions of Contract, Drawings, and Specifications and contains Addenda and all Modifications subsequent to execution of Contract Documents.
3. Alternate: Work added to or deducted from the base Bid, if accepted by Owner.
4. Application for Payment: Written application for monthly or periodic progress or final payment made by Contractor complying with the Contract Documents.
5. Approved Equal: Approved in writing by Owner as being of equivalent quality, utility and appearance.
6. Architect/Engineer: If used elsewhere in the Contract Documents, “Architect/Engineer” shall mean a person (or that person’s firm) holding a valid California State Architect’s or Engineer’s license representing the Owner in the administration of the Contract Documents. Architect/Engineer may be an employee of or an independent consultant to Owner. When Architect/Engineer is referred to within the Contract Documents and not an employee of Owner, Architect/Engineer shall be construed to include employees of Architect/Engineer and/or employees that Architect/Engineer supervises. When the designated Architect/Engineer is an employee of Owner, his or her authorized representatives on the Project will be included under the term Architect/Engineer. If Architect/Engineer is an employee of Owner, Architect/Engineer is the beneficiary of all Contractor obligations to Owner, including without limitation, all releases and indemnities. Architect/Engineer may also be referred to as Architect or Engineer.

7. Asbestos: Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by OSHA or Cal/OSHA.
8. Bid: The offer or proposal of the Bidder submitted on the prescribed form(s) setting forth the prices for the Work to be performed.
9. Bidder: One who submits a Bid.
10. Bidding Documents: All documents comprising the Project Manual (including all documents and Specification Sections listed in Document 00 0110 [Table of Contents]), including documents supplied for bidding purposes only and Contract Documents.
11. BIT – Component 3 of a Cost Proposal addressing Measurement and Payment of Bonds, Insurance and Taxes. See Document 01 2050 Modification Procedures.
12. BMP (Best Management Practices) – Related to implementation of a SWPPP, the measures and methods undertaken to implement a Stormwater Pollution and Prevention Plan on a project site.
13. Board: The governing body of the Owner.
14. Business or Working (Work) Day: Any Day other than Saturday, Sunday, and the following days that have been designated as holidays by Owner. If a holiday falls on a Saturday, the preceding Friday will be the holiday. If a holiday falls on a Sunday, the following Monday will be the holiday.

    a. New Year's Day, January 1;
    b. Martin Luther King Jr.'s Birthday, third Monday in January;
    c. Lincoln's Birthday, February 12;
    d. Presidents' Day, third Monday in February;
    e. Cesar Chavez Day, March 31;
    f. Memorial Day, last Monday in May;
    g. Independence Day, July 4;
    h. Labor Day, first Monday in September;
    i. Columbus Day, second Monday in October;
    j. Veterans' Day, November 11;
    k. Thanksgiving Day, as designated by the President;
    l. The Day following Thanksgiving Day;
    m. Christmas Day, December 25; and
    n. Each day appointed by the Governor of California and formally recognized by the Governing Board as a day of mourning, thanksgiving, or special observance.

15. By Others: Work that is outside scope of Work to be performed by Contractor under this Contract, which will be performed by Owner, other contractors, or other means.
16. By Owner: Work that will be performed by Owner or its agents at the Owner's expense.
17. Change Order ("**CO**"): A written instrument prepared by Owner and signed by Owner and Contractor, stating their agreement upon all of the following:

    a. a change in the Work;
    b. the amount of the adjustment in the Contract Sum, if any; and
    c. the amount of the adjustment in the Contract Time, if any.

18. Code: All Codes specified by law or applicable governing agency.
19. Code Inspector: A local or state agency responsible for the enforcement of applicable codes and regulations.
20. Concealed: Work not exposed to view in the finished Work, including within or behind various construction elements.
21. Contract Amount: a change order price, line item price, Contract Sum, or other price assigned to a scope of work.

22. Contract Conditions or Conditions of the Contract: Consists of two parts: General Conditions and Supplementary Conditions.
    a. General Conditions are general clauses that are common to the Owner Contracts, including Document 00 7200 (General Conditions).
    b. Supplementary Conditions modify or supplement General Conditions to meet specific requirements for Contract Documents.
23. Contract Documents and Contract: Contract Documents and Contract shall consist of the documents identified as the Contract Documents in Document 00 5200 (Agreement), plus all changes, Addenda, and modifications thereto.
24. Contract Modification: Either:
    a. a written amendment to Contract signed by Contractor and Owner; or
    b. a Change Order; or
    c. a written directive for a minor change in the Work issued by Owner.
25. Contract Sum: The sum stated in the Agreement and, including authorized adjustments, the total amount payable by Owner to Contractor for performance of the Work and the Contract Documents. The Contract Sum is also sometimes referred to as the Contract Price or the Contract Amount.
26. Contract Time: The number or numbers of Days or the dates stated in the Agreement to achieve Final Completion of the Work or designated Milestones; and/or to achieve Final Completion of the Work so that it is ready for final payment and is accepted.
27. Contractor: The person or entity identified as such in the Agreement and referred to throughout the Contract Documents as if singular in number and neutral in gender. The term “Contractor” means the Contractor or its authorized representative.
28. Contractor’s Employees: Persons engaged in execution of Work under Contract as direct employees of Contractor, as Subcontractors, or as employees of Subcontractors.
29. Cost Proposal: A cost estimate for an increase or decrease in Contract Sum relative to a Contract Modification. All cost proposals shall be submitted on the form included in Document 01 2050.
30. Day: One calendar day of 24 hours measured from midnight to the next midnight, unless the word “day” is specifically modified to the contrary.
31. Defective: An adjective which, when modifying the word “Work,” refers to Work that is unsatisfactory or unsuited for the use intended, faulty, or deficient, that does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents (including but not limited to approval of Samples and “or equal” items), or has been damaged prior to final payment (unless responsibility for the protection thereof has been assumed by Owner). Unapproved substitutions are defective. Owner is the judge of whether Work is Defective.
32. Division of State Architect: A division of the State of California providing, design and construction oversight for K–12 schools and community colleges, and developing and maintaining accessibility standards and codes utilized in public and private buildings throughout the State of California.
33. Drawings: The graphic and pictorial portions of Contract Documents, wherever located and whenever issued, showing the design, location, and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.
34. Equal: Equal in opinion of Owner. Burden of proof of equality is responsibility of Contractor.
35. Exposed: Work exposed to view in the finished Work, including behind louvers, grilles, registers and various other construction elements.
36. Final Acceptance or Final Completion: Owner’s acceptance of the Work as satisfactorily completed in accordance with Contract Documents. Requirements for Final Acceptance/Final Completion include, but are not limited to:

a. Final cleaning is completed.
b. All systems having been tested and accepted as having met requirements of Contract Documents.
c. All required instructions and training sessions having been given by Contractor.
d. All Project Record Documents having been submitted by Contractor, reviewed by Owner, and accepted by Owner.
e. All punch list Work, as directed by Owner, having been completed by Contractor.
f. Generally all Work, except Contractor maintenance after Final Acceptance/Final Completion, having been completed to satisfaction of Owner.

37. Force Account: Work directed to be performed without prior agreement as to lump sum or unit price cost thereof, and which is to be billed at cost for labor, materials, equipment, taxes, and other costs, plus a specified percentage for overhead and profit.
38. Furnish: Supply only, do not install.
39. Indicated: Shown or noted on the Drawings.
40. Install: Install or apply only, do not furnish.
41. Instruction Bulletin ("**IB**"): A document consisting of supplementary details, instructions, or information issued by Owner that clarifies or supplements Contract Documents, and with which Contractor shall comply. Instruction Bulletins may also order alterations or Modifications that do not result in change in Contract Sum or Contract Time, and do not substantially change Drawings or Specifications. Instruction Bulletins do not constitute changes in Contract Sum or Contract Time except as otherwise agreed in writing by Owner.
42. Latent: Not apparent by reasonable inspection, including but not limited to, the inspections and research required as a condition to bidding under Document 00 7200 (General Conditions).
43. Law: Unless otherwise limited, all applicable laws including without limitation all federal, state, and local laws, statutes, standards, rules, regulations, ordinances, and judicial and administrative decisions.
44. LEMS: Component 1 of a Cost Proposal addressing Measurement and Payment of Labor, Equipment, Material and Subcontractors. See Document 01 2050 Modification Procedures.
45. Material: This word shall be construed to embrace machinery, manufactured articles, materials of construction (fabricated or otherwise), and any other classes of material to be furnished in connection with Contract, except where a more limited meaning is indicated by context.
46. Milestone: A principal event specified in Contract Documents relating to an intermediate completion date or time prior to Final Completion of all Work.
47. Modification: Same as Contract Modification.
48. Not in Contract or "NIC": Work that is outside the scope of Work to be performed by Contractor under Contract Documents.
49. Notice of Completion: Shall have the meaning provided in California Civil Code §3093, and any successor statute.
50. Off Site: Outside geographical location of the Project.
51. Owner: Owner is defined in Document 00 5200 (Agreement).
52. Owner-Furnished, Contractor Installed: Items furnished by Owner at its cost for installation by Contractor at its cost under Contract Documents.
53. Owner's Representative(s): See Document 00 5200 (Agreement).
54. Partial Utilization: Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Final Completion of all of the Work.
55. PCBs: Polychlorinated biphenyls.

56. Phase: A specified portion of the Work (if any) specifically identified as a Phase in Document 00 5200 (Agreement) or Document 01 1000 (Summary).
57. Product Data: That information (brochures, catalog sheets, manufacturer's cut sheets, etc.) supplied by vendors having technical and commercial characteristics of the supplied equipment or materials and accompanying commercial terms such as warranties, instructions, and manuals.
58. Progress Report: A periodic report submitted by Contractor to Owner with progress payment invoices accompanying progress schedule. See Document 00 7200 (General Conditions).
59. Progress Schedule (schedule):
    a. Baseline Progress Schedule: The first progress schedule submittal from the Contractor and reviewed by Owner, with no exceptions taken.
    b. Progress Schedule: All subsequent schedule submissions after the Baseline Progress Schedule.
60. Project: Total construction of which Work performed under Contract Documents may be whole or part.
61. Project Manager: If used elsewhere in the Contract Documents, "Project Manager" shall mean a person representing the Owner in the administration of the Contract Documents. Project Manager may be an employee of or an independent consultant to Owner. When Project Manager is referred to within the Contract Documents and no Project Manager has in fact been designated, then the matter shall be referred to Owner. The term Project Manager shall be construed to include employees of Project Manager and/or employees that Project Manager supervises. When the designated Project Manager is an employee of Owner, his or her authorized representatives on the Project will be included under the term Project Manager. If Project Manager is an employee of Owner Project Manager is the beneficiary of all Contractor obligations to Owner, including without limitation, all releases and indemnities.
62. Project Manual: Project Manual consists of Bidding Requirements, Agreement, Bonds, Certificates, Contract Conditions, Drawings, and Specifications.
63. Project Record Documents: All Project deliverables required under the Contract Documents, including without limitation, as built drawings; Installation, Operation, and Maintenance Manuals; and Machine Inventory Sheets.
64. Provide: Furnish and install.
65. Request for Information ("**RFI**"): A document prepared by Contractor requesting information regarding the Project or Contract Documents. The RFI system is also a means for Owner to submit Contract Document clarifications or supplements to Contractor.
66. Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
67. Shop Drawings: All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
68. Shown: As indicated on Drawings.
69. Site: The particular geographical location of Work performed pursuant to the Contract Documents.
70. Specifications: The written portion of the Contract Documents consisting of requirements for materials, equipment, construction systems, standards, and workmanship for the Work; performance of related services.
71. Specified: As written in Specifications.

72. Standard Specifications: The most recent edition of the Standard Specifications of the State of California, Business and Transportation Agency, Department of Transportation, insofar as the same may apply and in accordance with the Specifications.
73. Subcontractor: A person or entity that has a direct contract with Contractor to perform a portion of the Work at the Site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and neutral in gender and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.
74. SWPPP (Storm Water Pollution and Prevention Plan) – Plan to mitigate storm water quality and discharges from the construction site.
75. Testing and special inspection agency: An independent entity engaged to inspect and/or test the workmanship, materials, or manner of construction of buildings or portions of buildings, to determine if such construction complies with the Contract Documents and applicable codes.
76. Time Impact Evaluation ("**TIE**"): An evaluation of the impact of an issue to the project schedule.
77. Underground Facilities: All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities that have been installed underground to furnish any of the following services or materials: Electricity, gases, chemicals, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems, or water.
78. Unit Price Work: Shall be the portions of the Work for which a unit price is provided in Document 00 5200 (Agreement) or Section 01 1000 (Summary).
79. Work: The entire completed construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents within the Contract Time. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents including everything shown in the Drawings and set forth in the Specifications. Wherever the word "work" is used, rather than the word "Work," it shall be understood to have its ordinary and customary meaning.

B. **Other Defined Terms**

The following terms are not necessarily identified with initial caps; however they shall have the meaning set forth below:

1. Wherever words "as directed," "as required," "as permitted," or words of like effect are used, it shall be understood that direction, requirements, or permission of Owner is intended. Words "sufficient," "necessary," "proper," and the like shall mean sufficient, necessary, or proper in judgment of Owner. Words "approved," "acceptable," "satisfactory," "favorably reviewed," or words of like import, shall mean approved by, or acceptable to, or satisfactory to, or favorably reviewed by Owner.
2. Wherever the word "may" or "ought" is used, the action to which it refers is discretionary. Wherever the word "shall" or "will" is used, the action to which it refers is mandatory.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

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SECTION 01 5000

TEMPORARY FACILITIES AND CONTROLS

PART 1 – GENERAL

1.01 SUMMARY

A. This Section describes construction facilities and temporary controls required for the Work.

1.02 SECTION INCLUDES

A. Temporary Utilities

B. Construction Facilities: sanitary facilities, parking, progress cleaning.

C. Dust control.

D. Noise control.

E. Pollution control.

F. Protect installed Work.

G. Security.

H. Nothing in this Section is intended to limit types and amount of temporary Work required. No omission from this Section will be recognized by Architect/Engineer that such activity is not required for successful completion of the Work and compliance with requirements of Contract Documents

1.03 RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to Work of this Section.

1.04 TEMPORARY UTILITIES

A. Temporary Sanitary Facilities:

1. Provide and maintain required facilities and enclosures. Comply with all minimum requirements of all public agencies having jurisdiction in regards to temporary restroom and hand wash stations.

1.05 TEMPORARY CONTROLS

A. Barriers:

1. Provide barricades, scaffolds, tarpaulins, canopies, warning signs, steps, etc., and other temporary construction required by governing authorities to comply with pertinent safety and other regulations.

B. Fencing, as required to secure Project Area:

1. Construction: Commercial grade chain link fence.

C. Protection of Installed Work:

1. Provide temporary and removable protection for installed Products. Control activity in immediate Work area to minimize damage.

1.06 CONSTRUCTION FACILITIES

A. Access Roads: Where required.

1. Construct and maintain temporary roads accessing public thoroughfares to serve construction area.
2. Extend and relocate as Work progress requires. Provide detours necessary for unimpeded traffic low.
3. Provide and maintain access to fire hydrants, free of obstructions.

B. Parking:

1. Coordinate with County of Kern regarding available parking location.
2. Do not allow vehicle parking on constructed pavement.

C. Progress Cleaning:

1. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition on a daily basis.
2. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
3. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust. Remove waste material, debris, and rubbish from site periodically and dispose off-site.

1.09 DUST CONTROL

A. Conduct construction operations to minimize the generation of dust and dirt, and prevent dust and dirt from interfering with the progress of the Work and from accumulation in Work and adjacent areas as required by authorities having jurisdiction.

B. Provide positive means to prevent air-borne dust from dispersing into atmosphere and into existing facility. This facility is to remain operation during the construction.

1. Periodically water construction areas to minimize the generation of dust and dirt.
2. To additionally minimize the generation of dust and dirt, hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or covered with tarpaulins.
3. Prevent dust and dirt from accumulating on walks, roadways, parking areas, and planting, and from washing into sewer and storm drain systems.

C. Dust and debris that may be generated during construction will be mitigated in accordance with the standards established by the Kern County Air Pollution Control District (KCUAPCD), Rule 42 Fugitive Dust/PM_{10} pertaining to construction and demolition activities for the control of Fugitive Dust of fine particulate matter (PM_{10}).

1.10 NOISE CONTROL

A. Provide methods, means, and facilities as required to minimize noise from the Work and noise produced by construction operations.

1.12 POLLUTION CONTROL

A. Comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of construction and disposal operations.

1.13 PROTECTION OF INSTALLED WORK

A. Protect installed Work and provide special protection where specified where specified in individual Specification Sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate Work area to prevent damage.

1.15 PROGRESS CLEANING AND WASTE REMOVAL

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition on a daily basis.

B. Collect and remove waste materials, debris, and rubbish from site daily and dispose offsite.

1.16 MAINTENANCE

A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the Work.

PART 2 – PRODUCTS

(Not applicable)

PART 3 – EXECUTION

3.01 REMOVAL

A. Maintain all temporary facilities and controls as long as needed for the safe and proper completion of the Work.

B. Remove all such temporary facilities and controls prior to final payment.

3.02 CONTRACTOR'S OPERATIONS

A. During the course of construction, do not interfere with other buildings or portions of buildings, which are to remain, occupied. Maintain free and safe passage to and from other buildings which are occupied

B. In occupied areas, attempt to do all jackhammer and other particularly noisy Work after normal working hours and on weekends. In all cases, schedule this Work in advance with the Owner's Representative. Minimize construction noise by adequate mufflers and other means.

END OF SECTION

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SECTION 01 6000

PRODUCT REQUIREMENTS

PART 1 – GENERAL

1.1 SUMMARY

A. Product requirements, transportation and handling of products, storage and protection of products, product options, and substitutions procedures.

1.2 SECTION INCLUDES

A. Definitions.

B. Products.

C. Transportation and handling.

D. Storage and protection.

E. Product options.

F. Substitutions.

1.3 RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 00 and Division 01 Specification Sections, apply to Work of this Section.

1.4 DEFINITIONS

A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

B. Named products: Items identified by manufacturer’s product name, including make and model as identified in published product literature current as of Contract Document date.

C. Materials: Products substantially shaped, cut or worked or otherwise fabricated, processed, or installed to form a part of the Work.

D. Equipment: Product with operational parts, motorized or manual, that requires service connections.

1.5 PRODUCTS

A. New and in a condition acceptable to the Owner and the Architect/Engineer. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

B. In conformance with EPA Codes and Regulations.

C. No material or equipment shall be used for any purpose other than that for which it is designed or specified.

D. Provide interchangeable components of the same manufacture, for components being replaced.

E. No material shall contain asbestos or polychlorinated biphenals (PCBs).

F. No materials or products shall contain formaldehyde in excess of the amount recommended by OSHA Regulations (Standards -29 CFR).

G. No lead containing powder driven anchors are permitted. Wherever powder driven anchors are Indicated or Specified, provide equivalent strength non-lead containing powder driven anchors.

H. Pursuant to the Resource Conservation & Recovery Act (RCRA) 6002 and to the extent that new recyclable material maybe utilized for construction of the building expansion with the approval of Architect/Engineer.

1.6 TRANSPORTATION AND HANDLING

A. Transport and handle products in accordance with manufacturer's instructions.

B. Deliver manufactured products in the manufacturer's original, unbroken containers or packaging, with identifying labels intact and legible.

C. Immediately on delivery, inspect shipments to assure compliance with the requirements of the Contract Documents and accepted Submittals, quantities are correct and to verify that products are properly protected and undamaged.

D. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damaging the product and their packaging.

E. Promptly remove damaged and defective products from the Site and replace at no increase in Contract Sum.

F. Provide protection for finished floor surfaces in traffic areas prior to allowing equipment or materials to be moved over such surfaces.

G. Protect finished surfaces, including jambs and soffits and openings used as passageways, through which equipment and material are handled.

H. Schedule delivery to minimize long term storage at the site and to prevent overcrowding of construction storage space.

I. Coordinate delivery with installation time to minimize holding time for flammable, hazardous, easily damaged, or other losses.

J. Inspect products upon delivery to ensure compliance with Contract Documents, products are not damaged and they are properly protected.

1.7 STORAGE AND PROTECTION

A. Except as otherwise approved by the Architect/Engineer, store and protect products in accordance with manufacturers' instructions, with seals and labels intact and legible.

B. Store products that are subject to damage by the elements, under cover in a weather-tight, climate controlled enclosures.

C. Maintain temperature and humidity within the ranges required by manufacturers.

D. For exterior storage of fabricated products, place on sloped supports, above ground, to prevent soiling and staining.

E. Provide off-site storage and protection when site does not permit on-site storage or protection.

F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation or potential degradation of product.

G. Store less granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.

H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

I. Arrange storage of products to permit access for inspection. Periodically inspect products to ensure that products are maintained under specified condition and free from damaged and deterioration.

J. In event of damage to the product, promptly replace to the approval of the Architect/Engineer and at no additional cost to the Owner.

K. Additional time required to secure replacements will not be considered by the Architect/Engineer for any extension in the contract time of completion.

L. Protection after Installation:

1. Provide substantial coverings as necessary to protect installed products from damage from traffic and construction operations. Remove coverings when no longer needed.
2. Maintain temperature and humidity conditions for interior equipment and finish products in accordance with the manufacturers' printed instruction.

1.8 PRODUCT OPTIONS

A. For products Indicated or Specified by Reference Standards or by descriptive requirements only, select any product by any manufacturer meeting description and that is recommended by manufacturer for the application Indicated.

B. For products Indicated or Specified by Performance Requirements only, select any product by any manufacturer meeting requirements and that is recommended by manufacturer for the application indicated. General overall performance of a product is implied where the product is specified for a specific application. Manufacturer's recommendations may be contained in published literature or by manufacturer's written certification of performance.

C. For products Indicated or Specified by Naming One Product and Manufacturer: Products of manufacture named and meeting specifications, no options or substitution are allowed. This option shall only apply to products matching others in use on a particular public improvement either completed or in the course of completion.

D. For products indicated or specified by naming several products or manufactures select, any one of the products or manufacturers named which complies with the Specified requirements. When the naming of one or more products is followed by "or accepted equal", a substitute product may be offered for consideration. Submit a request for substitution for any manufacturer not named in accordance with the following articles.

1.9 SUBSTITUTIONS

A. Refer to Section 00 2113 (Instruction to Bidders), Article 6, Paragraph 6.07.

- END OF SECTION-

DOCUMENT 01 6000-A

SUBSTITUTION REQUEST FORM

To: **The Rosamond Community Services District, Owner**

(661) 256-3411

PROJECT: RCSD Admin Building Standby Generator Replacement **Owner Project No:**	**Contractor:**

Substitution Request By:	Firm:

Transmittal Record	**Attn:**	**Firm:**	**Date Sent:**	**Date Rec'd:**	**Date Due:**
Contractor to Owner					
Contractor to Architect					
Owner / Architect to Consultant					
Architect to Owner Representative					
Owner Representative to Contractor					

We hereby submit for your consideration the following product instead of the specified item for the Project:

Section / Drawing	**Article**	**Specified Item**
Proposed Substitution:		

We have (a) attached manufacturer's literature, including complete technical data and laboratory test results, if applicable, (b) attached an explanation of why proposed substitution is a true equivalent to specified item, (c) included complete information on changes to Contract Documents that the proposed substitution will require for its proper installation, and (d) filled in the blanks below:

Contractor to complete questions that follow and certifies to the accuracy of all answers:

A.	Does the substitution affect dimensions shown on Drawings? Yes __ / No __. If Yes, please explain proposed mitigation and why substitution is equivalent to originally specified item:
B.	Will the undersigned pay for changes to the design, including engineering and detailing costs caused by the requested substitution? Yes __ / No __. If No, please state reasons explain why substitution is equivalent to originally specified item:
C.	What effect does the substitution have on other trades? No effect: __ / Some effect__. If substitution will affect other trades, please explain the effect and why substitution is equivalent to originally specified item:
D.	Will substitution cause change to Project Schedule, or to critical delivery dates? Add? Shorten? If the substitution will add to schedule dates or affect critical activities, please explain why substitution is equivalent to originally specified item:
E.	Please describe differences between proposed substitution and specified item? Please explain and identify any and all differences, and please explain why substitution is equivalent to originally specified item:
F.	What is the Cost Differential to Contractor in original specified item and proposed substitution including all mark-ups? [If substitution requested during bid period, skip this question.]
G.	Are Manufacturer's guarantees for the proposed item the same as for item specified? Yes ____; No____. If No, please explain why substitution is equivalent to originally specified item:

H.	Contractor accepts full responsibility for delays caused by redesign of other items of the Work necessitated by substitution? Yes __ / No __. If No, please state reasons and explain why substitution is equivalent to originally specified item:
I.	Contractor states that the function, appearance and quality are equivalent or superior to the specified item? Yes __ / No __. If No, please explain why substitution is equivalent to originally specified item:

We certify that the function, appearance, and quality of the proposed substitution are equivalent or superior to those of the specified item, except as we may specifically state otherwise in this request.

Contractor:

Submitted by:_____ Signature: _____

Firm:_____ Date: _____

Address:_____ Phone/ Fax: _____

Remarks:_____

Proposed Substitution Manufacturer

Submitted by:_____ Signature: _____

Firm:_____ Date: _____

Address:_____ Phone/ Fax: _____

Remarks:_____

Consultant Response:	**Owner Representative Response:**
o Accepted	o Accepted
o Not Accepted	o Not Accepted
o Accepted As Noted	o Accepted As Noted
o Received Too Late	o Received Too Late

Remarks:_____ **Remarks:**_____

_____ _____

By:_____ **By:**_____

END OF DOCUMENT

SECTION 01 7000

CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 SUMMARY

A. **Section describes requirements and procedures for:**

1. Preparation for Contract Closeout
2. Punch List Development.
3. Final Completion
4. Warranties

1.02 PREPARATION FOR CONTRACT CLOSEOUT

A. **Removal of Temporary Construction Facilities and Project Cleaning.**

1. Prior to closeout procedures: remove temporary materials, equipment, services, and construction; clean all areas affected by the Work; clean and repair damage caused by installation or use of temporary facilities; restore permanent facilities used during construction to specified condition.

B. **Permitting and Reporting.**

1. Prior to closeout procedures, Contractor shall demonstrate or provide evidence that all outstanding permit requirements have been met, including reporting, certifications, and commissioning. Where Owner is required to certify to any permit compliance, Contractor shall prepare such certification documents for Owner execution.
2. Contractor shall schedule all necessary site visits from all authorities having jurisdiction to meet permit compliance.
3. Contractor shall provide all required commissioning documents and reports as required by Laws and Regulatory Requirements.

1.03 PUNCH LIST DEVELOPMENT

A. **Punch List Readiness Determination.**

1. When Contractor considers Work or designated portion of the Work as ready for punch list review, Contractor shall submit written notice to the Owner to review Project readiness with Inspector. Contractor and Inspector shall review the Work and, if Inspector identifies items needing correction prior to punch list review, Contractor shall make such corrections prior to scheduling the punch list walk.

B. **Punch List Walk and Corrections.**

1. When Contractor considers Work or designated portion of the Work as ready for punch list walk, submit written notice to Owner. Within reasonable time, Owner will schedule the punch list walk to determine status of completion. The attendees for the punch list walk will include the Architect/Engineer, Inspector, Owner, and Owner's Representatives. Consultant disciplines may schedule individual punch list walks as necessary. Contractor shall attend the punch list walk with personnel he deems necessary to accomplish Final Completion.
2. Should Owner determine that status of Work does not meet the Contract requirements for Final Completion, Owner will promptly notify Contractor in writing, listing all defects and omissions (the "**Punch List**").

3. Contractor shall be aware that the generation of a Punch List does not limit the Owner's ability to identify other deficiencies not previously identified on the Punch List and that the Contractor is responsible for all corrections required to meet the Contract requirements.
4. Contractor shall remedy deficiencies to the satisfaction of the Owner. Contractor shall provide Project Record Documents and evidence that all permit requirements have been satisfied.

C. **Final Walk.**

1. After Contractor performs all corrections identified on the Punch List, performs corrections of subsequent items added after the punch list walk and provides Project Record Documents and evidence of permit compliance, Contractor shall submit written notice to Owner. Within a reasonable time, Owner will schedule the final walk to determine status of completion. Owner's attendees will be personnel involved in Punch List generation. Contractor shall provide all personnel he deems necessary to accomplish Project Completion.
2. The Punch List examination will be performed at the final walk. One follow-up review of Punch List items for each discipline will be provided. If further site visits are required to review Punch List items due to incompleteness of the Work by Contractor, Contractor will reimburse Owner for costs associated with these visits.
3. If Owner deems work has been completed in accordance with the Contract requirements, or in Owner's judgment minor corrections may be completed which do not hinder Final Completion, Contractor shall prepare for Final Completion.

1.04 FINAL COMPLETION

A. **Requirements**

1. Final Completion occurs when Work meets requirements for Owner's Final Acceptance.

B. **Procedure**

1. When Contractor and Owner consider Work to be Complete, Contractor shall submit written certification that:
    a. Contractor has inspected Work for compliance with Contract Documents, and all Punch List requirements have been met.
    b. Except for Contractor maintenance after Final Acceptance, Work has been completed in accordance with Contract Documents and deficiencies listed in the Punch List have been corrected. Equipment and systems have been tested in the presence of Owner, and are operative.
2. Project Record Documents are completed and turned over to Owner, Work is complete and certificate of occupancy is obtained. (3) copies of Project Record Documents shall be provided in PDF format on electronic media to the Owner.
3. In addition to submittals required by Contract Documents, provide submittals required by governing authorities and submit final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.
4. Upon Contractor completion of all closeout procedures and Owner's Final Acceptance, Owner will file the Notice of Completion.

C. **Final Adjustments of Accounts:**

1. Submit a final statement of accounting to Owner, showing all adjustments to the Contract Sum and complete and execute Document 00 5200 (Agreement and Release of Claims).
2. If so required, Owner shall prepare a final Change Order for submittal to Contractor, showing adjustments to the Contract Sum that were not previously made into a Contract Modification.

D. **Turn-In.** Contract Documents will not be closed out and final payment will not be made until all keys issued to Contractor during prosecution of Work and letters from property owners, pursuant to Contract Documents, are turned in to Owner.

E. **Release of Claims.** Contract Documents will not be closed out and final payment will not be due or made until Document 00 5200 (Agreement and Release of Claims) is completed and executed by Contractor and Owner.

F. **Fire Inspection Coordination.** Coordinate fire inspection and secure sufficient notice to Owner to permit convenient scheduling (if applicable).

G. **Building Inspection Coordination.** Coordinate with Owner a final inspection for the purpose of obtaining an occupancy certificate (if applicable).

1.05 WARRANTIES

A. **Warranty Documents**

1. Contractors shall assemble and provide warranty documents, executed or supplied by Subcontractors, suppliers, and manufacturers. Provide table of contents and assemble in 8½ inches by 11 inches three-ring binder with durable plastic cover, appropriately separated and organized. Assemble in specification section order. Additionally, Contractor shall provide to Owner all documents in the warranty document package in an electronic file, portable document format (pdf). Provide one copy on four individual flash drives.
2. Submit warranty documents in accordance with Document 01 3000 (Administrative Requirements) and prior to final Application for Payment. For equipment put into use with Owner's permission during construction, submit warranty documents within 14 Days after first operation. For items of Work delayed materially beyond the date of Final Completion, provide updated warranty documents within 14 Days after acceptance, listing date of acceptance as start of warranty period.
3. Warranty Forms: Submit drafts to Owner for review prior to execution. Forms shall not detract from or confuse requirements or interpretations of Contract Documents. Warranty shall be countersigned by manufacturers. Where specified, warranty shall be countersigned by Subcontractors and installers.
4. Rejection of Warranties: Owner reserves right to reject unsolicited and coincidental product warranties that detract from or confuse requirements or interpretations of Contract Documents.
5. Term of Warranties: For materials, equipment, systems, and workmanship, warranty period shall be one year minimum from date of Final Completion of entire Work except where:

    a. Detailed Specifications for certain materials, equipment or systems require longer warranty periods.
    b. Materials, equipment or systems are put into beneficial use of Owner prior to Final Completion as agreed to in writing by Owner.
    c. Materials, equipment, or systems delayed from beneficial use of Owner as of the date of Notice of Completion, as agreed to in writing by Owner.

B. **Warranty of Title:**

1. No material, supplies, or equipment for Work under Contract shall be purchased subject to any chattel mortgage, security agreement, or under a conditional sale or other agreement by which an interest therein or any part thereof is retained by seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with improvements and appurtenances constructed or placed thereon by Contractor, to Owner free from any claim, liens, security interest, or charges, and further agrees that neither Contractor nor any person, firm, or corporation furnishing any materials or labor for any Work covered by Contract shall have right to lien upon premises or improvement or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or

impair right of persons furnishing materials or labor under bond given by Contractor for their protection or any rights under law permitting persons to look to funds due Contractor in hands of Owner.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

Preventive Maintenance and Operating Requirement Sheets

<table>
<tr><td>Preventive Maintenance Program</td><td colspan="2">Equipment Record Number</td></tr>
<tr><td>EQUIPMENT DESCRIPTION</td><td colspan="2">ELECTRICAL OR MECHANICAL DATA</td></tr>
<tr><td>Name:</td><td colspan="2">Size:</td></tr>
<tr><td>Serial No.:</td><td colspan="2" rowspan="2">Model:</td></tr>
<tr><td>Vendor:</td></tr>
<tr><td rowspan="2">Vendor Address:</td><td colspan="2">Type:</td></tr>
<tr><td colspan="2">Mfr.:</td></tr>
<tr><td>Vendor Rep:</td><td>Voltage:</td><td>Amps:</td></tr>
<tr><td>Phone:</td><td>Phase:</td><td>rpm:</td></tr>
<tr><td colspan="2">Maintenance Work to be Done</td><td>Frequency*</td></tr>
<tr><td colspan="2"></td><td></td></tr>
<tr><td colspan="3">OPERATING REQUIREMENTS AND REFERENCE</td></tr>
</table>

*D - Daily; W - Weekly; B - Biweekly; M - Monthly; Q - Quarterly;
S - Semiannually; A - Annually.

SAMPLE

Preventive Maintenance and Operating Requirement Sheets

Preventive Maintenance Program	Equipment Record Number	
EQUIPMENT DESCRIPTION	ELECTRICAL OR MECHANICAL DATA	
Name: Influent Pump No. 1 Tag No.: P01-1	Size: 15 hp	
Serial No.: 123456ABC Vendor: ABC Pump Co.	Model: 140T Frame Serial No. 987654ZY Class F Insulation W/Space Heater	
Vendor Address: 1111 Pump Circle Newport Beach, CA 92663	Type: Mfr.: DEF Motors, Inc.	
Vendor Rep: XYZ Equipment, Inc.	Voltage: 460	Amps: 20
Phone: 714/752-0505	Phase: 3	rpm: 1,800
Maintenance Work to be Done		Frequency*
1. Operate all valves and check such things as a) bearing temperature, b) changes in running sound, c) suction and discharge gauge readings, d) pump discharge rate, and e) general condition of the drive equipment. 2. Check packing. 3. Checking pumping unit for any dust, dirt, or debris. (Continued on attached sheet)		D D W
OPERATING REQUIREMENTS AND REFERENCE		
For manufacturer's instructions regarding installation, operation, maintenance, and trouble shooting of this equipment, see Volume ____, Section _____.		

*D - Daily; W - Weekly; B - Biweekly; M - Monthly; Q - Quarterly;
S - Semiannually; A - Annually.

SAMPLE

Preventive Maintenance and Operating Requirement Sheets

Preventive Maintenance Program	Equipment Record Number	
EQUIPMENT DESCRIPTION	ELECTRICAL OR MECHANICAL DATA	
Name:	Size:	
Serial No.:	Model:	
Vendor:		
Vendor Address:	Type:	
	Mfr.:	
Vendor Rep:	Voltage:	Amps:
Phone:	Phase:	rpm:
Maintenance Work to be Done		Frequency*
4. Lubricate bearing frame and motor bearings (consult manufacturer's instructions for type of grease or oil).		Q
5. Disassemble and change or repair the following: a) impeller, b) shafts, c) shaft sleeve, d) rotary seals, and e) sleeve bearings.		A
OPERATING REQUIREMENTS AND REFERENCE		

*D - Daily; W - Weekly; B - Biweekly; M - Monthly; Q - Quarterly;
S - Semiannually; A - Annually.

(PAGE LEFT BLANK INTENTIONALLY)

SECTION 01 7050

CUTTING AND PATCHING

PART 1 – GENERAL

1.01 SUMMARY

A. This Section establishes General Requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:

1. Make the several parts fit properly.
2. Uncover Work to provide for installing, inspection, or both, of ill-timed Work.
3. Remove and replace Work not conforming to requirements of the Contract Documents.
4. Remove and replace defective Work.

B. Requirements and limitations for cutting and patching of Work.

1.02 RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 0 and Division 1 Specification Sections, apply to Work of this Section.

1.03 QUALITY ASSURANCE

A. Requirements for Structural Work: Do not cut and patch structural Work in a manner that would result in a reduction of load carrying capacity or of load deflection ration. Obtain approval of the cutting and patching proposal before cutting and patching the following structural elements:

1. Foundation construction.
2. Structural concrete.
3. Stair systems.
4. Miscellaneous structural metals.
5. Exterior curtain wall construction.
6. Equipment supports.
7. Piping, ductwork, vessels and equipment.

B. Operational and Safety Limitations: Do not cut and patch operational elements or safety related components in a manner that would result in a reduction of their capacity to perform in the manner intended, to increase maintenance, or to decrease operational like or safety.

C. Visual Requirements:

1. Do not cut and patch construction exposed on the exterior or in its occupied spaces, without consulting the Engineer/Architect.
2. Remove and replace Work cut and patched in a visually unsatisfactorily manner.

D. Employ skilled workers for cutting and patching. Wherever practicable, employ original installer or fabricator providing Work under this Contract to perform cutting and patching for new:

1. Weather-exposed and moisture-resistant products.
2. Fireproofing.
3. Finished surfaces exposed to view.

E. Individual Product Specification Sections:

1. Cutting and patching incidental to Work of the Section.
2. Advance notification to other Sections of openings required in Work of those Sections.
3. Limitations on cutting structural members.

1.04 SUBMITTALS

A. Submit written request in advance of cutting or alteration which affects:

1. Structural integrity of any element of Project.
2. Integrity of weather exposed or moisture resistant element.
3. Efficiency, maintenance, or safety of any operational element.
4. Visual qualities of sight exposed elements.
5. Work of Owner or separate contractor.
6. Cost estimate and type of reimbursement review by Architect/Engineer. Review does not waive Architect/Engineer's right to later require complete removal and replacement of any part of Work found to be unsatisfactory.

B. Include in Request:

1. Identification of Project.
2. Location and description of affected Work.
3. Necessity for cutting or alteration.
4. Description of proposed Work, entities to perform Work, products to be used, dates when Work is to be performed.
5. Alternatives to cutting and patching.
6. Effect on Work of Owner or separate Contractor.
7. Written permission of affected separate Contractor.
8. Describe anticipated results in terms of changes to existing construction.
9. List utilities to be disturbed or relocated or temporarily out of service. Indicate length of service disruption.
10. Where Work involves addition of reinforcement to structural elements, submit details and engineering calculations showing how new reinforcement integrates with original structure.
11. Date and time Work will be executed, to provide for Engineering/Architect observation.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Primary Products: Those required for original installation.

B. Product Substitution: Refer to Section 00 2113 (Instruction to Bidders), Article 6, Paragraph 6.07.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Examine existing conditions prior to commencing Work, including elements subject to damage or movement during cutting, excavating, patching and backfilling.

B. After uncovering the Work, inspect conditions affecting of new Work.

C. If uncovered conditions are not as anticipated, immediately notify the Architect/Engineer and secure needed directions.

D. Do not proceed until unsatisfactory conditions are corrected.

E. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

A. Provide required temporary supports including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.

B. Prior to cutting, employ a competent private utility locating service capable of locating positions and depths of underground and concealed structural reinforcements and utilities including, but not limited to electrical conduits, plumbing lines, and other utilities in the vicinity of the construction to be cut.

C. Perform cutting and patching using methods so as not to void existing warranties.

D. Provide protection from elements for areas which may be exposed by uncovering Work.

E. Maintain excavations free of water.

3.03 CUTTING

A. Perform required cutting and fitting to complete the Work under pertinent other Sections of these Specifications.

B. Perform required excavating and backfilling as required under pertinent other Sections of these Specifications.

C. Perform cutting and demolition by methods which will prevent damage to other portions of the Work and provide proper surfaces to receive installation of repair and new Work.

D. Do not cut or alter structural members without prior consultation with the Engineer/Architect unless specifically indicated. Do not damage reinforcing or structural steel to remain.

E. Do not damage electrical conduits, plumbing lines, and other utilities to remain.

F. Cut existing construction to provide for installation of Work. Make new openings neat, as close as possible to profiles indicated and only to extent necessary for new Work.

G. Uncover Work to install improperly sequenced Work.

H. Remove and replace defective or non-conforming Work.

I. Remove samples of installed Work for testing when requested.

J. Provide openings in the Work for penetration of mechanical and electrical Work.

K. At concrete, masonry, paving, and other materials where edges of cuts and holes will remain exposed in the completed Work, make cuts using power-sawing and power-coring equipment; do not overcut at corners of cut openings. Saw overruns shall not be permitted. Pneumatic tools not allowed without prior approval.

L. Upon completion of cutting and coring, clean remaining surfaces of loose particles and dust.

3.04 PATCHING

A. Execute patching to complement adjacent Work.

B. Patch existing construction by filling repairing, refinishing, closing up and similar operations. Patching includes the insertion of projection of other products in or from a surface.

C. Perform fitting and adjusting of products together to integrate with other Work with the specified tolerance and finishes.

D. Perform Work by methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.

E. Restore Work with new Products in accordance with requirements of Contract Documents.

F. Fit Work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

G. Patch weather-exposed components in a manner that restores them to a weathertight condition.

H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material, to full thickness of the penetrated element.

I. Finish or refinish, as required, cut and patched surfaces to provide an even surface of uniform finish, color, texture, and appearance, matching existing adjacent. Finish complete surface plane, unless otherwise indicated. Over patched wall or ceiling surfaces, finish to nearest cutoff line for entire surface, such as intersection with adjacent wall or ceiling, beam, pilasters or to nearest opening frame, unless otherwise indicated. Finished surfaces shall not present a spotty, touched-up appearance. For an assembly, refinish entire unit.

3.05 PERFORMANCE

A. Execute Work by methods to avoid damage to other Work, and which will provide appropriate surfaces to receive patching and finishing.

B. Employ original subcontractor to perform cutting and patching for weather exposed and moisture resistant elements.

C. Cut materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.

D. Restore Work with new products in accordance with requirements of Contract Documents.

E. Fit Work tightly to pipes, sleeves, ducts, conduit, and other penetrations through surfaces, caulking where necessary to create water and air resistive barriers.

F. At penetrations of fire-rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400 (Firestopping) and Section 07 9200 (Joint Sealers), to full thickness of the penetrated element.

G. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.

3.06 PAYMENT FOR COSTS

A. In accordance with Section 00 7200 (General Conditions) and Section 01 2000 (Price and Payment Procedures).

END OF SECTION

SECTION 01 9113

STARTING OF SYSTEMS

PART 1 – GENERAL

1.01 SUMMARY

A. Administrative procedures for starting up of various systems.

1.02 SECTION INCLUDES

A. Starting systems.

B. Demonstration and instructions.

C. Testing, adjusting, and balancing.

1.03 RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division 0 and Division 1 Specification Sections, apply to Work of this Section.

1.04 QUALITY ASSURANCE

A. When specified in individual Sections, or when requested by Architect/Engineer, manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment installation prior to start-up; to supervise placing equipment in operations; and to provide a written report that equipment has been properly installed and lubricated, is in accurate alignment, is free from any undue stress imposed by connection lines or anchor bolts, and has been satisfactorily operated under full load conditions.

1.05 SUBMITTALS

A. Submit under pertinent provisions of the Section 00 7200 (General Conditions) and Section 01 3000 (Administrative Requirements).

B. Submit preliminary schedule listing times and dates for start-up of each item of equipment in sequence prior to proposed dates.

C. Submit manufacturer’s representative’s reports within one week after start-up, listing satisfactory start-up dates.

1.06 PROJECT CONDITIONS

A. Building enclosures complete and weather tight.

B. Excess packing and shipping bolts are removed.

C. Interdependent systems have been checked and are operational.

PART 2 – PRODUCTS

(Not applicable)

PART 3 – EXECUTION

3.01 INSPECTION

A. Verify that Project conditions comply with requirements.

B. Verify that status of Work meets requirements for starting of equipment and systems.

3.02 PREPARATION

A. Coordinate sequence for start-up of various items of equipment including Owner provided equipment.

B. Notify Architect/Engineer seven days prior to start-up of each item of equipment.

C. Provide Contract Documents, shop drawings, product data, and operation and maintenance data available during entire start-up process.

D. Verify that each piece of equipment has been checked for proper lubrication, drive rotation, belt tension, control sequence and other conditions which may cause damage.

E. Verify control systems are fully operational in automatic mode.

F. Verify that test, meter readings and specific electrical characteristics agree with those specified by electrical equipment manufacturer.

G. Verify wiring to motors and controls required by mechanical Work for operation smoke and fire protection demonstrations is completed.

H. Verify wiring and support systems for equipment installed under separate contracts is complete and checked.

I. Bearings: Inspect for cleanliness; Clean and remove foreign matter, Verify alignment; Take corrective measures.

J. Drives: Inspect for tension on belt drives, adjustment of varipitch sheaves and drives, alignment, proper equipment speed and cleanliness. Take corrective action.

K. Motors: Verify that motor amperage agrees with nameplate value. Inspect for conditions which procedure excessive current flow and which exist due to equipment malfunction. Take corrective action.

3.03 STARTING SYSTEMS

A. Execute start-up under supervision of responsible personnel.

B. Place equipment in operation in proper sequence.

C. Execute start-up under supervision of responsible Contractor’s personnel in accordance with manufacturers’ written instructions.

D. When specified in individual Specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up and to supervise placing equipment or system in operation.

E. Submit a written report in accordance with Section 01 4000 (Quality Requirements) that equipment or system has been properly installed and is functioning correctly.

3.04 DEMONSTRATION AND INSTRUCTIONS

A. Demonstration operation and maintenance of Products to Owner's personnel 2 weeks prior to date of Punch List Walk.

B. For equipment or systems requiring seasonal operation, perform demonstration for other season within 6 months, at no cost to the Owner.

C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.

D. Demonstrate, start-up, operation, control, adjustment, safety procedures, troubleshooting, servicing, maintenance, and shutdown of each item of equipment at agreed upon times, at equipment location.

E. Prepare and inset additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

3.05 TESTING, ADJUSTING, AND BALANCING

A. Contractor will appoint, employ, and pay for services of an independent firm to perform testing, adjusting and balancing.

B. Reports will be submitted by the independent firm to the Architect/Engineer indicating observations and results of tests and indicating compliance of noncompliance with specified requirements and with requirement of the Contract Documents.

END OF SECTION

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ROSAMOND COMMUNITY SERVICE DISTRICT
ADMIN BUILDING GENERATOR REPLACEMENT

TECHNICAL SPECIFICATIONS

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S019310	OPERATION AND MAINTENANCE MANUALS
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S260500	GENERAL ELECTRICAL REQUIREMENTS
S260519	WIRES AND CABLES (LESS THAN 600 VOLTS)
S260524	ELECTRICAL FIELD TESTING
S260526	GROUNDING AND BONDING
S260534	CONDUITS, BOXES, AND FITTINGS
S260548	SEISMIC RESTRAINT FOR ELECTRICAL EQUIPMENT
S260573	ARC-FLASH STUDY
S263212	STANDBY ENGINE-GENERATOR
S263623	AUTOMATIC TRANSFER SWITCHES

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SECTION 019310 OPERATION AND MAINTENANCE MANUALS

1.01 GENERAL

Submit six copies of all manufacturer's operation and maintenance manuals and data pertinent to equipment supplied for the project. **Manuals shall be delivered as a single complete submittal and not in multiple packages.** Prepare and organize the material in three-ring binders with divider tabs and labels. Include a table of contents. Include a USB flash drive of all catalog data in pdf format and all drawings in both pdf and CADD formats. All pdf files shall be formatted to allow word search.

1.02 SUBMITTALS

A. Submittals shall include:

1. List of equipment furnished for project with name, address, and telephone number of each vendor.

2. List of serial numbers of equipment furnished.

3. A copy of shop drawings for mechanical, electrical, and instrument equipment in final form.

4. Manufacturer's operation and maintenance instructions and parts lists.

5. Tabulation of motor nameplate horsepower, nameplate current, field-measured current, overload relay setting, and catalog number for polyphase motors.

6. List of fuses, lamps, seals, and other expendable equipment and devices. Specify size, type, and ordering description. List name, address, e-mail address, website address, fax number, and telephone number of vendor.

B. Provide manuals for each piece of equipment including individual components and subsystems of complete assemblies. Line out nonapplicable text and illustrations. The section of the manual on operation shall describe the functions and limitations of each component and its relationship to the system of which it is a part. Where several models, options, or styles are described, the manual shall identify the items actually provided.

C. Each manual shall contain the following:

1. Manufacturer's identification, including order number, model, and serial number.

2. Blue line prints or reviewed shop drawings and diagrams of all systems.

3. Certified equipment drawings or reviewed shop drawing data clearly marked for equipment furnished.

4. Complete operating and maintenance instructions for each and every item of equipment, setting forth in detail and step-by-step the procedure for starting, stopping, operating, and maintaining the entire system as installed. Include a schedule of recommended maintenance intervals.

5. Complete parts list of replaceable parts, their part numbers, and the name and address of their nearest vendor.

6. A complete valve tag list including the name and function of the pipe in which the valve is mounted.

7. Any special emergency operating instruction and a list of service organizations (including addresses and telephone numbers) capable of rendering emergency service to the various parts of the system.

8. Copy of manufacturer's equipment guarantees and warranties.

D. Brochures shall be loose leaf with durable plastic or fiberboard covers. Each sheet shall be reinforced to prevent tearing from continued use, and each brochure shall have the following information clearly printed on its cover:

1. Project name, name of Owner, and address.

2. Name and address of Owner's Representative.

3. Name and addresses of contractors and subcontractors and department to contact.

4. Telephone number of contractors, including night and emergency numbers.

5. Major equipment vendors' names and telephone numbers.

E. Submit complete manuals at least four weeks before the date of the instructions required by the subsections on "Manufacturer's Services" in the various specification sections.

F. Operation and maintenance manuals specified herein are in addition to any operation, maintenance, or installation instructions required by the Contractor to install, test, and start up equipment.

1.03 EQUIPMENT DATA SHEETS

Provide six sets of equipment data sheets, bound in three-ring binders, summarizing the equipment manufacturer's maintenance instructions and recommendations. A blank data sheet and a sample data sheet are attached.

Preventive Maintenance and Operating Requirement Sheets

Preventive Maintenance Program	Equipment Record Number	
EQUIPMENT DESCRIPTION	ELECTRICAL OR MECHANICAL DATA	
Name:	Size:	
Serial No.:	Model:	
Vendor:		
Vendor Address:	Type:	
	Mfr.:	
Vendor Rep:	Voltage:	Amps:
Phone:	Phase:	rpm:
Maintenance Work to be Done		Frequency*
OPERATING REQUIREMENTS AND REFERENCE		

*D - Daily; W - Weekly; B - Biweekly; M - Monthly; Q - Quarterly;
S - Semiannually; A - Annually.

SAMPLE

Preventive Maintenance and Operating Requirement Sheets

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Serial No.: 123456ABC Vendor: ABC Pump Co.	Model: 140T Frame Serial No. 987654ZY Class F Insulation W/Space Heater	
Vendor Address: 1111 Pump Circle Newport Beach, CA 92663	Type: Mfr.: DEF Motors, Inc.	
Vendor Rep: XYZ Equipment, Inc.	Voltage: 460	Amps: 20
Phone: 714/752-0505	Phase: 3	rpm: 1,800
Maintenance Work to be Done		Frequency*
1. Operate all valves and check such things as a) bearing temperature, b) changes in running sound, c) suction and discharge gauge readings, d) pump discharge rate, and e) general condition of the drive equipment. 2. Check packing. 3. Checking pumping unit for any dust, dirt, or debris. (Continued on attached sheet)		D D W
OPERATING REQUIREMENTS AND REFERENCE		
For manufacturer's instructions regarding installation, operation, maintenance, and trouble shooting of this equipment, see Volume _____, Section _____.		

*D - Daily; W - Weekly; B - Biweekly; M - Monthly; Q - Quarterly;
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SAMPLE

Preventive Maintenance and Operating Requirement Sheets

Preventive Maintenance Program	Equipment Record Number	
EQUIPMENT DESCRIPTION	ELECTRICAL OR MECHANICAL DATA	
Name:	Size:	
Serial No.:	Model:	
Vendor:		
Vendor Address:	Type:	
	Mfr.:	
Vendor Rep:	Voltage:	Amps:
Phone:	Phase:	rpm:
Maintenance Work to be Done		Frequency*
4. Lubricate bearing frame and motor bearings (consult manufacturer's instructions for type of grease or oil).		Q
5. Disassemble and change or repair the following: a) impeller, b) shafts, c) shaft sleeve, d) rotary seals, and e) sleeve bearings.		A
OPERATING REQUIREMENTS AND REFERENCE		

*D - Daily; W - Weekly; B - Biweekly; M - Monthly; Q - Quarterly;
S - Semiannually; A - Annually.

END OF SECTION

SECTION 024100 DEMOLITION

PART 1 – GENERAL

A. Description:

Provide demolition of existing conditions as indicated and in compliance with Contract Documents.

B. Submittals:

1. Submit the following in accordance with Section 01 33 00.

a. Demolition Plan.

b. Sustainable Design Submittals.

C. Quality Assurance:

1. Demolition Plan: Provide description of sequence, methods, and equipment used for demolition (including disposal).

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

A. Preparation:

1. Survey Markers and Monuments:

a. Provide three reference points, established by a licensed land surveyor, for each survey marker or monument temporarily removed. Record locations and designations of survey markers and monuments prior to removal.

b. Store removed markers and monuments during demolition work, and replace upon completion of work. Reestablish survey markers and monuments in conformance with recorded reference points. Forward letter to CM, signed by a licensed land surveyor, verifying reestablishment of survey markers and monuments.

2. Burning of demolition debris is prohibited.

3. Protect existing structures, equipment, and appurtenances to remain.

4. Obtain permission from **CM** before abandoning or removing existing structures, materials, equipment and appurtenances.

5. Provide fire extinguishers in areas where demolition work is performed by use of an open flame. Exercise necessary precautions for fire prevention.

6. Always maintain circulation of traffic within area during demolition operations.

7. Make necessary arrangements with and perform work required by utility companies and municipal departments for discontinuance or interruption of utility services due to demolition work.

8. Confine apparatus, storage of materials, demolition work, new construction, and operations of workmen to areas that will not interfere with continued use and operation of entire facility. Provide and maintain lights, barriers, and temporary passageways for free and safe access.

B. Demolition:

1. Demolish and remove existing construction, utilities, equipment, and appurtenances.

2. Provide maximum practicable protection from inclement weather for materials, equipment, and personnel located in partially dismantled structures.

3. Protect persons and property throughout progress of work. Provide safe working conditions for personnel.

4. Wet down work during demolition operations to prevent dust from arising. Minimize spread of dust and airborne particles.

5. Cap or plug with non-shrink grout, pipes and other conduits which are abandoned in place.

6. Removed materials, equipment, and appurtenances, not designated for relocation, become property of Contractor and shall be disposed of offsite.

C. Salvage:

1. Store equipment to be salvaged or relocated as directed by CM.

D. Repair/Restoration:

1. Repair or remove items that are damaged. Repair and install damaged items to condition at least equal to that which existed prior to start of work.

END OF SECTION

SECTION 260500 GENERAL ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

A. Description

This section includes materials, installation, and testing of the electrical system.

B. Related Work Specified Elsewhere

1. One-Year Guarantee: General Provisions.

2. Permits and Licenses: General Provisions.

3. Submittals: 013300.

4. Construction Facilities and Temporary Controls: 015100.

5. Operation and Maintenance Manuals: 019310.

C. Submittals

1. Submit shop drawings in accordance with the General Provisions and Section 013300.

2. Submit electrical service changes work procedure.

D. Regulatory Agencies and Standards

1. See General Provisions.

2. Electrical work shall comply with the NEC as amended by the CEC and local city code where applicable.

E. Quality Control

Materials, appliances, equipment, and devices shall conform to the applicable UL standards. The label of, or listing by, UL is required for all electrical equipment.

F. Operation and Maintenance Manuals

Submit operation and maintenance manuals in accordance with Section 019310.

G. Locations

1. General: Use equipment, materials, and wiring methods suitable for the types of locations in which they are located as defined below.

2. Definitions of Types of Locations:

a. Dry Locations: Indoor areas which do not fall within the definitions below for wet, damp, or corrosive locations and which are not otherwise designated in the drawings.

b. Damp Locations: Spaces wholly or partially underground or having a wall or ceiling forming part of a channel or tank, unless otherwise designated in the drawings.

c. Wet Locations: Locations exposed to the weather, whether under a roof or not.

d. Corrosive Locations: Where so identified in the drawings.

PART 2 - MATERIALS

A. General

1. Similar materials and equipment shall be the product of a single manufacturer.

2. Provide only products which are new, undamaged, and in the original cartons or containers.

3. Materials and equipment shall be the standard products of manufacturers regularly engaged in the production of such material and shall be the manufacturer's current design.

4. Materials and equipment shall be suitable for storage, installation, and operation at an ambient temperature of 0°C to 50°C except where more stringent conditions are stated in individual equipment specifications.

5. Electrical equipment and panels shall be factory finished with manufacturer's standard primer and enamel topcoats, unless stated otherwise in the individual equipment specifications. Provide 1 pint of the equipment manufacturer's touchup paint per 500 square feet of painted surface for repair of damaged enamel topcoats.

PART 3 - EXECUTION

A. Installation

1. The drawings indicate connections for typical equipment only. If the equipment furnished is different from what is shown, provide the modifications necessary for a safe and properly operating installation in accordance with the equipment manufacturer's recommendations.

2. The drawings diagrammatically indicate the desired location and arrangement of outlets, conduit runs, equipment, and other items. Field determine exact location based on physical size and arrangement of equipment, finished elevations, and obstructions.

3. Work or equipment not indicated or specified which is necessary for the complete and proper operation of the electrical systems shall be accomplished without additional cost to the Owner.

4. Review demolition methods with Owner's Representative prior to cutting or removing existing architectural and/or structural items or equipment. Repair damage to match existing.

5. Accomplish work required to pierce any waterproofing after the part piercing the waterproofing has been set in place. Seal and make watertight the openings made for this purpose.

6. Install equipment and material piercing fire walls and fire-resistant or fire-stopped walls, partitions, ceilings, and floors in a manner so the rating remains equivalent.

7. Seal weathertight equipment or components exposed to the weather.

8. Protect equipment outlets and conduit openings with factory-made plugs or caps whenever work is not in progress at that point.

B. Nameplates

1. Mark each individual panelboard, motor controller, disconnect switch, timer, relay, and contactor to identify each item with its respective service or function.

2. Provide a nameplate inside the door of each panelboard listing its designation, voltage, and feeder circuit number.

3. Provide a nameplate on each transformer listing its designation, voltage, feeder number, and load served.

4. Provide nameplates with engraved lettering not less than 1/4 inch high. Use black-on-white laminated plastic, attached with rivets or sheet metal screws. Do not use embossed plastic adhesive tape.

C. Warning Signs

1. Install warning, caution, or instruction signs where required by NEC and NFPA 79 paragraph 4.5.1, where indicated, or where reasonably required to assure safe operation and maintenance of electrical systems and of the items to which they connect.

2. Install engraved plastic-laminated instruction signs with approved legend where instructions or explanations are needed for system or equipment operation. Install butyrate signs with metal backing for outdoor items.

D. Emergency Operation Signs

Install engraved laminate signs with white legend on red background with minimum 3/8-inch-high lettering for emergency instructions on power transfer, or other emergency operations.

END OF SECTION

SECTION 260519 WIRES AND CABLES LESS THAN 600 VOLTS

PART 1 - GENERAL

A. Description

This section describes materials and installation of wires and cables rated 600 volts and below.

B. Related Work Specified Elsewhere

1. General Electrical Requirements: 260500.

2. Grounding and Bonding: 260526.

3. Electrical Field Testing: 260524.

C. Submittals

1. Submit shop drawings in accordance with Section 260500.

2. Submit material list for each conductor type. Indicate insulation material, conductor material, voltage rating, manufacturer and other data pertinent to the specific cable, such as shielding, number of pairs, and applicable standards.

PART 2 - MATERIALS

A. Low-Voltage Building Wire

1. Conductor material shall be copper.

2. Low-voltage building wire for use at 600 volts or less shall be 600-volt insulated, Type XHHW or THWN, and rated for continuous operation at 75°C.

3. No. 12 AWG minimum conductor size for power and lighting circuits.

4. No. 14 AWG minimum conductor size for control circuits.

5. Conductors for lighting and receptacle circuits that are No. 10 AWG and smaller shall be solid. All other conductors shall be stranded.

B. Twisted-Shielded Cable

Single-pair cables shall be two No. 18 AWG and single triads shall be three No. 18 AWG stranded tinned-copper conductors individually insulated with fully color-coded PVC rated at 600 volts; insulated conductors twisted together and shielded with a spiral-wound metal foil tape overlapped for 100% shielding. Outer jacket shall be PVC.

C. Grounding Conductors--Bare Copper

Refer to Section 260526 for bare copper grounding conductors.

D. Conductor Tags

Provide self-extinguishing heat-shrink individual or sleeved, nonmetallic, snap-on type. Grafoplast, Phoenix Contact, Thomas & Betts sleeve markers, or equal.

Alternatively provide adhesive-type markers. Brady, Thomas & Betts, or equal.

E. Plastic Adhesives

Plastic adhesives for color-coding and overall cold-shrink wrapping shall be 7-mil minimum thick, flame-retardant, weather-resistant tape, resisting abrasion, UL rays, moisture, alkalies, solvents, and acids. Adhesives shall meet the requirements of UL-510 and CSA C22.2.

F. Wire Splices and Terminations

Material for wire splices and termination are described in Part 3 of this section.

PART 3 - EXECUTION

A. Installation

1. Install wiring and cable in conduit and terminate unless otherwise noted.

2. To reduce pulling tension in long runs, coat cables with pulling compound recommended by the cable manufacturer before being pulled into conduits.

3. Remove debris and moisture from the conduits, boxes, and cabinets prior to cable installation.

4. Group conductors No. 1/0 and smaller in panelboards, cabinets, pull boxes, motor control centers, and switchboard wireways; tie with plastic ties; and fan out to terminals. Lace conductors No. 2/0 and larger with marline.

B. Identification

1. Color Coding of Low-Voltage Building Wire: Provide color coding throughout the entire network of feeders and circuits as follows:

Phase	240/120 Volts	208/120 Volts	480/277 Volts
Phase A	Black	Black	Brown
Phase B	Red	Red	Orange
Phase C	---	Blue	Yellow
Neutral	White	White	Gray
Ground	Green	Green	Green

2. Phase conductors No. 10 AWG and smaller and neutral/ground conductors No. 6 and smaller shall have factory color-coding with solid color insulation. Do not use onsite coloring of ends of conductors or apply colored plastic adhesives in lieu of factory color-coding. Larger conductors may have onsite application of colored plastic adhesives at ends of conductors and at each splice.

3. Control wires shall have colored insulation. Separate color codes for each wire shall be provided in each conduit that has up to seven wires. Conduits with more than seven wires shall have at least seven types of colored insulation.

4. Tagging of Conductors: Tag control wires and instrument cables in panels, pull boxes, wireways, and at control device. Tag control wires and instrument cables with same wire numbers as on the shop drawing submittals. Tag power wires in pull boxes and wireways where there is more than one circuit. Tag power conductors with motor control center or panelboard number and circuit numbers.

C. Low-Voltage Wire Splices

1. Solid Conductors: Use 3M "Scotchlok," Ideal "Super Nut," Buchanan B-Cap, or equal. Seal splices in underground handholes and pull boxes and in light poles with individual sealing packs of Scotchcast Brand 400 Resin , moisture-tight cold shrink cable splicing product with overall plastic adhesive, or equal.

2. Stranded Conductors No. 8 and Larger: Use T & B "Locktite" connectors, Burndy Versitaps and heavy-duty connectors, O.Z. solderless connectors, or equal.

3. Stranded Conductors No. 10 and Smaller: Use crimp connectors with tools by same manufacturer and/or UL listed for connectors of all stranded conductors.

4. Retighten bolt-type connectors 24 to 48 hours after initial installation and before taping. Tape connections made with noninsulated-type connectors with rubber-type tape, one and one-half times the thickness of the conductor insulation, then cover with Scotch 33 tape.

D. Wire Terminations

1. Terminate wires and cables at each end.

2. Provide ring tongue, nylon- or vinyl-insulated copper crimp terminals for termination on screw-type terminals, except for light switches and receptacles. Utilize installation tools recommended by the crimp manufacturer.

3. Terminal lugs shall be UL listed and of the copper compression type, electro-tin plated. Provide color-coded system on terminal and die sets to provide the correct number and location of crimps. Permanent die index number shall be embossed on completed crimp for inspection purposes.

4. Tighten screws to the value recommended by the manufacturer.

E. Field Tests

Refer to Section 260524.

END OF SECTION

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SECTION 260524 ELECTRICAL FIELD TESTING

PART 1 - GENERAL

A. Description

This section includes field testing, cleaning, adjusting, and lubrication of electrical equipment and wiring systems.

B. References

The following is a list of standards which may be referenced in this section:

1. American National Standards Institute (ANSI):

   a. C2, National Electrical Safety Code.

   b. C62.33, Standard Test Specifications for Varistor Surge-Protective Devices.

2. Institute of Electrical and Electronics Engineers (IEEE):

   a. 43, Recommended Practice for Testing Insulating Resistance of Rotating Machinery.

   b. 81, Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System.

   c. 118, Standard Test Code for Resistance Measurement.

   d. 400, Guide for Making High-Direct-Voltage Tests on Power Cable Systems in the Field.

3. National Electrical Manufacturers Association (NEMA):

   a. AB 4, Guideline for Inspection and Preventive Maintenance of Molded Case Circuit Breakers Used in Commercial and Industrial Applications.

   b. WC 7, Cross-Linked-Thermosetting-Polyethylene-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.

4. International Electrical Testing Association (NETA): ATS, Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.

5. National Fire Protection Association (NFPA):

   a. 70, National Electrical Code (NEC).

   b. 70E, Standard for Electrical Safety Requirements for Employee Workplaces.

C. Submittals

1. Submit schedules and sample copies of inspection forms in accordance with the General Provisions and Section 013300.

2. Administrative Submittals: Submit 30 days prior to performing inspections or tests:

a. Schedule for performing inspection and tests.

b. List of references to be used for each test.

c. Sample copy of equipment and materials inspection form(s).

d. Sample copy of individual device test form.

e. Sample copy of individual system test form.

f. Copies of all testing personnel's certifications.

3. Quality Control Submittals: Within 30 days after completion of test and prior to substantial completion of project, submit test or inspection reports and certificates for each electrical item tested.

4. Contract Closeout Submittals:

a. Operation and Maintenance Data:

(1) In accordance with Section 019310.

(2) After test or inspection reports and certificates have been reviewed by Owner's Representative and returned, insert a copy of each in operation and maintenance manual.

D. Quality Assurance

1. Testing Firm Qualifications:

a. Corporately and financially independent organization functioning as an unbiased "third party" testing authority.

b. Professionally independent of manufacturers, suppliers, and installers of electrical equipment and systems being tested.

c. Employer of engineers and technicians regularly engaged in testing and inspecting of electrical equipment, installations, and systems.

d. Supervising engineer accredited as Certified Electrical Test Technologist by National Institute for Certification of Engineering Technologists (NICET) or NETA and having a minimum of five years' testing experience on similar projects.

e. Technicians certified by NICET or NETA.

f. Assistants and apprentices assigned to project at ratio not to exceed two certified to one noncertified assistant or apprentice.

g. Professional electrical engineer registered in the state of California to provide comprehensive project report outlining services performed, results of such services, recommendations, actions taken, and opinions.

h. In compliance with OSHA Title 29, Part 1907 criteria for accreditation of testing laboratories or a full member company of NETA.

2. Test equipment shall have an operating accuracy equal to, or greater than, requirements established by NETA ATS.

3. Test instrument calibration shall be in accordance with NETA ATS.

E. Sequencing and Scheduling

1. Perform inspection and electrical tests after equipment has been installed.

2. Perform tests with apparatus de-energized whenever feasible.

3. Notify Owner's Representative at least 24 hours prior to performing tests on energized electrical equipment.

PART 2 - MATERIALS

Not used.

PART 3 - EXECUTION

A. General

1. Tests and inspection shall establish that:

a. Electrical equipment is operational within industry and manufacturer's tolerances.

b. Installation operates properly.

c. Equipment is suitable for energization.

d. Installation conforms to requirements of contract documents and NFPA 70, NFPA 70E, and ANSI C2.

2. Perform inspection and testing in accordance with NETA ATS, industry standards, and manufacturer's recommendations.

3. Set, test, and calibrate protective relays, circuit breakers, and other applicable devices as required to coordinate with next upstream and downstream devices.

4. Adjust mechanisms and moving parts for free mechanical movement.

5. Adjust adjustable relays and sensors to correspond to operating conditions or as recommended by manufacturer.

6. Verify nameplate data for conformance to contract documents.

7. Realign equipment not properly aligned and correct unlevelness.

8. Properly anchor electrical equipment found to be inadequately anchored.

9. Tighten accessible bolted connections, including wiring connections, with calibrated torque wrench to manufacturer's recommendations or as otherwise specified.

10. Clean contaminated surfaces with cleaning solvents as recommended by manufacturer.

11. Provide proper lubrication of applicable moving parts.

12. Inform Owner’s Representative of working clearances not in accordance with NFPA 70.

13. Investigate and repair or replace:

    a. Electrical items that fail tests.

    b. Active components not operating in accordance with manufacturer's instructions.

    c. Damaged electrical equipment.

14. Electrical Enclosures:

    a. Remove foreign material and moisture from enclosure interior.

    b. Vacuum and wipe clean enclosure interior.

    c. Remove corrosion found on metal surfaces.

    d. Repair or replace, as determined by Owner’s Representative, door and panel sections having dented surfaces.

    e. Repair or replace, as determined by Owner’s Representative, poor fitting doors and panel sections.

    f. Repair or replace improperly operating latching, locking, or interlocking devices.

    g. Replace missing or damaged hardware.

15. Finish:

    a. Provide matching paint and touch up scratches and mars.

    b. If required due to extensive damage, as determined by Owner’s Representative, refinish the entire assembly.

16. Replace fuses and circuit breakers that do not conform to size and type required by the contract documents.

B. Switchboard Assemblies

This subsection applies to equipment specified under 262410 and 262913.

1. Visual and Mechanical Inspection:

    a. Insulator damage and contaminated surfaces.

    b. Proper barrier and shutter installation and operation.

    c. Proper operation of indicating devices.

    d. Improper blockage of air-cooling passages.

e. Proper operation of drawout elements.

f. Integrity and contamination of bus insulation system.

g. Check door and device interlocking system by:

(1) Closure attempt of device when door is in open position.

(2) Opening attempt of door when device is in on position.

h. Check nameplates for proper identification of:

(1) Equipment title and tag number with latest single-line diagram.

(2) Circuit breaker.

i. Verify that fuse and circuit breaker ratings, sizes, and types conform to those specified.

j. Check bus and cable connections for high resistance by low resistance ohmmeter and calibrated torque wrench applied to bolted joints.

(1) Ohmic value to be zero.

(2) Bolt torque level in accordance with NETA ATS, Table 10.1, unless otherwise specified by manufacturer.

k. Verify performance of each control device and feature.

l. Control Wiring:

(1) Compare wiring to local and remote control and protective devices with elementary diagrams.

(2) Proper conductor lacing and bundling.

(3) Proper conductor identification.

(4) Proper conductor logs and connections.

m. Exercise active components.

n. Perform phasing check to ensure proper bus phasing from each source.

2. Electrical Tests:

a. Insulation Resistance Tests:

(1) Applied megohmmeter d-c voltage in accordance with NETA ATS, Table 7.1.1.

(2) Each phase of each bus section.

(3) Phase-to-phase and phase-to-ground for one minute.

(4) With breakers open.

(5) With breakers closed.

(6) Control wiring except that connected to solid-state components.

(7) Insulation resistance values equal to, or greater than, ohmic values established by manufacturer.

b. Control Wiring:

(1) Apply secondary voltage to control power and potential circuits.

(2) Check voltage levels at each point on terminal boards and each device terminal.

c. Operational Test:

(1) Initiate control devices.

(2) Check proper operation of control system in each section.

C. Low-Voltage Cables, 600 Volts Maximum

This subsection applies to Section 260519.

1. Visual and Mechanical Inspection:

a. Inspect each individual exposed power cable for:

(1) Physical damage.

(2) Proper connections in accordance with single-line diagram.

(3) Cable bends not in conformance with manufacturer's minimum allowable bending radius where applicable.

(4) Color coding conformance with specifications.

(5) Proper circuit identification.

b. Inspect mechanical connections for:

(1) Proper lug type for conductor material.

(2) Proper lug installation.

(3) Bolt torque level in accordance with NETA ATS, Table 10.1, unless otherwise specified by manufacturer.

c. Inspect shielded instrumentation cables for:

(1) Proper shield grounding.

(2) Proper terminations.

(3) Proper circuit identification.

d. Inspect control cables for:

(1) Proper termination.

(2) Proper circuit identification.

e. Cables Terminated Through Window Type CTs: Verify that neutrals and grounds are terminated for correct operation of protective devices.

2. Electrical Tests for Conductors No. 12 and Larger:

a. Insulation Resistance Tests:

(1) Utilize 1,000-volt d-c megohmmeter for 600-volt insulated conductors.

(2) Test each conductor with respect to ground and to adjacent conductors per IEEE 118 procedures for one minute.

(3) Evaluate ohmic values by comparison with conductors of same length and type.

(4) Investigate values less than 50 megohms.

b. Continuity test by ohmmeter method to ensure proper cable connections.

D. Molded and Insulated Case Circuit Breakers

This subsection applies to Sections 262410, 262419, and 262913.

1. General: Inspection and testing applies to all circuit breakers and motor circuit protectors unless otherwise specified.

2. Visual and Mechanical Inspection:

a. Proper mounting.

b. Proper conductor size.

c. Feeder designation according to nameplate and single-line diagram.

d. Cracked casings.

e. Connection bolt torque level in accordance with NETA ATS, Table 10.1.

f. Operate breaker to verify smooth operation.

g. Compare frame size and trip setting with circuit breaker schedules or single-line diagram.

h. Verify that terminals are suitable for 75°C rated insulated conductors.

3. Electrical Tests:

a. Insulation Resistance Tests (100A and larger breakers and all motor circuit protectors):

(1) Utilize 1,000-volt d-c megohmmeter for 480- and 600-volt circuit breakers and 500-volt d-c megohmmeter for 240-volt circuit breakers.

(2) Pole-to-pole and pole-to-ground with breaker contacts opened for one minute.

(3) Pole-to-pole and pole-to-ground with breaker contacts closed for one minute.

(4) Test values to comply with NETA ATS, Table 10.2.

b. Contact Resistance Tests:

(1) Contact resistance in microhms across each pole.

(2) Investigate deviation of 50% or more from adjacent poles and similar breakers.

c. Primary Current Injection Test (for larger than 100A breakers) to Verify:

(1) Long-time minimum pickup and delay.

(2) Short-time pickup and delay.

(3) Ground fault pickup and delay.

(4) Instantaneous pickup by run-up or pulse method.

(5) Trip characteristics of adjustable trip breakers shall be within manufacturer's published time-current characteristic tolerance band, including adjustment factors.

(6) Trip times shall be within limits established by NEMA AB 4, Table 5-3.

(7) Instantaneous pickup value shall be within values established by NEMA AB 4, Table 5-4.

E. Instrument Transformers

This subsection applies to Sections 262419 and 262913.

1. Visual and Mechanical Inspection:

a. Visually check current, potential, and control transformers for:

(1) Cracked insulation.

(2) Broken leads or defective wiring.

(3) Proper connections.

(4) Adequate clearances between primary and secondary circuit wiring.

b. Verify mechanically that:

(1) Grounding and shorting connections have good contact.

(2) Withdrawal mechanism and grounding operation, when applicable, operate properly.

c. Verify proper primary and secondary fuse sizes for potential transformers.

2. Electrical Tests:

a. Current Transformer Tests:

(1) Insulation resistance test of transformer and wiring-to-ground at 1,000 volts d-c for 30 seconds.

(2) Polarity test.

b. Potential Transformer Tests:

(1) Insulation resistance test at test voltages in accordance with NETA ATS, Table 7.1.1 for one minute on:

(a) Winding-to-winding.

(b) Winding-to-ground.

(2) Polarity test to verify polarity marks or H1-X1 relationship as applicable.

c. Insulation resistance measurement on instrument transformer shall not be less than that shown in NETA ATS, Table 7.1.1.

F. Metering

This subsection applies to Section 262913.

1. Visual and Mechanical Inspection:

a. Verify meter connections in accordance with appropriate diagrams.

b. Verify meter multipliers.

c. Verify that meter types and scales conform to contract documents.

d. Check calibration of meters at cardinal points.

e. Check calibration of electrical transducers.

G. Grounding Systems

Testing for these systems is described under Section 260526.

1. Electrical Tests:

a. Insulation Resistance Tests:

(1) Applied megohmmeter d-c voltage in accordance with NETA ATS, Table 10.2.

(2) Bus section phase-to-phase and phase-to-ground for one minute on each phase.

(3) Contactor phase-to-ground and across open contacts for one minute on each phase.

(4) Starter section phase-to-phase and phase-to-ground on each phase with starter contacts closed and protective devices open.

(5) Test values to comply with NETA ATS, Table 10.2.

b. Control Wiring Tests:

(1) Apply secondary voltage to control power and potential circuits.

(2) Check voltage levels at each point on terminal boards and each device terminal.

(3) Insulation resistance test at 1,000 volts d-c on control wiring except that connected to solid-state components. Insulation resistance to be 1 megohm minimum.

c. Operational test by initiating control devices to affect proper operation.

2. Electrical Tests:

a. Perform resistance measurements through bolted connections with low-resistance ohmmeter, if applicable, in accordance with NETA ATS, Section 7.17.1 (Visual and Mechanical Inspection).

H. Engine-Generator

This subsection applies to Section 263212.

1. Visual and Mechanical Inspection:

a. Compare equipment nameplate data with drawings and specifications.

b. Inspect physical and mechanical condition.

c. Inspect correct anchorage and grounding.

2. Electrical and Mechanical Tests:

a. Test protective relay devices in accordance with NETA ATS, Section 7.9.

b. Perform phase-rotation test to determine compatibility with load requirements.

c. Functionally test engine shutdown for low oil pressure, overtemperature, overspeed, and other features as applicable.

d. Perform vibration baseline test. Plot amplitude versus frequency for each main bearing cap.

e. Conduct performance test in accordance with ANSI/NFPA 110, Section 5-13 (Installation Acceptance).

f. Verify correct functioning of governor and regulator.

3. Test Values:

a. Vibration levels shall be in accordance with manufacturer's published data.

b. Performance tests shall conform to manufacturer's published data and ANSI/NFPA 110.

I. Automatic Transfer Switch

This subsection applies to Section 263623.

1. Visual and Mechanical Inspection:

a. Compare equipment nameplate data with drawings and specifications.

b. Inspect physical and mechanical condition.

c. Confirm correct application of manufacturer's recommended lubricants.

d. Verify that manual transfer warnings are attached and visible.

e. Verify tightness of all control connections.

f. Inspect all bolted electrical connections for high resistance using one of the following methods:

(1) Use of low-resistance ohmmeter in accordance with NETA ATS, Section 7.22.3.2 (Electrical Tests).

(2) Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data or NETA ATS, Table 10.12.

(3) Perform thermographic survey in accordance with NETA ATS, Section 9.

g. Perform manual transfer operation.

h. Verify positive mechanical interlocking between normal and alternate sources.

2. Electrical Tests:

a. Perform a contact-resistance test.

b. Perform resistance measurements through all bolted connections with low-resistance ohmmeter, if applicable, in accordance with NETA ATS, Section 7.22.3.1 (Visual and Mechanical Inspection).

c. Perform insulation-resistance on each pole, phase-to-phase and phase-to-ground with switch closed and across each open pole for one minute. Perform tests in both source

positions. Test voltage shall be in accordance with manufacturer's published data or NETA ATS, Table 10.1.

d. Calculate polarization index.

e. Verify settings and operation of control devices.

f. Calibrate and set all relays and timers in accordance with NETA ATS, Section 7.9.

g. Perform automatic transfer tests:

(1) Simulate loss of normal power.

(2) Return to normal power.

(3) Simulate loss of emergency power.

(4) Simulate all forms of single-phase conditions.

h. Verify correct operation and timing of the following functions:

(1) Normal source voltage-sensing relays.

(2) Engine start sequence.

(3) Time delay upon transfer.

(4) Alternate source voltage-sensing relays.

(5) Automatic transfer operation.

(6) Interlocks and limit switch function.

(7) Time delay and retransfer upon normal power restoration.

(8) Engine cool down and shutdown feature.

3. Test Values:

a. Compare bolted connection resistance to values of similar connections.

b. Bolt-torque levels should be in accordance with NETA ATS, Table 10.12 unless otherwise specified by manufacturer.

c. Minimum insulation-resistance shall be in accordance with manufacturer's published data or NETA ATS, Table 10.1.

d. Microhm or millivolt drop values shall not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate any values that deviate from similar connections by more than 50% of the lowest value.

J. Test Values

1. Compare bolted connection resistance to values of similar connections.

2. Bolt-torque levels should be in accordance with NETA ATS, Table 10.12, unless otherwise specified by manufacturer.

3. Microhm or millivolt drop values shall not exceed the high levels of the normal range as indicated in the manufacturer's published data. If manufacturer's data is not available, investigate any values that deviate from similar connections by more than 50% of the lowest value.

END OF SECTION

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SECTION 260526 GROUNDING AND BONDING

PART 1 - GENERAL

A. Description

This section includes materials, testing, and installation of electrical grounding.

B. Related Work Specified Elsewhere

1. General Electrical Requirements: 260500.
2. Wires and Cables Less Than 600 Volts: 260519.

C. Submittals

1. Submit shop drawings in accordance with the Section 260500.
2. Submit material list for all grounding materials and equipment. Indicate size, material, and manufacturer.
3. Submit test results. Indicate overall resistance to ground and resistance of each electrode.

D. Performance Requirements

Grounding System Resistance:

1. Separately Derived Sources (as Defined by NEC 250) Grounding Electrode: 10 ohms.
2. Grounds Not Covered Above: 25 ohms.

PART 2 - MATERIALS

A. Ground Rods

Ground rods shall be copper-clad steel, 3/4 inch in diameter, minimum 10 feet long, with hardened steel points.

B. Connections

1. Ground Clamps: Clamps for connection of ground wire to ground rod shall be bronze.
2. Exothermic Connections: Provide Cadweld or equal.

C. Conductors

1. Equipment Ground: Conductors shall be low-voltage building-wire type as specified in Section 260519.
2. Bare Copper Conductors: Annealed bare copper, conforming to ASTM B 3 and B 8.

PART 3 - EXECUTION

A. Ground Electrode

Install a bare copper ground wire between the newly installed ground rods and ground well and connect it to the generator enclosure with a jumper, as shown on the drawings.. Bring one end of the ground wire from the generator enclosure to the ground bus within the service distribution board.

Provide a detectable warning tapes 12” above electrodes that run between buildings and or structures.

Equipment Grounding

1. Connect the ground bus of the generator to the ground bus within the main service distribution panel with a grounding conductor.

2. Ground raceways and noncurrent-carrying parts of electrical equipment in accordance with NEC Article 250.

3. Additionally, all circuits shall carry one ground conductor for equipment grounding. Ground conductor shall be in excess of grounding through the metallic conduit system.

B. Ground Test Well

Provide a handhole and ground rod as detailed in the drawings to aid in performing ground testing and connecting additional ground rods if required by the test results. Connect ground wire from ground rod to main service switchboard or motor control center ground bus as shown in the drawings.

C. Connections

Exothermic weld all underground connections.

D. Tests

Before making connections to the ground electrode, measure the resistance of the electrode to ground using a ground resistance tester specifically designed for ground resistance testing. Perform testing in accordance with test instrument manufacturer's recommendations using fall-of-potential method. Perform the test not less than two days after the most recent rainfall and in the afternoon after any ground condensation (dew) has evaporated. If a resistance less than the performance requirements is not obtained, provide a ground rod driven 6 inches below grade spaced 10 feet away from the ground well and connect to ground well bus with No. 4 AWG bare copper wire and repeat the test. If the performance requirements are still not obtained, inform the Owner for resolution.

END OF SECTION

SECTION 260534 CONDUITS, BOXES, AND FITTINGS

PART 1 - GENERAL

A. Description

This section includes material, installation, and testing for conduit, boxes, fittings, terminal boxes, and cabinets.

B. Related Work Specified Elsewhere

1. Trenching, Backfilling, and Compacting: 312316.

2. General Electrical Requirements: 260500.

3. Grounding and Bonding: 260526.

C. Submittals

1. Submit shop drawings in accordance with Section 260500.

2. Submit product data for the following:

a. Conduit and fittings for each type specified.

b. Boxes and cabinets.

D. Quality Control

1. NEMA Compliance: Comply with NEMA standards pertaining to conduits and components.

2. UL Compliance and Labeling: Comply with requirements of UL standards pertaining to electrical conduits and components. Provide conduits and components listed and labeled by UL.

PART 2 - MATERIALS

A. Rigid Steel Conduit and Fittings

1. Rigid Steel Conduit and Fittings: Conform to ANSI C80.1, NEMA RN2, and UL-6, hot-dipped galvanized after threading. The zinc coating shall be flexible and shall not crack during bending.

2. Fittings:

a. Locknuts: Steel or malleable iron.

b. Bushings: Threaded type, steel or malleable iron, with 105°C rated plastic insulated throat. Plastic bushings with a temperature rating of 105°C may be used for conduits 1 inch and smaller.

c. Box Connectors for Damp and Wet Locations: Provide a watertight threaded hub on enclosure consisting of sealing fitting with tapered conduit thread, neoprene O-ring, and 105°C rated insulating throat with grounding and bonding lug.

d. Couplings: Threaded, hot-dipped galvanized after fabrication.

3. Long-Radius Elbows (90 Degrees):

Conduit Size (inches)	**Minimum Radius (inches)**
3/4 through 1-1/4	12
2 and 2-1/2	15
3 and 3-1/2	18
4	30
5	36

B. PVC-Coated Rigid Steel Conduit and Fittings

1. Conduit:

a. All conduits, prior to coating, shall conform to ANSI C80.1 and UL-6. Conduits shall be hot-dipped galvanized inside and out with hot galvanized threads.

b. The zinc surface shall be treated prior to coating to enhance the bond between metal and plastic.

c. Both interior and exterior of the conduit shall be coated with an epoxy acrylic primer of approximately 0.5-mil thickness.

d. The exterior coating shall be applied by dipping in liquid plastisol or other equal method that will produce a finished product conforming to NEMA 5-19-1986.

e. The thickness of the PVC coating shall be a minimum of 40 mils the full length of the conduit except the threads.

f. The bond between the PVC coating and the conduit surface shall be greater than the tensile strength of the plastic.

g. A chemically cured urethane coating of a nominal thickness of 2 mils shall be applied to the interior of all conduits.

h. The conduit shall be bendable without damage to the PVC or urethane coatings.

i. Threads shall have an added protection of a 2-mil clear urethane coating.

j. The PVC-coated rigid galvanized steel conduit shall be certified and authorized to apply the ETL verification mark “ETL Verified to PVC-001.” ETL certified to Intertek ETL SEMKO High-Temperature H2O PVC Coating Adhesion Test Procedure.

k. Test results shall be available to confirm coating adhesion under the following conditions:

(1) Conduit immersed in boiling water with a minimum mean time to adhesion failure of 24 hours (ASTM D 870).

(2) Conduit and conduit bodies' exposure to 150°F and 95% relative humidity with a minimum mean time failure of seven days (ASTM 1511).

2. Fittings:

a. Fittings and elbows shall be coated similar to the conduits.

b. A loose coupling shall be furnished with each length of conduit. A PVC coating shall be bonded to the outer surface of the coupling, and a PVC sleeve equal to the outside diameter of the uncoated conduit shall extend beyond both ends of the coupling approximately one pipe diameter or 2 inches whichever is smaller. The wall thickness of the sleeve shall be the same as the plastic coating on the pipe.

c. The PVC coating on the coupling shall be ribbed to enhance installation.

d. All hubs shall have PVC sleeves equal to those on the couplings.

e. All screws on Form 8 fittings shall be of stainless steel with encapsulated plastic heads.

f. All U bolts and RA clamps shall be sized to fit conduit, and the nuts shall be encapsulated in plastic.

g. Fittings shall otherwise be same as specified for rigid steel.

h. Elbows or bends exceeding 45 degrees shall be PVC coated and shall be of the same dimensions as specified for rigid steel long-radius elbows.

i. Conduit bodies, where applicable, shall be Form 8 with a tongue-in-groove (V-seal) gasket to effectively seal out corrosive elements.

3. Conduits and fittings shall conform to NEMA RN-1 and shall be manufactured by Ocal, Robroy, Perma-cote, KorKap, or equal.

C. Rigid Nonmetallic Conduit (PVC) and Fittings

1. Conduit: PVC Schedule 40, 90°C rise rating, conforming to NEMA TC-2 Type EC-40 and UL-651.

2. Long-Radius Elbows (90 Degrees): Rigid PVC-coated conduit or PVC Schedule 80 conduit of the same dimension as specified for steel conduit.

3. Couplings, Adapters, Bell Ends, Expansion Couplings, Elbows, and Turns of 30 Degrees: Factory-made in accordance with NEMA TC-2 and TC-3.

4. Joint Cement: As recommended by manufacturer as suitable for the climate, furnished with instructions to achieve watertight joints.

5. Manufacturers: Carlon, Condux, or equal.

D. Electrical Metallic Tubing (EMT) and Fittings

1. Conduit: Steel with corrosion-resistant coating, ANSI C80.3.

2. Couplings: Compression type.

3. Box Connectors: Compression type with 105°C rated insulated throat.

E. Flexible Metallic Conduit and Fittings

1. Conduit: Zinc-coated steel, conforming with ANSI C33.92 and UL-1, UL listed for grounding without a bonding conductor.

2. Fittings:

a. Conform to ANSI C33.92, UL listed for grounding.

b. Material: Steel or malleable iron, zinc plated, with 105°C insulated throat and grounding and bonding lugs.

F. Liquidtight Flexible Metal Conduit and Fittings

1. Conduit: Steel, UL-360 listed, PVC jacketed. An additional neoprene coating for conduits to be used in corrosive locations shall be provided.

2. Fittings:

a. Conform to ANSI C33.84, UL listed for use with the conduit.

b. In sizes 1-1/4 inches and less, UL listed for grounding.

c. Made of steel or malleable iron, zinc plated, 105°C insulated throat, grounding and bonding lug.

G. Conduit Bodies

1. Provide types, shapes, and sizes to suit individual applications. Provide matching gasketed covers, secured with at least two captive corrosion-resistant screws.

2. Bodies connecting to rigid conduit shall be of the same material and material coating as the conduit, with metal threaded hubs. Provide with threaded covers or gasketed covers secured with at least two corrosion-resistant captive screws.

3. Bodies connecting to nonmetallic conduit shall be nonmetallic conduit bodies conforming to UL-514B.

4. Connect bodies to electrical metallic tubing with compression-type EMT connections.

H. Specialty Conduit Fittings

1. Expansion/Deflection Fittings for Rigid Metal Conduit: Weatherproof with an internal bonding arrangement. Provide for 3/4-inch movement in all directions. Where used for angular movement, allow for a 30-degree deflection from normal in any direction.

2. Cable Supports for Conductors in Vertical Conduit Risers: Cable support plugs in special conduit fitting, O-Z/Gedney Type S, Crouse Hinds CGBS series, or equal.

3. Expansion Fittings for Rigid Nonmetallic Conduit: O-ring type with at least two rings, allowing for a minimum conduit movement of 6 inches.

I. Outlet Boxes

1. Concealed and Flush-Mounted Boxes:

a. Galvanized steel of gang sizes and as required by code. Do not use sectional boxes for multigang applications.

b. Receptacle Device Boxes: 4 by 4 by 1.5 inches with:

(1) Plaster ring for plaster and drywall construction.

(2) Square-cornered tile-type rings for exposed masonry wall construction.

(3) Square-cornered tile-type covers with ribs or extensions for casting in concrete.

2. Exposed Boxes:

a. Cast iron or aluminum, with threaded hubs.

b. Conduit bodies may be used instead of boxes except where boxes contain devices.

c. Outlet boxes connecting to PVC-coated rigid conduit shall be of the same material and material coating as the conduit, with metal threaded hubs. Provide with gasketed covers secured with at least two corrosion-resistant capture screws.

J. Junction and Pull Boxes, and Enclosures

1. Provide factory-made standard sizes, and shop fabricate when nonstandard size boxes are shown or are required. Comply with UL and NEMA standards.

2. NEMA 1: Sheet steel, hot-dipped galvanized after fabrication. Finish with one coat of metal primer and one coat of primer sealer.

3. NEMA 1 AL: Type 5052 H-32 aluminum. Provide continuous hinges and clamp covers of Type 304 stainless steel.

4. NEMA Type 4X: Type 316 stainless steel or fiberglass, with gasketed covers and Type 316 stainless steel bolts or screws.

5. NEMA 4: Code gauge steel, hot-dipped galvanized after fabrication. Provide cover with Type 303 stainless steel bolts.

6. NEMA 12: Code gauge steel, hot-dipped galvanized after fabrication. Provide continuous hinged cover and three-point latch or Type 303 stainless steel bolts and clamps.

7. Provide terminal junction boxes with terminal strips or terminal blocks with a separate connection point for each conductor entering or leaving the box. Provide 25% spare terminal points.

K. Conduit Sealant

1. Moisture Barrier Types: Sealant shall be a nontoxic, nonshrink, nonhardening, putty-type hand-applied material providing an effective barrier under submerged conditions.

2. Fire-Retardant Types: Fire stop material shall be a reusable, nontoxic, asbestos-free, expanding, putty-type material with a three-hour rating in accordance with UL-35L4.

3. ents.

PART 3 - EXECUTION

A. Conduit Usage Schedule

Install the following types of conduits and fittings in locations listed, unless otherwise noted in the drawings. Definitions and requirements of NEC apply unless specifically modified below. Refer to Section 260500 for definitions of locations.

1. Exterior, Exposed (all locations):

   a. Material: PVC-coated rigid steel conduit.

   b. Minimum Size: 3/4 inch.

2. Interior, Exposed, Dry Locations (non-corrosive):

   a. Material: Rigid steel conduit or EMT (the latter may be used over 8 feet above finished floor only).

   b. Minimum Size: 3/4 inch.

3. Interior, Exposed, Damp or Corrosive Locations:

   a. Material: PVC-Coated Rigid steel conduit.

   b. Minimum Size: 3/4 inch.

4. Embedded in Concrete above grade:

   a. Material: Rigid steel conduit

   b. Minimum Size: 3/4 inch.

5. Embedded in Concrete on grade or below grade level:

   a. Material: Galvanized Rigid Steel conduit

   b. Minimum Size: 3// inch.

6. Embedded in Concrete:

   a. Material: Rigid steel conduit.

   b. Minimum Size: 3/4 inch.

7. In Earth, Below Concrete Slabs:

   a. Material: Rigid nonmetallic conduit (PVC).

b. Minimum Size: 3/4 inch.

c. Conduit Stub-Ups: Provide PVC-coated rigid steel conduit long-radius elbows for stub-ups which connect to underground rigid PVC conduit. Extensions from elbows above grade shall be PVC-coated rigid steel conduit for 6” minimum above grade. Stub-ups within free standing electrical gear may be rigid PVC conduit.

8. Final Connections to Instruments:

a. Material: Liquid-tight flexible conduit. Use type with additional neoprene protective cover in corrosive locations.

b. Minimum Size: 3/4 inch.

c. Length of liquidtight flexible conduit shall be 5 feet or less, unless field conditions require longer lengths.

9. Connections to Recessed Lighting Fixtures:

a. Material: Flexible conduit.

b. Minimum Size: 3/4 inch.

10. Corrosive Locations:

a. Material: PVC-Coated Rigid steel conduit.

b. Minimum Allowable Size: 3/4 inch.

11. Interior, Concealed, Dry Locations: Typical for spaces above suspended ceilings, concealed in interior stud and masonry partitions:

a. Material: Electrical metallic tubing or rigid steel conduit.

b. Minimum Size: 3/4 inch.

B. Junction, Pull Boxes, and Enclosures--Usage Schedule

Install the following type of boxes, and enclosures in locations listed, unless otherwise noted in the drawings:

1. Exterior: 4X.

2. Corrosive areas: 4X

3. Interior, Dry: NEMA 1 or 12.

4. Interior, Damp: 4X.

C. Conduit Fill

For runs that are not sized in drawings, compute the maximum conduit fill using NEC requirements for Type THW conductors (larger if applicable), although the actual wiring may be with types of conductors having smaller cross-sections.

D. Conduit Installation, General

1. Install conduit exposed above finished floor or grade, except in Administration Building, where they shall be concealed.

2. Run exposed conduits parallel and perpendicular to surface or exposed structural members and follow surface contours as much as practicable to provide a neat appearance.

3. Make right-angle bends in conduit runs with long-radius elbows or conduits bent to radii not less than those specified for long-radius elbows.

4. Make bends and offsets so that the inside diameter of conduit is not effectively reduced. Unless otherwise indicated, keep the legs of a bend in the same plane and the straight legs of offsets parallel.

5. Cap all conduits immediately after installation to prevent entrance of foreign matter.

6. Do not use diagonal runs except when specifically noted in the drawings.

7. Route exposed conduit to preserve headroom, access space, and work space.

8. Treat threaded joints of rigid steel conduit with T&B "Kopr-Shield" before installing fittings.

9. For PVC-coated rigid conduits, use manufacturer's recommended installation tools and recommendations. The installer shall be certified by the manufacturer before installation can proceed.

10. Conduit Terminations:

    a. Terminate conduits with locknuts and bushings except where threaded hubs are specified.

    b. Install conduits squarely to the box and provide one locknut outside the box and one locknut and bushing inside the box.

    c. Install locknuts with dished side against the box.

    d. When terminating in threaded hubs, screw the conduit or fitting tight into the hub so that the end bears against the fire protection shoulder.

    e. When chase nipples are used, install conduits and coupling square to the box and tighten the chase nipple leaving no exposed threads.

11. Install exposed, parallel, or banked conduits together. Make bends in parallel or banked runs from the same centerline so that the bends are parallel. Factory elbows may be used in banked runs only where they can be installed parallel.

12. Provide expansion fittings for conduits crossing expansion joints in structures and in straight runs exceeding 100 feet.

13. Conduit runs are shown schematically. Supports, pull boxes, junction boxes, and other ancillary equipment are not usually shown in drawings. If not shown, provide as required by NEC, except that there shall not be more than equivalent of three quarter bends (270 degrees) total between pull points. Provide additional boxes to permit pulling of wires without damage to the conductors or insulation.

14. Locations of conduit stub-ups shown in the drawings are schematic. Coordinate these locations with equipment served and with conduit space available for actual equipment being provided.

E. Requirements for Rigid Nonmetallic (PVC) Conduit

1. Comply with the installation provisions of NEMA TC2, except as modified below.

2. Make cuts with a fine tooth handsaw. For sizes 2 inches and larger, use a miter box or similar saw guide to assure a square cut.

3. Use factory-made couplings for joining conduit.

4. Cementing and joining operation shall not exceed 20 seconds. Do not disturb joint for 5 minutes, longer (up to 10 minutes) at lower temperatures. Make joints watertight. Joining procedure shall conform to detailed procedures of ASTM D 2855.

5. Install expansion fittings. Expansion fittings are required when the conduit is left exposed in trenches for a period of time during which the conduit's temperature can vary more than 2 degrees. Install expansion fittings near the fixed end of the run and 100 feet on center.

F. Conduit Sealing

1. Seal conduit entries with conduit sealant as follows:

a. When conduit leaves an area identified as corrosive.

b. Conduits exiting buildings and underground structures.

c. Where indicated in the drawings.

G. Grounding

1. Provide grounding in accordance with Section 260526.

2. Use grounding bushings for all conduits carrying a grounding conductor.

3. Provide a grounding conductor in flexible conduit; size conforming to NEC Article 250.

H. Conduits Embedded in Concrete and Below Slabs

1. Install conduits and sleeves passing through slabs, walls, columns, or beams so as not to impair the strength of construction. Secure conduit to prevent sagging or shifting during concrete pour.

2. Conduits larger than 1-1/2 inches in diameter may be embedded in structural concrete only after submittal and review of location and reinforcement details.

3. Conduits and sleeves may be installed without specific permission, provided:

a. They are 1-1/2 inches or less in diameter, are spaced not less than three diameters on centers, and conform to paragraph b or c below.

b. Conduits, including fittings, which are embedded within a column, do not displace more than 4% of the cross-sectional area on which structural strength is calculated.

c. Conduits and sleeves, embedded within a wall, slab, or beam, are not larger in the outside dimension than one-third the overall thickness of wall, slab, or beam in which they are embedded.

d. There is a minimum of 1-1/2 inches between the conduit and reinforcement for slab and wall penetrations.

4. Install conduits in slabs other than slabs-on-grade as close to the middle of the slabs as practical without disturbing the reinforcement. Outside diameter of the conduit shall not exceed one-third times the slab thickness. Do not space parallel runs of conduit closer than three diameters on centers, except at cabinet and outlet box locations.

5. Conduits shown in or under slab-on-grade construction shall be installed below the floor slab and under curing or dampproofing membranes. An exception may be made for conduit with an outside diameter not larger than 25% of the slab thickness, in which case, standards applying to slabs other than slab-on-grade may be used.

6. Install expansion fittings at expansion joints.

I. Conduit Supports

1. Support conduit at intervals and at locations as required by the NEC. Do not use perforated strap or plumber's tape for conduit supports.

2. In Steel Stud Construction: Tie conduit with 16-gauge galvanized annealed wire.

3. Conduit on Concrete or Masonry: Use one-hole clamps with pipe spacers (clamp backs) or preformed channels. Anchor with metallic expansion anchors and screws or from preset inserts. Use preset inserts in prestressed concrete. On plaster or stucco, use one-hole straps with toggle bolts.

4. Supports, hangers, preformed channels, and clamps:

a. Dry, Damp or Wet Locations: Type 304 stainless steel, PVC-coated steel, or fiberglass.

b. Corrosive Locations: PVC-coated steel, or fiberglass

5. Fiberglass support system shall be as manufactured by Omnistrut, Click, or equal. Bolts and nuts shall be Type 304 stainless steel.

J. Conduit Penetrations

1. Unless otherwise indicated, dry-pack around conduits which penetrate concrete walls, floors, or ceilings.

2. Conduits passing through concrete slabs and through structural beams shall be sleeved, except where sealing and expansion/deflection fittings are required. Pack sleeves through floors and fire-rated walls with fire-rated packing. Nonrated penetrations may be packed with nonshrink grout.

3. Maintain the integrity of all damp-proofing and waterproofing membranes that are penetrated by conduits and boxes.

4. Buried conduits shall penetrate surfaces at right angle.

K. Damaged Conduit

1. Repair or replace conduit damaged during or after installation.

2. Replace crushed or clogged conduit or any conduit whose inner surface is damaged or not smooth.

3. Repair cuts, nicks, or abrasions in the zinc coating of galvanized conduit with galvanizing repair stick, Enterprise Galvanizing "Galvabra" or equal.

4. Repair cuts, nicks, or abrasions in the PVC coating of PVC-coated conduit with the manufacturer's recommended PVC material and build up surface thickness to match the factory coating thickness and color.

L. Empty Conduit

1. Provide 200-pound strength pull cord in all empty conduits or cord of higher strength if so required by the utility for which the conduit is intended.

2. Provide a waterproof label on each end of the pull cords to indicate the destination of the other end.

M. Outlets for General Wiring

1. Use multigang boxes and device plates where several devices are located in the same general area. Obtain back box requirements for systems provided under other sections and provide them per those requirements.

2. Mount outlets for different conduit systems shown in the same wall area not more than 6 inches on center.

3. Locate switch boxes 4 inches from doorjamb. Verify rough-in dimensions for outlets occurring above counters, cabinets, mirrors, etc., to ensure that finished outlet clears all trim.

4. Rigidly support boxes for wall and ceiling outlets and finish flush and straight. Front edge shall be within 1/8 inch of finished surface and plumb within 1/8 inch.

5. Install outlets in exposed masonry and tile walls, with square corner boxes or standard boxes with square corner extensions that are sufficiently deep so that conduit offsets are not required. Saw cut openings in exposed masonry and tile walls with an opening tolerance of 1/8 inch on all sides, placing bottom of box at nearest masonry joint to specified mounting height. For other wall finishes, install with plaster or other rings. Do not activate any outlet unless these installation requirements are met.

6. No outlets shall be back-to-back. Place outlets in stud walls so that adjacent boxes facing to opposite sides are isolated by a stud.

7. Install outlets and boxes securely and support them substantially. In stud walls, use rigid bar hangers, attached to hanger with stud and nut. In ceilings, attach to building structure. Anchor boxes into masonry construction with one or more integral flanges.

8. Outlets shall be exposed mounted except in Administration Building, where they shall be concealed mounted, unless otherwise indicated, such as in the laboratory, where they shall be mounted on surface raceways.

N. Equipment Supports

Support wall-mounted junction boxes, pull box enclosures, and panels with Type 304 stainless steel preformed channels and Type 304 stainless steel concrete anchors.

O. Adjusting and Cleaning

Upon completion of installation of conduits and boxes, inspect interiors of conduits and boxes; clear all blockages; and remove burrs, dirt, and construction debris.

P. Conduit Identification

Identify each conduit using the conduit number shown in the drawings by means of a stamped brass tag at each end and at junction boxes, pull boxes, manholes, handholes, etc. Stencil all exposed conduits for identification at least once in each room.

Q. Junction and Pull Box Identification

1. Identify all exposed junction and pull boxes by installing labels on their covers. Identification shall include voltage and system type.

2. Identify all fire alarm system junction boxes by painting the covers red and attaching labels that identify the systems contained in the box and their operating voltage.

END OF SECTION

SECTION 260548 SEISMIC RESTRAINT FOR ELECTRICAL EQUIPMENT

PART 1 - GENERAL

A. Description

This section describes the requirements for furnishing and installing seismic restraint devices for electrical equipment.

B. Related Work Specified Elsewhere

When it applies, this section is referenced in other sections of the specifications.

C. Submittals

1. Submit shop drawings in accordance with the General Provisions and Section 013300.

2. Submit seismic anchoring calculations with equipment and raceway submittals. Calculations shall be performed by a licensed civil or structural engineer employed by the equipment manufacturer and registered in the state of California.

3. Submit equipment anchoring methods. Include anchoring locations, anchor types, and minimum anchor embedment depths. Anchors shall have ICC-approved anchorage values.

D. Project-Specific Criteria

1. Importance Factor, Ip: 1.5.

2. Risk Category: IV.

3. Seismic Design Category: D.

4. Site Class: D.

5. S_{DS}: 0.746.

6. S_{D1}: 0.406.

7. Ap and Rp per ASCE 7-16 Table 13.6-1.

PART 2 - MATERIALS

A. Seismic Design of Equipment

Equipment fabricated or assembled at manufacturers' premises shall be designed and constructed in such a manner that all portions, elements, subassemblies, and/or parts of said equipment and the equipment as a whole, including their attachments, shall have the capability of withstanding seismic forces specified under "Seismic Anchoring and Restraints" below.

B. Seismic Anchoring and Restraints

1. Equipment Anchors: Electrical equipment shall be securely anchored. Anchoring shall have the capability of withstanding seismic forces per Section 16 of the California Building Code and ASCE 7-16, Chapter 13.

2. Raceway Supports:

a. Seismically support raceway (conduit, cable tray, busway, etc.) of 2.5-inch inside diameter and larger and suspend 12 inches or more from the top of the raceway to the bottom of the support for the hanger. Raceway supports shall have the capability of withstanding seismic forces per the CBC and ASCE 7-16.

b. Provide Kin-Line seismic bracing system, Midland Ross superstrut seismic restraint system, Cooper B-Line Seismic Bracing System, or equal. Install per manufacturer's requirements.

PART 3 - EXECUTION

A. Equipment and Raceways

Install equipment anchors and raceway supports in accordance with the final shop drawing and manufacturer's recommendations. Properly torque all bolts to the required values.

END OF SECTION

SECTION 260573 ARC-FLASH STUDY

PART 1 - GENERAL

A. Description

This section describes the requirements for furnishing an arc-flash hazard analysis.

B. Submittals

Submit in accordance with the General Provisions and Section 013300.

PART 2 - MATERIALS

A. Arc Flash Label

1. Arc flash labels shall identify the following as a minimum:

   a. Flash Hazard Boundary: Threshold at which burn level exceeds 1.2 cal/cm^2.

   b. Calculated incident energy at indicated working distance (18 inches).

   c. Hazard risk category and personal protective equipment (PPE) description.

   d. Equipment rated voltage.

   e. Required electrical glove class.

   f. Shock hazard boundaries (based on equipment rated voltage).

   g. Location (name of board).

   h. Name of organization that performed the analysis and contact information.

2. Labels shall carry either a “DANGER” or “WARNING” header, depending on whether an accident will or can result in injury or death, as stated in ANSI Z534.4.f. Header shall also include the following: “QUALIFIED WORKERS ONLY – PPE REQUIRED.”

3. Labels shall carry a footer that reads “Warning: Changes in equipment settings or system configuration will invalidate the calculated values and PPE requirements.”

4. Labels shall be 6 inches long by 4 inches wide, die-cut and shall come on industrial-quality adhesive-backed vinyl.

PART 3 - EXECUTION

A. General

1. Utilize independent NETA-certified testing firm to perform study using commercially available computer software, such as Power Tools for Windows by SKM Systems Analysis, Inc.; ETAP by Operation Technology, Inc.; or equal.

2. Study shall be performed under the supervision of and signed by a registered professional electrical engineer.

3. The study shall include scope, results, comments, and suggestions. Evaluation procedures shall follow applicable ANSI, NEMA, IEEE, and UL standards.

4. Obtain referenced or required characteristics and data from pertinent equipment manufacturers and from serving utility company as applicable.

B. Arc-Flash Hazard Analysis and Equipment Labeling

Perform an arc-flash hazard analysis in compliance with the latest edition of NFPA 70E 110.8(B)(1) for the electrical equipment in accordance with Appendix D of NFPA 70E and IEEE 1584 to identify:

1. The arc-flash protection boundaries, defined in Article 130.3(A) as "an approach limit at a distance from exposed live parts within which a person could receive a second-degree burn if an electrical arc flash were to occur."

2. The shock hazard boundaries.

3. The PPE and protective clothing necessary, based on the incident energy present at the working distance for the task to be performed, as described in Article 130.3(B) and Article 130.7.

4. Switchboards, panelboards, industrial control panels, and individually mounted starters shall be included in the study and shall be provided with arc flash labels. Labels shall be provided for each section of switchboard. Arc flash study shall not exclude equipment exempted by NFPA 70(E) and IEEE 1585, which allow exclusion of equipment that operates at 240 volts maximum and is fed from a transformer smaller than 125 kVA.

C. Reevaluation of Analysis

Owner will have the right to request reevaluation of any part of the coordination and arc flash analysis to improve coordination or to reduce arc flash risk category or to eliminate cable protection inadequacy. Owner reserves the right to contact the individual who performed the study or to witness the actual reevaluation at the premises of the organization performing the study and shall be allowed to make suggestions. All of these services shall be provided at no extra cost.

D. Safety Training

An electrical safety training (based on the results of the arc flash study) shall be provided for up to 10 of the Owner's staff at project facility or Owner's headquarters. The Owner will provide a suitable classroom or conference room for such training.

END OF SECTION

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SECTION 263212 STANDBY ENGINE-GENERATOR

PART 1 - GENERAL

A. Description

This section describes replacing an existing 350KW diesel engine generator along with the existing automatic transfer switch with a new 350KW diesel engine, Tier 3 generator and a new automatic transfer switch. This section also describes materials, installation, and testing of the new diesel engine-generator set, new automatic transfer switch and associated equipment to be used for standby power in the event of a utility power failure.

B. Related Work Specified Elsewhere

1. General Electrical Requirements: 260500.

2. Protective Device Coordination Study: 260573.

3. Seismic Restraint for Electrical Equipment: 260548.

4. Electrical Field Testing: 260524.

5. Automatic Transfer Switch: 263623.

C. Standards

Construct equipment in accordance with the applicable requirements of the following standards:

1. NFPA 30, 37, AND 110

2. California Building Code Article 909

3. National Electrical Code (NEC).

4. American National Standards Institute (ANSI).

5. National Electrical Manufacturers Association (NEMA).

6. Institute of Electrical and Electronic Engineers (IEEE).

7. Insulated Cable Engineers Association (ICEA).

8. American Society for Testing and Materials (ASTM).

9. Underwriters' Laboratories, Inc. (UL) excluding generator and generator-mounted control panel.

D. Submittals

1. Submit shop drawings in accordance with the General Conditions and Section 013300.

2. Submit shop and installation drawings and catalog data for the following equipment. Show applicable ratings, sizes, materials, manufacturers and part numbers, and overall dimensions and weights.

    a. Itemized bill of material.

    b. Engine-generator base with anchor bolt sizes and layout. Submit anchor bolt material listing. Submit catalog data for vibration isolators and calculations for size and number of anchor bolts.

    c. Engine.

    d. Generator.

    e. Voltage regulator.

    f. Silencer with insulation.

    g. Base fuel tank.

    h. Control panel, generator mounted.

    i. Battery charger.

    j. Batteries.

    k. Jacket water heater.

    l. Weatherproof enclosure.

    m. Alternator windings anticondensation heaters.

    n. Fuel Monitoring System

3. Submit installation fact sheet giving fuel, coolant, lubricating oil, and exhaust and ventilation requirements.

4. Submit torsional vibration analysis.

5. Submit factory test report.

6. Submit verification of ability to meet emission requirements as required by local air control district (Kern County Air Pollution Control District – Kern County APCD) .

7. Submit a start-up inspection report signed by the engine manufacturer's authorized field service representative.

8. Provide an information copy of the standard engine inspection and maintenance service contract. The contract shall be for the complete system including all auxiliary support systems.

9. Provide necessary data to Contractor to perform a protective device coordination study. See Section 260573.

10. Submit copies of installation and permits obtained from the local air quality management authority.

11. Upon engine-generator delivery, submit operation and maintenance manuals describing the equipment including the following:

    a. Project-specific layout drawings of components specified.

    b. Project-specific narrative and tables for the following:

        (1) Replacement parts list.

        (2) Lubrication (each type, location, and frequency).

        (3) Common problems and troubleshooting.

        (4) Personnel safety/issues.

        (5) Listing of low-normal-high levels for all fluids, pressures, and temperatures.

        (6) Control panel and instruments.

    c. Control schematics, ladder diagrams, and interconnection drawings.

    d. Catalog cuts and technical manuals for system components.

    e. Copy of guarantees and warranties issued for the various items of equipment, showing dates of expiration.

    f. Copies of test results.

    g. Information copy of the standard engine inspection and maintenance service contract as described above. Service contract shall cover the complete system, including all auxiliary support systems.

    h. Marked tab dividers for each of the following sections:

        (1) List of equipment furnished for project with name, address, and telephone number of vendor.

        (2) List of serial numbers of equipment furnished.

        (3) A copy of shop drawings for mechanical, electrical, and instrument equipment in final form.

        (4) Manufacturer's operation and maintenance instructions and parts lists.

    i. Documentation of permit to construct/operate for the air quality management authority.

    j. Line out nonapplicable text and illustrations. The section of the manual on operation shall describe the functions and limitations of each component and its relationship to the system of which it is a part. Where several models, options, or styles are described, the manual shall identify the items actually provided.

    k. Provide complete operating and maintenance instructions for each item of equipment, setting forth a detailed, step-by-step procedure for starting, stopping, operating, and maintaining the entire system as installed. Include a schedule of recommended maintenance intervals.

E. Manufacturer's Services

Provide equipment manufacturer's services at the jobsite for the minimum labor days listed below, travel time excluded:

1. Two labor days to check the installation and advise during start-up, testing, and adjustment of the equipment.

2. One labor day to instruct the Owner's personnel in the operation and maintenance of the equipment. Submit operation and maintenance manuals prior to this instruction. The training program shall include a thorough explanation and training in general operating and maintenance procedures including troubleshooting. The class shall be limited to five students and shall be at the discretion of the Owner. All materials, books, and other aids shall be furnished by the Contractor for each student at no charge to the Owner. The training instruction shall be video recorded and provided to Owner for future reference.

F. Warranty

Equipment furnished under this section shall be guaranteed against defective parts or workmanship for a period of 24 months from date of acceptance by the Owner.

PART 2 - MATERIALS

A. Manufacturers

1. The engine, generator (alternator), generator control panel, and fuel tank unit shall be manufactured in the U.S. by manufacturers currently engaged in the production of such equipment. An authorized distributor maintaining a parts depot and service facility shall be located within a 200-mile radius of the jobsite. The engine and alternator shall be manufactured and assembled by the same company.

2. The engine-generator shall be manufactured by Caterpillar Inc., Cummins Inc., or equal.

B. Rating

The rating of the standby engine-generator shall be as listed below, based on operation of the set when equipped with all operating accessories, such as air cleaners, lubricating oil pump, fuel injection pump, radiator fan, and jacket water pump. The specified standby kw shall be for continuous electrical service during interruption of the normal utility source.

1. Standby kw: 350 (minimum).

2. Engine Speed: 1,800 rpm (maximum).

3. Voltage: 480/277 volts, 3 phase, 4 wire.

4. Frequency: 60 hertz.

5. Power Factor: 0.8.

6. Elevation: 2700 feet above sea level.

7. Maximum ambient temperature under shade: 50C.

8. Humidity at Maximum Temperature: 60%.

9. The momentary rms voltage dip shall not be greater than 35% of rated voltage when full load at rated power factor is applied to the generator.

10. The engine-generator shall be precertified by the Kern County air quality management authority to meet applicable rules and BACT.

11. The engine-generator shall be capable of starting and running the loads as per single line diagram. Maximum voltage dip shall be 20%. Provide oversized generator or engine-generator unit to comply with this requirement. Provide calculations showing this requirement.

C. Engine

1. General: The engine shall be the standard low-emission version of the product of the manufacturer, a current production model, and have the following features:

   a. Compression ignition.

   b. Two- or four-stroke cycle.

   c. Electronic fuel controller.

   d. Water cooled.

   e. Replaceable cylinder liners.

   f. Replaceable valve seat inserts.

   g. Turbocharged, aftercooled, retarded four degrees if required by the local air quality management authority.

   h. With or without aftercooler as required by the local air quality management authority.

   i. Capable of the rated output when operating on No. 2-D diesel fuel (ASTM D 975).

2. Provide the engine with the following accessories:

   a. Fuel, lube oil, and intake air filters.

   b. Intake air silencer, high frequency type or combination intake filter/silencer.

   c. Lube oil cooler, fuel cooler, radiator mounted.

   d. Fuel transfer pump.

   e. Flexible fuel lines.

   f. Engine-mounted water pump for jacket water and aftercooler.

   g. Coolant and oil drain valves extended to the edge of engine rails, with valve and cap.

3. Starting System:

a. Provide a d-c electric starting system with positive engagement drive. Minimum voltage shall be 24 volts.

b. Provide diesel-starting type lead-acid storage batteries. The batteries shall have sufficient capacity to provide for one-and-one-half-minute total cranking time without recharging and shall be 20-hour rated no less than 200 amp-hours at 24 volts. Provide a free-standing corrosion-resistant fiberglass battery box. Provide battery cables and replaceable connectors.

c. Provide a UL-listed, two rate, temperature-compensated current-limiting battery charger to recharge batteries automatically. Charger shall float at 2.17 volts per cell and equalize at 2.33 volts per cell. It shall include overload protection, silicon diode full wave rectifiers, voltage surge suppressors, digital d-c ammeter and volt-meter, and fused a-c input. A-C input voltage shall be 120 volts. Amperage output shall be no less than 20 amperes. Charger output shall be at least 25% greater than the auxiliary equipment power demand. Provide front panel LEDs indicating a-c good, float mode, fast charge mode, battery fault, charger fail, d-c high, d-c low, and a-c fail. Provide common dry contacts for remote indication of warning and failure.

d. Provide an adjustable isochronous governor of the electronic-hydraulic or all-electronic type with electrical speed sensing. Governor shall provide adjustable speed setting from 58- to 62-hertz adjustable speed regulation, adjustable load limit from 100% to 110% of unit rating, and shall also control the engine at recommended idle speed. The governor shall be capable of maintaining the frequency constant within ±0.5% for any constant load from no load to full generator rating. After a sudden load change of 25% of rated load, the governor shall reestablish stable operating conditions in not more than one and one-half seconds. Stable operation is defined as operation at a frequency that is constant within ±1% of rated frequency.

e. Install the electronic control portion of the governor in the generator local control panel. Governor shall be Woodward, Barber Colman, Caterpillar, or equal.

4. Lubrication System:

a. Attach a pressure-type lubricating system with gear-type oil pump and full flow oil filter to the engine. Filters shall be threaded spin-on type or can type with replaceable filter elements, conveniently located for servicing. Provide filters with a spring-loaded bypass valve to ensure oil circulation if filters are clogged.

b. Provide an oil drain with manual valve.

5. Engine-Mounted Fuel System:

a. Provide an engine-mounted fuel filter with replaceable elements, fuel pressure gauge, manual shutoff valve, and engine-driven positive displacement fuel pump.

b. Provide a water separator on the engine just ahead of the fuel filters to prevent condensation or other water present in the fuel from reaching the engine filters, pumps, or injectors. Construct of heat-resistant Lexan, with a perforated aluminum baffle, for easy viewing of the amount of water contained. Unit shall be DAHL 300 or equal.

c. Provide a return fuel cooler, as specified below.

6. Jacket Water Heater: Provide a UL-listed, unit-mounted thermal circulation-type water heater incorporating a self-contained thermostatic switch, controlled by the exit coolant temperature

from the heater to maintain engine jacket coolant to 90°F in an ambient temperature of 30°F. The heater shall be single phase, 60 hertz, 240 volts and connected to a 208V power source. Heater shall be Chromalox, Kim, Indeeco, or equal. Provide manual valves in the heater hoses to facilitate changing heating elements without draining the entire cooling system.

7. Safety Switches: Provide devices for indication and control of the following conditions at the generator control panel.

   a. Low oil pressure (prealarm).

   b. Low oil pressure for low and high idle (shutdown).

   c. Adjustable high water temperature (prealarm).

   d. Adjustable high water temperature (shutdown).

   e. Overspeed (shutdown). Overspeed trip and cranking termination shall be by a dual element electronic-type speed switch that operates on magnetic impulses from the flywheel ring gear or other engine-timed gear. Overspeed trip setting shall be 118% of synchronous speed. Use the low setting to automatically ensure continued engine cranking until the engine has reached 600 rpm, even if the oil pressure is up to an acceptable level at a lower speed.

   f. Emissions: Provide the engine with emission control equipment to ensure that gaseous (NOx, HC, and CO) exhaust emissions do not exceed the maximum levels established by the local air quality management authority.

   g. These maximum levels shall be at manufacturer's rated speed and load a measured by SAE-J177 and SAE-J-215 recommended practices.

D. Generator

1. General:

   a. The generator shall be a 3-phase, 60-hertz, single- or two-bearing, dripproof, rotating field, synchronous type, with 3-phase rotating armature brushless exciter. Generator shall be 6-lead winding with two-thirds pitch. Provide Class F or H insulation on the stator and rotor. Further protect both with 100% epoxy varnish impregnation and an overcoat of resilient epoxy asphalt insulating material to increase resistance to abrasive dust or sand, high humidity, and light acidic, oil, or salt-laden atmospheres, as well as prevent fungus growth.

   b. The generator mechanical design shall allow the set to withstand the effects of an across-the-line short circuit. Provide the generator with rotating surge suppressors that shunt overvoltages in the excitation system to ground. Provide busing and insulators as required to terminate generator and field cables.

   c. The wave form deviation factor of the line-to-line voltage at no load and balanced rated load at 0.80 power factor shall not exceed 5%. The rms of all harmonics shall be less than 3% and that of any one harmonic less than 2% at full rated load.

   d. Stator and rotor insulation shall be rated for a 130°C rise. Insulation class shall be 155°C. Generator efficiency shall be not less than manufacturer's highest efficiency rating for that kw rating class.

e. Provide a permanent magnet generator to provide excitation power isolated from load harmonics.

f. Conform to the applicable NEMA standards for motors and generators, MG-1. Base rating of generator on continuous operation at 0.80 power factor.

g. Provide 120V anticondensation heater for windings.

2. Regulator:

a. The voltage regulator shall be a solid-state, volts per hertz type with 3-phase sensing and shall maintain a constant and stable generator output voltage within -1% of nominal for all steady-state loads from no load to full load with isochronous speed control and ±2% with speed droop operation. A 5% variation in frequency and the effects of field heating shall not affect the unit's regulation performance. Provide stability and voltage range adjustments.

b. The manufacturer's regulator shall be a Basler Electric Company, Newage Stamford, Marathon, Caterpillar D.V.R. with RS422 port or equal.

c. A series boost circuit shall be included if required by the coordination study, to provide 300% rated current for 10 seconds under short-circuit conditions.

3. The alternator mechanical design shall allow the set to withstand the effects of an across-the-line short circuit. Provide the alternator with rotating surge suppressors that shunt overvoltages in the excitation system to ground. Provide busing and insulators to terminate generator and field cables.

E. Structural Steel Base

1. Mount the engine-generator on a structural steel base. Provide holes for mounting bolts. Provide the structural steel base with means for lifting the unit for shipment and installation. Clearly identify lift points and total weight and permanently mark on the base.

2. Provide a concrete pad. Anchor the steel base to the concrete pad with an anchorage system designed per Section 260548. Submit calculations that are stamped and signed by a civil or structural engineer registered in the state of California.

3. Isolate the structural steel base from the concrete pad by spring-type isolators with neoprene-jacketed precompressed molded fiberglass noise isolation pads, steel load plate, built-in leveling bolt, welded steel or cast housing, and high deflection steel springs. Isolators shall be Peabody Noise Control, Inc.; Kinetics brand, Type SM; or equal.

4. Anchor bolts for the engine-generator set bases shall be cast-in-place type with anchor bolt boots to be epoxy grouted after equipment installation.

5. Coat structural steel base per coating system described elsewhere in these specifications. Color of finish coat shall match the color of the engine and generator.

6. Provide a base-mounted fuel tank with spill basin, vents, vent extensions, fill connection, gauging, and ports for installation of leak sensors. Provide double-wall UL-listed subbase or integrated fuel storage tank with capacity to provide a minimum fully connected load running time of 24 hours or at minimum 300 gallon capacity. Construct the tank of steel. Mount the fuel tank and spill basin inside or below the steel base enclosure. Provide an automatic leak detection system in the space between the walls with audible and visible alarms. Provide fuel

level gauge. Provide dry contacts for low fuel level, high fuel level and fuel leakage. Fuel tank shall comply with UL 142.

F. Cooling System--Engine Mounted

1. Provide an engine-mounted radiator with blower-type fan sized to maintain full load operation continuously at the specified maximum ambient temperature. Equip the radiator with a 1-inch-wide duct adapter flange and low coolant level switch gauge. Airflow restriction from the radiator shall not exceed 0.5-inch water. Provide fan guard for maintenance personnel protection as required by CAL/OSHA.

2. Provide ductwork with flexible connection section between radiator duct flange and exhaust louver. Ductwork shall be Type 316 stainless steel sheets. Anchor ducts securely to the building and install so as to be completely free from vibration during engine operation. Brace and reinforce ducts with angles or other structural members. Internal ends of slip joints shall be installed in the direction of flow. Provide a flexible duct connection at the radiator flange.

3. Flexible connection shall be wire-reinforced glass fabric. The connection shall be rendered practically airtight.

4. Provide a coolant drain with readily accessible manual valve with piping extended for easy access and proper capture of waste coolant.

5. Provide an air-cooled return fuel cooler attached to the radiator with vibration isolators and factory piped with flexible hoses.

G. Exhaust System

1. Exhaust system shall consist of a silencer, flexible exhaust fitting, exhaust piping, insulation, and mounting hardware.

2. Provide a chamber-type industrial-grade silencer constructed of carbon steel, aluminized steel or 316 stainless steel with a baked on silicon-based coating rated for 1100°F minimum. Exhaust noise shall not exceed 85 dBA at 25 feet. Attenuation shall be greater than 20 dB for all frequencies above 63 hertz. Provide brackets, companion flanges, gaskets, and fasteners for mounting from ceiling of enclosure. Silencer shall be as manufactured by Universal, Nelson, Riley-Beaird, or equal.

3. Silencer and exhaust pipe size shall be sufficient to ensure that measured exhaust backpressure does not exceed the maximum limitations specified by the engine manufacturer.

4. Provide a seamless Type 316 stainless steel bellows-type flexible exhaust fitting at least 18 inches long.

5. Exhaust piping shall be carbon steel pipe. Provide flanged or welded-type fittings. Provide sufficient flanged fittings to permit the system to be entirely dismantled in sections. Use sweep elbows with a radius at least three times the pipe diameter.

6. Provide vertical Type 316 stainless steel discharge tailpipe. Cap with a counterbalanced raincap.

7. Cover the exhaust manifolds, turbochargers, and flexible exhaust fitting with heat-shielding material or thermal blankets provided by the engine supplier. Exterior surface temperatures

shall not exceed 200 degrees F. Install insulation so that it does not interfere with the functioning of the flexible exhaust fitting.

H. Fuel Supply System

1. Provide a base-mounted fuel tank in accordance with subsection on “Structural Steel Base” in this section.

I. Control Panel, Engine Mounted (Digital Type)

1. Demonstrate (by factory testing) that the panel can operate at ambient air temperatures up to 158°F and down to –40°F and that the panel operates normally while subjected to a rigorous vibration test.

2. The generator control panel shall be standard Caterpillar Electronic Modular Control Panel (EMCII+) or equal, consisting of full-featured power metering, protective relaying, simultaneous engine and generator parameter viewing, and expanded a-c metering. Engine and generator control, diagnostics, and operating information shall be accessible via the control panel and communications provided for remote access, control, and monitoring.

3. Fabricate housing from environmentally sealed die-cast aluminum that isolates and protects electrical components against failures caused by moisture and dirt contamination. Panel shall maintain metering accuracy from -40°C (-40°F) to 70°C (158°F).

4. Panel shall have electrical noise immunity of no less than 100 volts/meter. True rms sensing shall ensure a-c metering accuracy of 0.5% for a-c volts, amperes, and power parameters.

5. Unit shall be digital, 32-bit microprocessor-based eliminating the need for switches, meters, transducers, relays, and sensing units. Panel shall have full-featured power metering, keypad control for viewing generator set kw, kva, kvar, kwh, kvar-hours, percent rated power, and power factor.

6. Panel shall have programmable protective relaying, available as alarm and shutdown, to provide protection against undervoltage, overvoltage, underfrequency, overfrequency, overcurrent, and reverse power. Provide simultaneous viewing of engine and generator parameters with toggle between auto parameter scrolling and individual parameter display.

7. Simultaneous viewing of L-L voltages, phase current, or frequency shall be possible.

8. Communication module shall be supported by an open RS-232C architecture and shall support Modbus protocol.

9. Keypad Programmability:

   a. Keypad shall have programmability for logical parameter groups: a-c metering, protective relaying, engine monitoring.

      (1) Digital (LCD) Indication:

      a-c voltage (L-L and L-N)
      a-c amperes.
      kw (total and per phase).
      kva (total).
      kvar (total).
      kwh (total).

kvar-hr (total).
PF (average total and per phase).
Percent of rated (total).
Frequency.
d-c voltage.
Coolant temperature (60°F to 240°F).
Oil pressure (0 to 80 psi).
Oil temperature.
Fuel level.
rpm.
Hours run.
System diagnostics.

(2) Controls:

Auto start/stop.
Emergency stop.
Lamp test.
Cycle crank.
Voltage control.
Cooldown timer, adjustable.
Phase selector switch.
Load demand relay.
Spare relay – programmable.

(3) Enclosure:

NEMA 1, IP22.
Vandal door.

(4) Indicator Lights:

Low oil pressure, shutdown.
High coolant temperature, shutdown.
Overspeed, shutdown.
Overcrank, shutdown.
Emergency stop.
Fault shutdown.
Fault alarms.
Three spare lights/four spare inputs, used for battery charger, high/low/fail, customer programmable (shutdown or alarm).
Two spare alarm or fault LEDs.

(5) Protective Relaying:

(a) Programmable Relays:

Over/undervoltage.
Reverse power relay.
Over/underfrequency.
Overcurrent.

(b) Programmable for:

Alarm enable/disable.

Alarm threshold level.
Alarm time delay.
Shutdown enable/disable.
Shutdown threshold level.
Shutdown time delay.

(c) Set point values may be viewed with the engine running or stopped.

(d) Protective Devices:

Low coolant level alarm/programmed for shutdown.
Alarm modules - local (with horn and silence switch).
Frequency control.
Common warning alarm dry contact.
Shutdown contact.
Generator 'running' dry contact.
Generator 'auto' dry contact.

10. Provide control panel with anticondensation heater.

J. Remote Annunciation Panel.

Provide a remote annunciation panel which shall be installed in the controls building/Admin building. The panel shall receive all the control signals from the safety switches and all the generator status signals.

K. Main Line Circuit Breaker

Provide a 100% rated main line electronic RMS trip breaking type circuit-breaker, including the following adjustable trip features: Long-time pickup, short-time pickup, short delay time, instantaneous, sized in accordance with the NEC. Install on the generator in a NEMA 1 enclosure or in the generator control panel to function as a load circuit interrupting and protection device. It shall operate both manually for normal switching function and automatically during overload and short-circuit conditions. Circuit breaker shall trip free of the handle. The handle position, or a luminescent flag, shall indicate "off," "on," or "tripped" breaker positions. The trip unit for each pole shall have elements providing inverse time delay during overload conditions and instantaneous magnetic tripping for short-circuit protection. Insulated neutral terminals and a ground terminal shall be provided and marked. The circuit breaker shall meet standards established by UL, NEMA, and NEC. Do not use generator exciter field circuit breakers in lieu of a main line circuit breaker.

L. Sound Attenuation Enclosure

1. Provide a standard weatherproof enclosure to completely enclose the engine-generator, radiator, control panel, battery box, battery charger, fuel level indicating instrument, heaters, and other required equipment. Mount the engine silencer inside the enclosure, with a structural support for the silencer. Design the enclosure to prohibit the entrance of rodents, birds, snow, ice, and rain. The enclosure design shall permit continuous full load operation of the engine-generator with access doors closed. Provide adequate soundproofing to attenuate sound to 72 dB average at 21 feet from generator.

2. Provide fixed air intake and exhaust louvers.

3. Air intake louvers shall be side-wall mounted, with the majority of the opening located 2 feet or more above the concrete pad to prevent blockage by leaves, or debris. Louvers shall be steel, with 1/2-inch bird screen on inlet air louvers and stainless steel ball bearing louver pivot joints in cadmium-plated steel bearing races.

4. Construct enclosure of formed steel sheet, minimum 16-gauge walls and 14-gauge roof, and securely bolt to the engine-generator base. Provide at least two side (each side) and one rear gasketed, pan-type doors, with a minimum width of 28 inches each for access to control and service items. Doors shall have vertical piano hinges with minimum 1/4-inch stainless steel pins, three-point locking bar, and tumbler-type locking handles. Provide wall pipes with end cap flanges or lifting eyes in each end of the base to permit four-point lifting. The roof shall be reinforced and rigid enough to support the exhaust system. Provide a lockable, sealed cap for radiator fill access. Oil and coolant drain lines shall terminate outside the enclosure.

5. The entire unit, enclosure, and other equipment shall be completely installed, wired, and plumbed by the engine supplier prior to shipment to the installation site.

M. Torsional Vibration Analysis

Submit a torsional vibration analysis of the engine-generator combination, showing it free of harmful torsional vibration stresses within ±10% of its normal operating speed range, the natural frequency, critical speeds, relative amplitudes of angular displacement, and approximate nodal locations of the complete elastic system of the engine and driven equipment.

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N. Spare Parts

Provide a crated supply of spare parts as listed below:

Quantity	Item
1	Starter
1	Fuel pump
1	Water pump
6	Oil filters
1	Air filter
2	Complete sets of gaskets: Cylinder head Valve covers Side covers Oil filter
2	Complete sets of pulley drive belts

O. Factory Testing

1. Perform factory tests prior to shipment. Include the following.

2. Demonstrate proper operation of all safety devices. Conduct load tests utilizing resistive load banks as follows:

Load	Hours
1/2	1
3/4	1
Full	4

3. Record current, voltage, frequency, water temperature, and lube oil pressure every 15 minutes.

PART 3 - EXECUTION

A. Installation

1. Apply for and obtain permits and licenses pertaining to the local air quality management authority for the installation and operation of this equipment in the name of the Owner. Obtain permits prior to installation of the equipment.

2. Coordinate the construction of engine-generator set foundations, piping systems, and conduit stub-ups with the generator set manufacturer's written requirements. Foundation blocks, anchor bolt layouts, and piping and quantity and locations of conduit stub-ups may have to be modified from those shown in the drawings. Such work shall be at the Contractor's expense.

3. Anchor bolts for the engine-generator set bases shall be cast-in-place.

4. Ground the generator frame in accordance with the NEC.

B. Piping

1. Pitch horizontal runs of exhaust pipe away from the engine. Provide condensate traps with petcocks or valves at low spots in the exhaust system.

2. Extend the crankcase ventilator pipe from engine to discharge crankcase fumes outside the enclosure. Pipe size shall be as recommended by the generator set manufacturer to prevent excessive crankcase pressure. Provide condensate traps with petcocks at all low places in the pipe to collect oil condensate without blocking fumes passage.

C. Painting and Coating

1. Paint and coat per manufacturer’s standard practice.

2. Coat noninsulated carbon steel exhaust pipes and silencers with baked silicon-based coating rated 1100 degress F. Follow the paint manufacturer’s recommendations for curing the coating.

D. Start-Up and Field Testing

1. Fill the fuel tanks with No. 2-D diesel fuel complying with ASTM D 975. After field testing is complete, refill the tanks.

2. Fill the engine-cooling system with a solution of 25% by volume propylene glycol for freeze protection and 5% by volume of a borate-nitrite solution (NALCO 2000 or equal) to prevent rust and corrosion.

3. On completion of the installation, the initial start-up shall be performed by a factory-trained service representative of the engine supplier, who shall thoroughly inspect, operate, test, and adjust the equipment. The inspection shall include the soundness of all parts, the completeness of all details, the proper operation of all components with special emphasis on safety devices, the correctness of settings, proper alignments, and correct phase rotation to match other sources. Energize the jacket water heater 24 hours prior to the initial start-up.

4. Field tests shall be performed as required in NFPA 110, and shall include, but not be limited to the following:

   a. Simulate power failure by tripping the main breaker and demonstrate complete manual and automatic start, load, unload, and stop sequence of the engine-generator.

   b. Conduct a two-hour run utilizing maximum available load, but not to exceed generator full load rating.

   c. See Section 260524 for additional requirements.

5. A written operational report including start-up inspection and field tests, signed by the manufacturer's representative, shall be submitted to the Owner prior to acceptance.

E. Scheduled Oil Sampling

1. In order to forecast and minimize engine failure, the supplier of the equipment shall provide a quarterly (every three months) oil sampling analysis for a period of two years from date of acceptance. This scheduled oil sampling shall be of the atomic absorption spectrophotometry method as opposed to the spectographic analysis method and shall be accurate to within ±1 ppm for the following elements: lead, iron, chromium, copper, aluminum, and silicon. In addition, test the sample for the presence of water, fuel, dilution, and antifreeze.

2. Provide equipment needed to take oil samples in a kit at the time of acceptance. Include a sample gun kit, bottles, mailers, and written instructions.

3. Provide immediate notification by telephone or fax to the Owner when analysis results show any critical reading. If readings are normal, provide a report by mail showing that the oil quality is within established requirements.

4. This scheduled oil sampling program shall be available to the Owner at the supplier's normal rate, after the mandatory two years, and shall be continued thereafter at the Owner's option.

END OF SECTION

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SECTION 263623 AUTOMATIC TRANSFER SWITCHES

PART 1 - GENERAL

A. Description

This section includes materials and installation of automatic transfer switches as indicated and in compliance with Contract Documents.

B. References

1. National Fire Protection Association (NFPA):

   70: National Electrical Code (NEC).

2. National Electrical Manufacturers Association (NEMA):

   ICS 2: Industrial Controls and Systems Controllers, Contactors, and Overload Relays Rated 600 Volts.

3. Underwriters Laboratories (UL):

   1008: Automatic Transfer Switches.

C. Submittals

1. Submit the following shop drawings in accordance with Section 013300.

2. Submit shop drawings and manufacturers' product data in accordance with the requirements of Section 260500.

3. Submit manufacturer's descriptive data including ratings, circuit diagrams, dimensional data, conduit entry restrictions, and a list of accessories.

D. Operation and Maintenance Manuals

Submit operation and maintenance manuals in accordance with Section 260500.

E. Manufacturer's Services

Provide manufacturer's services at the jobsite for the minimum labor days listed below, travel time excluded:

1. Two labor days to check the installation and advise during start-up, testing, and adjustment of the transfer switch.

PART 2 - PRODUCTS

A. Transfer Switch

1. Transfer switch shall be open type and installed in a vertical section of a distribution board as shown in the drawings. Transfer switch shall have number of poles, amperage, and voltage

ratings as shown in the drawings. Withstand current rating shall not be less than 65,000 ampere rms symmetrical.

2. Switch shall be listed per UL 1008 as a recognized component for emergency systems and be rated for all classes of loads.

3. Transfer switch shall be electrically operated and mechanically held in each direction by a single operating mechanism momentarily energized from the source to which the load shall be transferred. Accomplish mechanical locking in each direction without the aid of latching solenoids, toggle mechanisms, or gear arrangements. Total operating transfer time shall not exceed one-sixth of a second.

4. Operation shall allow for an adjustable delay with load not connected to either sources. An overload or short circuit shall not cause the switch to go to a neutral position. Do not use main contact structures not originally manufactured for transfer switch service (molded case circuit breakers or contactors). Inspection and replacement of all contacts (stationary and arcing) shall be possible from the front of the switch without any disassembly of operating linkages or power conductors. Provide a handle to permit no-load manual operation.

B. Accessories

1. Provide a solid-state sensing and control logic panel. Include the following operational characteristics:

   a. Adjustable (0.5 to 6.0 seconds) time delay on engine starting to override momentary dips in normal source, set at 1 second.

   b. Full phase voltage relay supervision of the normal source with at least one close differential relay to detect "brownout" condition, set at 70 percent dropout and 90 percent pickup.

   c. Voltage/frequency lockout relay to prevent premature transfer, set at 90 percent voltage and 90 percent frequency.

   d. Engine starting control contacts (one normally open and one normally closed).

   e. Adjustable (2 to 25 minutes) time delay on retransfer to normal, set at 20 minutes.

   f. Unloaded running time delay for generator cool down (adjustable 0.1 to 10 minutes), set at 5 minutes.

   g. Transfer to emergency time delay (adjustable 1 to 300 seconds), set at 1 second.

2. Provide a system test switch (momentary type) on the front of the enclosure.

3. Manual push button to bypass the time delay on retransfer.

4. Indicating lights to indicate source to which the load is connected.

5. Indicating light to indicate presence of normal power source.

6. Auxiliary contacts for remote indication of switch position, 15 normally open and 15 normally closed contact for normal and emergency position.

C. Manufacturers

1. The transfer switch shall be as manufactured by:

   a. Automatic Switch Company.

   b. Russelectric Co.

   c. Zenith (ZTS).

   d. Eaton Electrical.

   e. Thomson Technology.

   f. ASCO 300 series

PART 3 - EXECUTION

A. Installation

Install transfer switch in distribution board. Secure transfer switch rigidly to wall and floor or mounting pad with anchor bolts or Phillips Drill Company concrete anchors. Anchor bolts or concrete anchors shall be carbon steel per ASTM A307, Grade B.

B. Field Testing

1. Field test per manufacturer's recommended standard test procedure.

2. Field test and calibrate timing and monitoring logic. All adjustments shall be within 5 percent of the previously specified set points.

END OF SECTION

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