

SECTION 26 00 00 - GENERAL PROVISIONS

PART 1 - GENERAL

- A. The general contract provisions apply to this section and take precedent over this section in case of conflict.

1.1 GENERAL PROVISIONS

- A. This division supplements the applicable requirements of other divisions.

1.2 DEFINITIONS

- A. For the purposes of Division 260000, the following definitions apply:
 - 1. Provide: Furnish and install.
 - 2. Indicated: As shown on the drawings or specified herein.
 - 3. Circuit Designation: Panel designation and circuit number, i.e., LA-13.
 - 4. Approved equal: Approved by the engineer of record as equal in his sole determination.

1.3 SCOPE OF WORK

- A. The Specifications for Work of Division 260000 include, but are not limited to the following sections:

- 26 0000—General Provisions
- 26 0050—Basic Electrical Materials and Methods
- 26 0111—Conduits
- 26 0120—Conductors
- 26 0130—Electrical Boxes
- 26 0140—Wiring Devices
- 26 0142—Nameplates and Warning Signs

- B. Work Included: All labor, materials, appliances, tools, equipment, facilities, transportation and services necessary for and incidental to performing all operations in connection with furnishing, delivery and installation of the work of this division, complete, as shown on the drawings and/or specified herein. Work includes, but is not necessarily limited to the following:

- 1. Examine all divisions for related work required to be included as work under this division.
- 2. General provisions for electrical work.
- 3. Site observation including existing conditions.

- C. Related Work Specified Elsewhere but included in the scope of work:

- 1. Motors and their installation.
- 2. Control wiring and conduit for heating, ventilating and air conditioning.

- D. Work Not In Contract (N.I.C.):

- 1. Telephone instruments.

E. Coordination

1. The following supplements are additional General Requirements pertaining to work of this Division. Provisions of Division 1 - General Requirements shall remain in effect.
 - a. Coordinate work of various sections of Division 26 and 27.
 - b. Coordinate work of this Division 26 with work of Divisions 2 through 25.

1.4 REFERENCE STANDARDS

- A. American National Standards Institute (ANSI).
- B. Association of Edison Illuminating Companies (AEIC).
- C. Electrical Testing Laboratories (ETL).
- D. Illuminating Engineering Society (IES).
- E. Institute of Electrical and Electronic Engineers (IEEE).
- F. Insulated Cable Engineers Association (ICEA).
- G. National Electrical Manufacturers Association (NEMA).
- H. National Fire Protection Association (NFPA).
- I. Underwriters Laboratories, Inc. (UL).
- J. California State Fire Marshal (CSFM).
- K. California Energy Commission (CEC) Title 24.

1.5 QUALITY ASSURANCE

- A. Regulations: All the electrical equipment and materials, including their installations, shall conform to the following applicable latest codes and standards:
 1. California Electric Code, Latest Adopted Edition (NEC), 2019 unless a more current version has been adopted.
 2. Local and State Fire Marshal.
 3. Occupational Safety and Health Act (OSHA).
 4. Requirements of the Serving Utility Company.
 5. Local Codes and Ordinances.
 6. Requirements of the Office of the California State Architect (OSA).
 7. California Administrative Code, Title 8, Chapter 4, Industrial Safety Orders.
 8. California Administrative Code, Title 24.
 9. County of Ventura Codes and Regulations.
- B. Variances: In instances where two or more codes are at variance, the most restrictive requirement shall apply. In instances where plans and specifications are at variance or conflict the most restrictive requirement shall apply. Contractor shall be responsible for all his associated work and materials and also the work and materials of related or affected trades.

- C. Contractor's Expense: Obtain and pay for all required bonds, insurance, licenses, and pay for all taxes, fees and utility charges required for the electrical work.
- D. Testing and Adjustment:
 - 1. Perform all necessary tests required to ascertain that the electrical system has been properly installed, that the power supply to each item of equipment is correct, and that the system is free of grounds, ground faults, and open circuits, that all motors are rotating in the proper directions, and such other tests and adjustments as may be required for the proper completion and operation of the electrical system. Contractor shall provide a copy of all test reports to prove these tests have been performed.
 - 2. If, during the course of testing, it is found that system imbalance is in excess of 20%, rearrange single-pole branch circuit in lighting and receptacle panels to bring system balance to within 20% on all phases. Record all such changes on the typewritten panelboard schedule and submit a summary of changes to the Engineer on the record drawings.

1.6 SUBMITTALS

- A. Procedure: In accord with the Submittal Section.
- B. Shop drawings: Detailed shop drawings for the following equipment:
 - 1. N/A
- C. Product data: Detailed manufacturer's data for:
 - 1. Concrete pull boxes
 - 2. Disconnects.
- D. Test results for the following:
 - 1. Grounding systems
 - 2. Cables.
- E. Include sufficient information to indicate complete compliance with Contract Documents. Include illustrations, catalog cuts, installation instructions, drawings, and certifications. On each sheet show manufacturer's name or trademark.
- F. Operating, maintenance, and instruction data for:
 - 1. N/A
- G. Instruction materials:
 - 1. Provide at the time of personnel instruction period three bound copies of instruction manuals for the systems as listed in Subparagraph 1.04.A.4.f.
 - 2. Include the following (minimum) information in each copy of instruction manual:
 - a. Manufacturers' names and addresses including phone numbers.
 - b. Serial numbers of items furnished.
 - c. Catalog cuts, exploded views and brochures, complete with technical and performance data for all equipment, marked to indicate actual items furnished and intended use.

- d. Recommended spare parts.

1.7 OWNER'S PERSONNEL INSTRUCTIONS

- A. Prior to completion of the contract, and at the Owner's convenience, instruct verbally and demonstrate to the Owner's personnel, the operation of the systems as listed under operating, maintenance, and instructional data and/or emergency generator, automatic transfer switch and fire alarm annunciator panel.

1.8 CLEANING

- A. Clean exterior surfaces and interiors of equipment and remove all dirt, cement, plaster and other debris. Protect interior of equipment from dirt during construction and clean thoroughly before energizing.
- B. Clean out cracks, corners and surfaces on equipment to be painted. Remove grease and oil spots so that paint may be applied without further preparation.

1.9 PROJECT RECORD DOCUMENTS - Prepare the following and submit to the engineer before final acceptance:

- A. Mark Project Record Documents daily to indicate all changes made in the field.
 - 1. In addition to general requirements of Project Record Drawings, indicate on drawings, changes of equipment locations and ratings, trip sizes, and settings on circuit breakers, alterations in raceway runs and sizes, changes in wire sizes, circuit designations, installation details, one-line diagrams, control diagrams and schedules.
- B. Use green to indicate deletions and red to indicate additions.
 - 1. Use the same symbols and follow the same drafting procedures used on the Contract Drawings.
- C. Locate dimensionally off of contract drawings all underground conduit stubbed-out for future use, underground feeder conduits, and feeder pull box locations using building lines by indicating on the Project Record Drawings.
- D. At the completion of underground conduit installation provide underground conduit record documents to owner's representative.
- E. Two copies, in binder form, of all test results as required by these specifications - 260030.
- F. Two copies of local and/or state code enforcing authorities final inspection certificates.
- G. Two copies, in binder form, of electrical equipment cut sheets, manufacturer's installation instructions, warranty certificates, and product literature for all products utilized on project.

1.10 SERVICE INTERRUPTIONS AND UTILITY

- A. Coordinate with the Owner the interruption of services necessary to accomplish the work.

- B. Coordinate with the utility company all work associated with power and communications distribution systems and service entrance equipment.
- C. Electrical contractor shall supply temporary power for all trades.

1.11 MINIMUM SPECIFICATION REQUIREMENTS (ALL WORK OF DIVISION 260000)

- A. As a minimum Specification requirement, all materials and methods shall comply with applicable governing codes.

1.12 PENETRATION SEALING

- A. Seal penetration through exterior walls and fire rated walls, floors, ceilings, and roofs with 3M Firestopping materials of fire rating capacity rated per architectural plans and UBC or prevailing building code requirements.

1.13 PLACING EQUIPMENT IN SERVICE

- A. Do not energize or place electrical equipment in service until all interested parties have been duly notified and are present or have waived their rights to be present. Where equipment to be placed in service involves service or connection from another contractor of the owner, notify the owner in writing when the equipment will be ready for final testing/connection and schedule to the owner's satisfaction of this service connection. Notify the owner two weeks in advance of the date the various items of equipment will be complete.

1.14 OWNER-FURNISHED ITEMS

- A. Pick up Owner-furnished items and handle, deliver, install, and make all final connections.
 - 1. Assume responsibility for the items when consigned at the storage facility or in the field in accord with requirements of the Contract Documents.

1.15 ELECTRIC ITEM LOCATION

- A. Electrical drawings are generally diagrammatic. Verify equipment sizes with shop drawings and manufacturers' data and coordinate location layout with other trades. Notify owner and engineer of any changes of location requirements prior to installation and obtain engineer's written acceptance for all changes/revisions.

1.16 DEMOLITION

- A. Scope: Provide and perform demolition, preparatory and miscellaneous work as indicated and specified, complete.
- B. Principle Items of Work:
 - 1. Demolition and removal of existing electrical conduit, wiring and equipment required to complete the project.
 - 2. Preparation of the existing building to receive or connect the new work.

3. Miscellaneous demolition, cutting, alteration, and repair work in and around the existing building necessary for the completion of the entire project.
 4. Disconnecting and reconnection of electrical equipment as required by the construction modifications.
- C. Existing Conditions: Make a detailed survey of the existing conditions pertaining to the work. Check the locations of all existing structures, equipment and wiring (branch circuiting and controls). Provide at bid time any exclusions for existing conditions work.
- D. Salvage and Disposal: All removed material other than items to be reused shall be returned to the owner or disposed of in accordance with instructions from the owner's representative. Disposal shall be done in accordance with EPA and governing body requirements and regulations. Contractor shall pay all fees and charges for disposal.

1.17 ELECTRICAL WORKMANSHIP REQUIREMENTS

- A. It is required that all electrical construction of this Contract be performed by journeyman electricians. All journeyman electricians shall have a minimum of 4 years of apprenticeship training and hold a valid Certificate of Completion from an apprenticeship training course approved by the State of California Department of Industrial Relations, Division of Apprenticeship Standards. This is intended to mean that a person who does not hold a valid Certificate of Completion from an apprenticeship training course approved by the State of California Department of Industrial Relations, Division of Apprenticeship Standards will not be permitted to do electrical work of any kind that involves new construction, nor make repairs, alterations, additions, or changes of any kind to any existing system of electrical wiring, apparatus, equipment, light, heat, or power.
- B. Contractor may employ electrical helpers or apprentices on any job of electrical construction, new or existing, when the work of such helpers or apprentices is performed under direct and constant personal supervision of a journeyman electrician holding a valid Certificate of Completion from an apprenticeship training course approved by the State of California Department of Industrial Relations, Division of Apprenticeship Standards.
1. Each journeyman electrician will be permitted to be responsible for quality of workmanship for a maximum of eight helpers or apprentices during any same time period, provided the nature of work is such that good supervision can be maintained and quality of workmanship achieved is the best, as expected by Owner and as implied by the latest edition of the California Electrical Code (National Electrical Code with State of California amendments).
 2. Before each journeyman electrician commences work, deliver to Owner at project site a photocopy of journeyman's valid Certificate of Completion from an apprenticeship training course approved by the State of California Department of Industrial Relations, Division of Apprenticeship Standards.
- C. All electrical systems shall be installed in a neat and workmanlike manner per National Electrical Code requirements and ANSI approved NEIS National Electrical Installation Standards.

1.18 DESIGN CHANGES AFTER AWARD OF BID

- A. When a change in the quantity or size of conductors is made, the conduit size will remain in accordance with that indicated in the original contract drawings rather than the drawing symbol

conduit table. When code permits, provide conductor insulation 'THWN' where required to maintain conduit fill conformance with the National Electrical Code.

1.19 MATERIAL AND EQUIPMENT SUBSTITUTION

- A. Where two or more trade names or manufacturers are mentioned, selection shall be made from the group listed for use in the base bid. The order in which names are listed is not intended to be any indication of preference.
- B. Where a single manufacturer, product or trade name is stated, that manufacturer, product or trade name shall be used in the base bid. The use of other manufacturers, products or trade names will be considered by the engineer of record (unless that product is indicated for no substitution) only if submitted as alternate items at the time of bidding, with evidence of equality and a statement of net price difference as compared to the specified item. After approval by the engineer of record, the architect and owner reserve the right to review such submittals and to determine the acceptability for use.
- C. Equipment other than that specified will be accepted only when written approval is given by the engineer of record and architect, in accordance with Division 1.
- D. The contractor shall be held responsible for all physical changes in piping, equipment, etc. resulting from equipment substitution and likewise bear any increased cost of other trades in making said substitution. Approval by the architect of equipment other than that specified does not relieve this contractor of this responsibility.

1.20 REQUESTS FOR INFORMATION

- A. The contractor shall submit all requests for information (RFI's) typewritten on the attached form.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 26 00 00