



COUNTY OF MENDOCINO  
EXECUTIVE OFFICE - FACILITIES AND FLEET DIVISION

**UKIAH VETERANS HALL  
HVAC REPLACEMENT  
PROJECT**

**BID DOCUMENTS  
AND SPECIFICATIONS**

Prepared by:  
Bennett Engineering  
3720 Main St.  
Kelseyville, CA 95451

Bid No. 32-18

**PROJECT LOCATION:**

Ukiah Veterans Hall  
293 Seminary Avenue  
Ukiah, CA 95482

**INFORMATION:**  
COUNTY OF MENDOCINO  
Facilities & Fleet Division  
851 Low Gap Road  
Ukiah, California 95482



SECTION 00002  
PROJECT DIRECTORY

PROJECT: Ukiah Veterans Hall HVAC Replacement  
293 Seminary Avenue  
Ukiah, CA 95482

OWNER: County of Mendocino  
501 Low Gap Road  
Ukiah, CA 95482

AGENT: Mendocino County Executive Office  
Facilities and Fleet Division  
851 Low Gap Road  
Ukiah, CA 95482  
(707) 234-6054  
Doug Anderson, Assistant Facilities Manager

ENGINEER: Bennett Engineering  
3720 Main Street  
Kelseyville, CA 95451  
707-263-5814



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## SECTION 00020 - NOTICE INVITING BIDS

Notice is hereby given that sealed bids will be received at the Facilities and Fleet Division Office, County of Mendocino, 851 Low Gap Road, Ukiah, California 95482 until the hour of 2:00 p.m., as determined by the clock on the wall of the Facilities and Fleet Division Office, County of Mendocino, on Thursday, September 13, 2018 at which time they will be publicly opened and read aloud in the Facilities and Fleet Division Office, County of Mendocino, 851 Low Gap Road, Ukiah, California for the following project:

**BID 32-18 – Ukiah Veterans Hall – HVAC Replacement**

License required for this Project is: “B” or “C-20” License

Plans and documents may be seen at the Facilities and Fleet Division Office, County of Mendocino, 851 Low Gap Road, Ukiah, CA 95482. Electronic Plans and Documents may be seen or downloaded from the Mendocino County Web Page for Open RFP, Quotes, Bids:

<https://www.mendocinocounty.org/government/executive-office/open-rfp-quotes-bids>

Additionally plans and documents have been distributed to builder’s exchange plan rooms throughout Northern California. In Mendocino County, printed plans may be obtained from:

Blueprints and Copies

846 S. State St.

Ukiah, CA 86482

707-462-1197

Bids shall be made up on a form provided by the County and accompanied by a Certified Check, Cashier's Check, or Bidder's Bond for ten percent (10%) of the amount bid, made payable to the County of Mendocino. The above-mentioned check or Bid Bond shall be given as a guarantee that the Bidder shall execute the contract if it be awarded to it in conformity with the contract documents and shall provide the surety bond or bonds required, sign the contract and commence work as set forth in the Instructions to Bidders of the contract documents.

The successful Bidder will be required to furnish a Labor and Material Bond and a Faithful Performance Bond in an amount equal to one hundred percent (100%) of the contract price. Bonds shall each be obtained from a surety company satisfactory to the County of Mendocino.

Federal Laws, including The Davis-Bacon Act and The Americans with Disabilities Act of 1990, are applicable to the project.

Bidders’ attention is called to Instruction to Bidders and other related documents for full directions and information as to bidding and other requirements.

Pursuant to California Public Contract Code Section 22300, the Contractor may substitute securities for any money withheld by the County to insure performance under the Contract. Said securities shall be in a form and of a type acceptable to the County.

**A non-mandatory pre-bid conference will be held on Wednesday September 5 at 9:00 a.m. at the Project site, 293 Seminary Avenue, Ukiah, California.**

**PAYMENT OF PREVAILING WAGES**

Pursuant to the provisions of the Labor Code of the State of California, the Department of Industrial Relations has made a determination of the rate of per diem wages to be paid on the prevailing rate of pay for regular, holiday and overtime work in the locality in which the public work is to be performed, for each craft, classification, or type of workman needed to execute the contract. All County of Mendocino projects greater than \$1,000 require that contractors adhere to Prevailing Wage requirements (California Labor Code, Sections 1770 through 1775). The rates can be found online here:

<http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>

**CONTRACTOR REGISTRATION**

Per Labor Code Section 1771.1(a) A contractor or subcontractor shall not 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 contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

**CERTIFIED PAYROLL RECORDS**

Per Labor Code Section 1776 each contractor and subcontractor shall keep accurate payroll records. A certified copy of all payroll records for work performed under this contract shall be furnished upon request to a representative of the awarding body. Per SB 854 contractors and subcontractors are required to furnish certified payroll reports directly to the Department of Industrial Relations.

**EMPLOYMENT OF APPRENTICES**

Each contractor and subcontractor performing work in an apprenticeable craft or trade shall comply with Section 1777.5 relating to Apprentices on public works projects.

**MENDOCINO COUNTY BUSINESS LICENSE**

Pursuant to Mendocino County Code Section 6.0 – Business Licenses and Regulations, at the time of contract award, the contractor shall supply a copy of their current County of Mendocino business license.

**LAWS AND GOVERNANCES**

In the performance of the work contemplated by this contract, the contractor shall conform to and abide by all labor requirements and provisions of State and Federal Laws and City and County Ordinances and Regulations which may in any manner affect those engaged or employed on the work project, including but not limited to the overtime provisions of the Labor Code section 1813 and 1815 of the State of California.



## SECTION 00100 - INSTRUCTIONS TO BIDDERS

## PART 1 – GENERAL

## 1.1 BIDS RECEIVED

- A. Sealed bids for the Mendocino County bid Number 32-18 for the **Ukiah Veterans Hall – HVAC Replacement** Project will be received at the Facilities and Fleet Division Office, County of Mendocino, 851 Low Gap Road, Ukiah, California, until 2:00 p.m. as determined by the clock on the wall of the Facilities and Fleet Division Office, on Thursday, September 13, 2018 and then publicly opened and read aloud in the Facilities and Fleet Division Office, County of Mendocino.
- B. Late bids will not be accepted. It is Bidder's responsibility to assure that its bid is delivered and received at the location noted above on or before the date and hour set for the bid opening.

## 1.2 LICENSE REQUIREMENT

- A. The license required for this Project is “B” or C-20 License.
- B. Pursuant to Mendocino County Code Section 6.0 – Business Licenses and Regulations, at time of contract award, the contractor shall supply a copy of their current County of Mendocino business license.

## 1.3 SECURING OF PLANS AND DOCUMENTS

Electronic Plans and Documents may be seen at, or downloaded from the Mendocino County Web Page for Bidding Opportunities – Construction:

<https://www.mendocinocounty.org/government/executive-office/open-rfp-quotes-bids>

## 1.4 BIDS

Bids, to be considered, must be in accordance with the following instructions:

- A. Bids must be submitted on the bid form provided by County, properly and completely filled out with numbers stated both in writing and in figures and with signatures of all persons signing in longhand/cursive.
- B. The completed form shall be without erasures or interlineation and shall not contain recapitulations of the work to be done. Only written proposals will be permitted.
- C. A Bid Bond or Certified Cashier's Check made payable to the County of Mendocino for an amount equal to at least ten percent (10%) of the bid amount shall accompany each bid. Such guaranty to be forfeited should the Bidder to whom the contract is awarded fail to enter into the contract.

## 1.5 PRE-BID CONFERENCE AND SITE ACCESS

- A. **A non-mandatory pre-bid conference will be held on Wednesday, September 5<sup>th</sup> at 9:00 a.m. at the site, 293 Seminary Avenue, Ukiah, California.**
- B. Following the meeting, a site review will be conducted to acquaint Bidders with the Project and conditions at the site.

## 1.6 SUBCONTRACTORS LISTED

- A. In accordance with California Public Contract Code Sections 4100 *et seq.*, inclusive, each bidder shall provide a list of subcontractors (Section 00430), giving the name and location of place of business and contractor's license number of each subcontractor who will perform a portion of the contract work in an amount in excess of one-half of one percent (0.5%) of the total contract price. In each instance, the nature and portion of the work to be subcontracted shall be described.
- B. Failure of Bidder to specify a subcontractor for any portion of the work in an amount in excess of one-half of one percent (0.5%) of the total contract price constitutes an agreement for Bidder to perform that portion of the work itself. After bids are opened, no subcontractor may be designated or substituted except as provided for in Sections 4107 *et seq.* of the Public Contract Code.
- C. All Bidders must supply with their Bids the required information on all subcontractors who will perform any portion of the 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 total bid. Violation of this requirement may result in Bid being deemed non-responsive and not being considered.

## 1.7 AWARD OR REJECTION OF BIDS

The contract shall be awarded to the lowest responsible bidder complying with these instructions, provided the bid is deemed reasonable and in the best interest of the County of Mendocino. County reserves the right to reject any and all bids, and to waive any informality on bids received whenever the rejection or waiver is in the best interest of County. The competency and dependability of the bidders will be considered when making the award.


Additive and Deductive Items: Method of Determining Lowest Bid. Pursuant to Public Contract Code section 20103.8, if this bid solicitation includes additive and/or deductive items, the checked [X] method shall be used to determine the lowest bid: *[check one]*

(a) The lowest bid shall be the lowest bid price on the base contract without consideration of the prices on the additive or deductive items.

(b) The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items that were specifically identified in the bid solicitation or Bid Form as being used for the purpose of determining the lowest bid price.

(c) The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items taken in order from a specifically identified list of those items that, when in

the solicitation, and added to, or subtracted from, the base contract, are less than, or equal to, a funding amount publicly disclosed by the County before the first bid is opened.

 (d) The lowest bid shall be determined in a manner that prevents any information that would identify any of the bidders or the proposed Subcontractors or suppliers from being revealed to the public entity before the ranking of all bidders from lowest to highest has been determined.

If no method is checked, sub-paragraph (a) shall be used to determine the lowest bid.

Notwithstanding the method used by the County to determine the lowest responsible bidder, the County retains the right to add to or deduct from the contract any of the additive or deductive items included in the bid solicitation.

The award of the contract, if awarded, is expected to be made within thirty (30) days and in no event later than eighty (80) days after the bid opening. After award, County shall notify the successful Bidder in writing, and forward with the notification original contracts for Bidder's execution. Within eight (8) working days after such notification, the successful Bidder shall return the signed contracts to County, accompanied by all required Surety Bonds, insurance policies and endorsements.

#### 1.8 TIME OF COMPLETION

Bidder agrees to commence work on or before a date to be specified in the written "Notice to Proceed" from County and to fully complete the project within One hundred twenty (45) calendar days from date of the written "Notice to Proceed".

#### 1.9 ADDENDUM

Any addendum issued during the time of bidding and before bid opening shall be included in the bid. The addendum issued by County shall become part of the agreement. **Questions to be considered for inclusion in an addendum must be in writing and in the hands of County not less than seven (5) days prior to bid opening date.**

#### 1.10 INTERPRETATION OF DRAWINGS AND DOCUMENTS

Should a Bidder find discrepancies in, or omissions from, the drawings or documents, or should it be in doubt as to their intent, it should at once notify County, which will then send responsive written instructions in the form of addenda to all Bidders. County will not be responsible for any oral instructions. Any verbal conversations with County during the bidding period are not to be construed as instructions. Any changes in the Contract documents will be issued by written addendum only.

#### 1.11 WITHDRAWAL OF BID

Bids may be withdrawn prior to, but not later than, the time of bid opening.

#### 1.12 BONDS

The successful Bidder is required to furnish a Labor and Material Payment Bond and a Performance Bond each in the amount equal to one hundred percent (100%) of the contract price. In addition, the successful Bidder is required to furnish a Bid Bond or Certified Cashier's Check made payable to the County of Mendocino for an amount equal to at least ten percent (10%) of the bid amount. Said Bonds shall be obtained from a surety company satisfactory to County.

### 1.13 SUBSTITUTIONS

Any substitution shall be made in accordance with instructions contained in Section 00700 – General Conditions attached hereto. Questions concerning substitutions will not be entertained during the bidding period.

### 1.14 LIQUIDATED DAMAGES

In case of failure on the part of Contractor to complete the work within the time stipulated plus any duly authorized extension of time granted in writing by County, Contractor shall pay to County the sum of \$250.00 per calendar day for each day's delay beyond the time prescribed as liquidated damages, but not as a penalty. The language in the paragraph of the General Conditions entitled "Time of Completion and Liquidated Damages" is incorporated herein.

### 1.15 BIDDER'S QUALIFICATIONS

- A. All Bidders, Contractors and Subcontractors bidding under joint venture agreements shall be duly licensed as provided for under Sections 7000 *et seq.* of the Business and Professions Code.
- B. A corporation which is awarded the Contract will be required to furnish certification attesting to its corporate existence, as well as evidence that the Officer signing the contract is duly authorized to do so.
- C. Bidders and their subcontractors may be required to furnish evidence satisfactory to County that they have sufficient means and have had experience in the class of work called for to enable them to complete the contract in a satisfactory manner.
- D. No person, firm or corporation shall make or file or be interested in more than one bid for the same work, except insofar as alternate bids may be called for. No person, firm or corporation shall submit a collusive or sham bid or seek directly or indirectly to induce any other bidder to submit a collusive or sham bid or to refrain from submitting a bid or to seek in any way to control or fix the price of the bid or any portion of the bid price in order to secure an advantage against County or any other person interested in the proposed contract. However, a person, firm or corporation submitting a sub-proposal to a bidder or quoting prices on materials to a bidder is not hereby disqualified from submitting sub-proposals or quoting prices to other bidders.
- E. A licensed contractor shall not submit a bid to a public agency unless (1) its contractor's license number appears clearly on the bid, (2) the license expiration date is stated, and (3) the bid contains a statement that the representations made therein are made under penalty of perjury. Any bid not containing this information, or a bid containing information which is subsequently proven false, shall be considered non-responsive and shall be rejected by County.

### 1.16 EXAMINATION OF SITE AND DOCUMENTS

By submitting a bid, Bidder agrees and warrants that (1) it has examined the site and all documents, drawings and specifications; (2) it is satisfied that the same are adequate to produce the required results; and (3) its bid covers the cost of all items required in the agreement. The work to be performed includes all of the items mentioned in these specifications and/or as shown on the plans and other documents included as a part of the project.

1.17 ENVIRONMENTAL IMPACT REPORT

Bidder agrees to perform its work in conformance with any environmental impact reports that may be applicable to the project.

1.18 AGREEMENT

Contract documents include the Agreement which the successful Bidder, as Contractor, will be required to execute.

1.19 PRE-CONSTRUCTION CONFERENCE

The successful bidder shall be available for a pre-construction conference with County at a mutually convenient time.

1.20 QUALIFICATIONS OF BIDDERS

The work to be performed under this contract is of a very specialized nature. It is the desire of County to secure the best work attainable and to maintain a very critical and condensed schedule. Bidders considered for award will be limited to those firms who can show to the satisfaction of County that they have the facilities and experience necessary to perform the required construction in accordance with specifications proposed for this project. The terms under which bidders will be evaluated and the rules that will be applied are attached to the bid documents herein as Section 00120, "Qualification Application".

END OF SECTION



SECTION 00120 - QUALIFICATION APPLICATION

The information contained in this Application is confidential, and is for the sole use of County in evaluating the qualifications of Bidder. Only the information below (“Contact Information”) is considered public information.

CONTACT INFORMATION

Firm Name (as it appears on license): \_\_\_\_\_

Check one:  Corporation       Partnership       Sole Proprietor

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

If the firm is a sole proprietor or partnership:

Owner(s) of Company: \_\_\_\_\_

Contractor’s License Number(s):

<u>License No.</u>	<u>Classifications</u>	<u>Expiration</u>	<u>Qualifying Individual</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

DIR Registration Number: \_\_\_\_\_

Mendocino County Business License No: \_\_\_\_\_

PART I. ESSENTIAL REQUIREMENTS FOR QUALIFICATION

**The Contractor will be immediately disqualified if the answer to any of questions 1 through 3 is “no”.**

**The Contractor will be immediately disqualified if the answer to any of questions 4 through 7 is “yes”<sup>1</sup>.**

- 1. Contractor possesses a valid and current California Contractor’s license for the project or projects for which it intends to submit a bid.  
 Yes       No
- 2. Contractor has a liability insurance policy with a policy limit of at least one million dollars (\$1,000,000) per occurrence and two million dollars (\$2,000,000) aggregate.  
 Yes       No
- 3. Contractor has a current workers’ compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code Section 3700 *et seq.*  
 Yes       No       Contractor is exempt from this requirement because it has no employees
- 4. Has Contractor’s license been revoked at any time in the last five (5) years?  
 Yes       No
- 5. Has a surety firm completed a contract on Contractor’s behalf, or paid for completion because Contractor’s firm was default terminated by the project owner within the last five (5) years?  
 Yes       No
- 6. At the time of submitting this qualification form, is Contractor’s firm ineligible to bid on or be awarded a public works contract, or perform as a subcontractor on a public works contract, pursuant to either Labor Code Section 1777.1 or Labor Code Section 1777.7?  
 Yes       No

If the answer is “yes”, state the beginning and ending dates of the period of debarment:

- 7. At any time during the last five (5) years, has Contractor’s firm, or any of its owners or officers, been convicted of a crime involving the awarding of a contract of a government construction project, or the bidding or performance of a government contract?  
 Yes       No

<sup>1</sup> A contractor disqualified solely because of a “yes” answer given to questions 4,5, or 7 may appeal the disqualification and provide an explanation of the relevant circumstances during the appeal procedure.



**PART II. ORGANIZATION, HISTORY, ORGANIZATIONAL PERFORMANCE, COMPLIANCE WITH CIVIL AND CRIMINAL LAWS**

**A. Current Organization and Structure of the Business**

*For firms that are corporations:*

- 1a. Date incorporated: \_\_\_\_\_
- 1b. Under the laws of the State of: \_\_\_\_\_
- 1c. Provide all the following information for each person who is either (a) an officer of the corporation (president, vice president, secretary, treasurer), or (b) the owner of at least ten percent (10%) of the corporation’s stock:

Name	Position	Years with Co.	% Ownership	Social Security #

*For firms that are partnerships:*

- 1a. Date of formation: \_\_\_\_\_
- 1b. Under the laws of the State of: \_\_\_\_\_
- 1c. Provide all of the following information for each partner who owns ten percent (10%) or more of the firm:

Name	Position	Years with Co.	% Ownership	Social Security #

*For firms that are sole proprietorships:*

- 1a. Date of commencement of business: \_\_\_\_\_
- 1b. Social security number of company owner: \_\_\_\_\_

**B. History of the Business and Organizational Performance**

2. Has there been any change in ownership of the firm at any time during the last three (3) years?

**NOTE: A corporation whose shares are publicly traded is not required to answer this question.**

- Yes       No

If “yes”, explain on a separate signed page.

3. Is the firm a subsidiary, parent, holding company, or affiliate of another construction firm?  
**NOTE: Include information about other firms if one firm owns fifty percent (50%) or more of another, or if an owner, partner, or officer of Contractor’s firm holds a similar position in another firm.**

Yes       No

If “yes”, explain on a separate signed page.

4. Are any corporate officers, partners, or owners connected to any other construction firms?  
**NOTE: Include information about other firms if an owner, partner, or officer of Contractor’s firm holds a similar position in another firm.**

Yes       No

If “yes”, explain on a separate signed page.

5. Financial Statements: Does the Contractor have reviewed or audited financial statements for each of the last three years?

Yes       No

6. State Contractor’s firm’s gross revenues for each of the last three (3) years:

Year	Gross Revenue

7. How many years has Contractor’s organization been in business in California as a contractor under its present business name and license number? \_\_\_\_\_ years.

8. Is Contractor’s firm currently the debtor in a bankruptcy case?

Yes       No

If “yes”, please attach a copy of the bankruptcy petition, showing the case number, and the date on which the petition was filed.

Disputes

9. At any time in the last five (5) years, has Contractor’s firm been assessed and paid liquidated damages after completion of a project under a construction contract with either a public or private owner?

Yes       No

If “yes”, explain on a separate signed page, identifying all such projects by owner, owner’s address, the date of completion of the project, amount of liquidated damages assessed, and all other information necessary to fully explain the assessment of liquidated damages.

10. In the last five (5) years, has Contractor’s firm, or any firm with which any of Contractor’s company’s owners, officers or partners was associated, been debarred, disqualified, removed or otherwise prevented from bidding on, or completing, any government agency or public works project for any reason?

**NOTE: “Associated with” refers to another construction firm in which an owner, partner or officer of Contractor’s firm held a similar position.**

Yes             No

If “yes”, explain on a separate signed page. State whether the firm involved was the firm applying for qualification here or another firm. Identify by name of the company, the name of the person within Contractor’s firm who was associated with that company, the year of the event, the owner of the project, the project, and the basis for the action.

11. In the last five (5) years, has Contractor’s firm been denied an award of a public works contract based on a finding by a public agency that Contractor’s company was not a responsible bidder?
- Yes             No

If “yes”, explain on a separate signed page. Identify the year of the event, the owner, the project, and the basis for the finding by the public agency.

**NOTE: The following two questions refer only to disputes between Contractor’s firm and the owner of a project. Contractor need not include information about disputes between its firm and a supplier, another contractor, or subcontractor. Contractor need not include information about “pass-through” disputes in which the actual dispute is between a subcontractor and a project owner. Also, Contractor may omit reference to all disputes about amounts less than \$50,000.**

12. In the last five (5) years, has any claim *against* Contractor’s firm concerning the firm’s work on a construction project been *filed in court or arbitration*?
- Yes             No

If “yes”, on separate signed sheets of paper identify the claim(s) by providing the project name, date of the claim, name of the claimant, a brief description of the nature of the claim, the court in which the case was filed, and a brief description of the status of the claim (pending or, if resolved, a brief description of the resolution).

13. In the last five (5) years, has Contractor’s firm made any claim against a project owner concerning work on a project or payment for a contract and *filed that claim in court or arbitration*?
- Yes             No

If “yes”, on separate signed sheets of paper identify the claim by providing the project name, date of the claim, name of the entity (or entities) against whom the claim was filed, a brief description of the nature of the claim, the court in which the case was filed, and a brief description of the status of the claim (pending or, if resolved, a brief description of the resolution).

**Criminal Matters and Related Civil Suits**

14. Has Contractor’s firm or any of its owners, officers or partners ever been found liable in a civil suit or found guilty in a criminal action for making any false claim or material misrepresentation to any public agency or entity?
- Yes             No

If “yes”, explain on a separate signed page, including who was involved, the name of the public agency, the date of the investigation and the grounds for the finding.

- 15. Has Contractor’s firm or any of its owners, officers or partners ever been convicted of a crime involving federal, state, or local law related to construction?  
 Yes       No

If “yes”, explain on a separate signed page, including who was involved, the name of the public agency, the date of the conviction and the grounds for the conviction.

- 16. Has Contractor’s firm or any of its owners, officers or partners ever been convicted of a federal or state crime of fraud, theft, or any other act of dishonesty?  
 Yes       No

If “yes”, identify on a separate signed page the person(s) convicted, the court (the county if a state court, the district or location if a federal court), the year, and the criminal conduct.

Bonding

- 17. If Issued a Notice to Proceed, can the contractor secure payment and performance bonds within ten (10) calendar days?  
 Yes       No

Name of Bonding Company: \_\_\_\_\_

Name, Address, Telephone# for Surety Agent: \_\_\_\_\_

\_\_\_\_\_

C. Compliance with Occupational Safety and Health Laws and with Other Labor Legislation Safety

- 18. Has Cal-OSHA cited and assessed penalties against Contractor’s firm for any “serious”, “willful”, or “repeat” violations of its safety or health regulations in the last five (5) years?  
**NOTE: If Contractor has filed an appeal of a citation, and the Occupational Safety and Health Appeals Board has not yet ruled on your appeal, Contractor need not include information about it.**  
 Yes       No

If “yes”, attach a separate signed page describing the citations, including information about the dates of the citations, the nature of the violation, the project on which the citation(s) was/were issued, and the amount of the penalty paid (if any). If the citation was appealed to the Occupational Safety and Health Appeals Board and a decision has been issued, state the case number and the date of the decision.

- 19. Has the Federal Occupational Safety and Health Administration cited and assessed penalties against Contractor’s firm in the last five (5) years?  
**NOTE: If Contractor has filed an appeal of a citation and the Appeals Board has not yet ruled on the appeal, or if there is a court appeal pending, Contractor need not include information about the citation.**  
 Yes       No

If “yes”, attach a separate signed page describing each citation.

- 20. Has the EPA or any Air Quality Management District or any Regional Water Quality Control Board cited and assessed penalties against either Contractor’s firm or the owner of a project contracted to Contractor in the last five (5) years?

**NOTE: If Contractor has filed an appeal of a citation and the Appeals Board has not yet ruled on the appeal, or if there is a court appeal pending, Contractor need not include information about the citation.**

Yes       No

If “yes”, attach a separate signed page describing each citation.

- 21. How often does Contractor require documented safety meetings to be held for construction employees and field supervisors during the course of a project?

\_\_\_\_\_

- 22. List Contractor’s Experience Modification Rate (EMR) (California’s Workers’ Compensation insurance) for each of the past three (3) premium years:

**NOTE: An Experience Modification Rate is issued to Contractor annually by its workers’ compensation insurance carrier.**

Current year: \_\_\_\_\_

Previous year: \_\_\_\_\_

Year previous to previous year: \_\_\_\_\_

If Contractor’s EMR for any of these three (3) years is or was 1.20 or higher, Contractor may, at its discretion, attach a letter of explanation.

Prevailing Wage and Apprenticeship Compliance Record

- 23. Provide the name, address and telephone number of the apprenticeship program (approved by the California Apprenticeship Council) from whom Contractor intends to request the dispatch of apprentices to Contractor for use on any public work project for which it is awarded a contract by the County of Mendocino:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



SECTION 00306 - ANTITRUST CLAIM ASSIGNMENT

Pursuant to California Labor Code Section 7103.5, the following certification is hereby set forth and made a part of these specifications:

In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the 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. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 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 the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.





SECTION 00307 - NON-COLLUSION AFFIDAVIT

In accordance with California Public Contract Code Section 7106, the following affidavit must be completed by the Bidder:

Non-Collusion Affidavit to be executed by Bidder  
and submitted with bid

State of California                    )  
  )        ss.  
County of Mendocino                )

\_\_\_\_\_, being first duly sworn, deposes  
and says that he or she is \_\_\_\_\_ of

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

\_\_\_\_\_  
Signature



SECTION 00308 - PUBLIC CONTRACT CODE QUESTIONNAIRE

In accordance with California Public Contract Code Section 7106, the following questionnaire must be completed by the Bidder:

Has the Bidder, any officer of the Bidder, or any employee of the Bidder who has a proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes       No

If 'yes', explain the circumstances in the space below.



SECTION 00310 - BID FORM

WILLITS VETERANS BULILDING  
ACCESSIBLE RAMPS

FOR MENDOCINO COUNTY

TO: Purchasing Agent, Mendocino County

It is understood that this bid is based upon completion of the work within the time of completion requirements contained in the Instructions to Bidders.

It is agreed that this bid may not be withdrawn for a period of eighty (80) days from the opening hereof.

The undersigned has carefully checked all its figures and understands that the County will not be responsible for any error or omissions on the part of the undersigned in making up this bid.

If awarded the Contract, the undersigned agrees to complete the Work forty five days (45) calendar days from the date of Notice to Proceed.

The undersigned, having become completely familiar with all conditions affecting the cost of the work at the place where the work is to be done, and with the drawings, specifications and other contract documents prepared and issued thereof and now on file at the Facilities and Fleet Division Office, hereby proposes and agrees to perform everything required to be performed, and to provide and furnish any and all required labor, materials, equipment, transportation and services necessary to erect and complete in the best workmanlike manner, all as shown and specified.

The following bid amounts are as defined and clarified in the Bids Required portion of these specifications:

---

**BASE BID:**

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**ALTERNATES:**

**Deductive Alternate #1:** Delete outdoor AC Compressors as defined in Section 01100 Alternates.

Deduct \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Deductive Alternate #2:** Delete Service Panel Upgrade as defined in Section 01100 Alternates.

Deduct \_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**“LOW BID WILL BE DETERMINED BY THE AMOUNT OF THE BASE BID.”**

Name of Organization \_\_\_\_\_

SALES TAX

All bids shall include required California State Sales Tax, cost of all bonds and insurance as required and all other items of expense incidental to the contract. The County of Mendocino is exempt from Federal Excise Tax.

A licensed Contractor shall not submit a bid to a public agency unless its Contractor's License number appears clearly on the bid, the license expiration date is stated, and the bid contains a statement that the representations made therein are made under penalty of perjury. Any bid not containing this information, or a bid containing information which is subsequently proven false, shall be considered nonresponsive and shall be rejected by the public agency.

Name of Organization \_\_\_\_\_

Type of Organization \_\_\_\_\_  
(Corporation, Partnership, etc.)

Address \_\_\_\_\_

Name of State where incorporated \_\_\_\_\_

CONTRACTORS LICENSE NO. \_\_\_\_\_ EXPIRATION DATE \_\_\_\_\_

Contractor has registered with the State of California’s DIR (Department of Industrial Relations) website.

**DIR Registration #:** \_\_\_\_\_

Contractor is currently licensed to do business in the County of Mendocino.

**Mendocino County Business License #:** \_\_\_\_\_

ADDENDA: CONTRACTOR TO ACKNOWLEDGE RECEIPT

I have received the following Addenda pertaining to this project and they have been included as part of my bid.

Numbers: \_\_\_\_\_

The undersigned hereby certifies under penalty of perjury that this bid is genuine and not collusive, that all the information is correct and that he/she has carefully checked all of the above figures and understands that the County will not be responsible for any errors or omissions on the part of the undersigned on making up this bid.

Signature \_\_\_\_\_

Corporate Seal

SECTION 00430 - SUBCONTRACTOR LISTING

WILLITS VETERANS HALL ACCESSIBLE RAMPS

FOR MENDOCINO COUNTY

In accordance with the provisions of Section 4100 *et seq.* of the Public Contract Code of the State of California, each bidder shall list below the name, license number, and location of place of business of each subcontractor who will perform a portion of the contract work in an amount in excess of one-half of one percent (0.5%) of the total contract price. In each such instance, the nature and portion of the work to be subcontracted shall be described.

PORTION OF THE WORK	SUBCONTRACTOR'S NAME	LICENSE #	LOCATION
---------------------	----------------------	-----------	----------






SECTION 00500 - AGREEMENT FOR LUMP SUM BID

THIS AGREEMENT, made on the \_\_\_\_\_ day of \_\_\_\_\_ in the year \_\_\_\_\_, between the County of Mendocino, hereinafter called COUNTY, and \_\_\_\_\_, hereinafter called CONTRACTOR.

COUNTY and CONTRACTOR, for the consideration described below named, agree as follows:

FIRST: CONTRACTOR shall furnish all labor, materials, equipment, mechanical workmanship, transportation, and services for the installation and completion of the Willits Veterans Hall Accessible Ramps Project, in accordance with the contract documents, including the Addenda thereto, all as adopted by COUNTY.

SECOND: The work under this contract described below shall be completed within One hundred twenty (45) days from the date of the "Notice to Proceed".

THIRD: The Contract consists of the following documents, all of which are fully a part hereof as if herein set out in full, whether or not hereto attached:

1. Invitation to Bid
2. Instructions to Bidders
3. Agreement
4. Contractor's Guarantee
5. Close-Out Items including all Warranties
7. Coordination
8. Construction Temporary Facilities
9. Maintenance Materials
10. Drawings & Specifications
11. General and Technical Conditions of the Specifications
12. All modifications thereof incorporated before execution of the Contract

FOURTH: COUNTY shall pay to CONTRACTOR, if CONTRACTOR is successful bidder, as full consideration for the faithful performance of the Contract the sum of:

\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

This sum constitutes the bid for the following project components (referenced hereunder to specifications section). This sum includes the following alternate bids:

\_\_\_\_\_

Payment shall be made each month to CONTRACTOR in accordance with and subject to the provisions embodied in the Documents made a part of this Contract.

**IN WITNESS WHEREOF**

**DEPARTMENT FISCAL REVIEW:**

\_\_\_\_\_  
DEPARTMENT HEAD                      DATE

Budgeted:  Yes    No

Budget Unit: \_\_\_\_\_

Line Item: \_\_\_\_\_

Grant:  Yes    No

Grant No.: \_\_\_\_\_

CARMEL J. ANGELO, Chief Executive Officer

By: \_\_\_\_\_  
PURCHASING AGENT

Date: \_\_\_\_\_

**INSURANCE REVIEW:**

By: \_\_\_\_\_  
Risk Management

Date: \_\_\_\_\_

**EXECUTIVE OFFICE/FISCAL REVIEW:**

By: \_\_\_\_\_  
Deputy CEO

Date: \_\_\_\_\_

**CONTRACTOR/COMPANY NAME**

By: \_\_\_\_\_

Date: \_\_\_\_\_

**NAME AND ADDRESS OF CONTRACTOR:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By signing above, signatory warrants and represents that he/she executed this Agreement in his/her authorized capacity and that by his/her signature on this Agreement, he/she or the entity upon behalf of which he/she acted, executed this Agreement

**COUNTY COUNSEL REVIEW:**

APPROVED AS TO FORM:

KATHARINE L. ELLIOTT,  
County Counsel

By: \_\_\_\_\_  
Deputy

Date: \_\_\_\_\_

**Signatory Authority:** \$0-25,000 Department; **\$25,001- 50,000 Purchasing Agent;** \$50,001+ Board of Supervisors  
**Exception to Bid Process Required/Completed**  \_\_\_\_\_  
**Mendocino County Business License: Valid**   
**Exempt Pursuant to MCC Section:** \_\_\_\_\_

SECTION 00501

WORKERS' COMPENSATION CERTIFICATION

Pursuant to California Labor Code Section 1861, the Contractor hereby certifies the following:

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 of this contract.

Dated \_\_\_\_\_

Contractor Signature \_\_\_\_\_



## SECTION 00650 - CONSTRUCTION SITE STORM WATER POLICY

## PART I – GENERAL

## 1.1 SUMMARY

- A. Mendocino County Ordinance No. 4313 STORM WATER RUNOFF POLLUTION PREVENTION PROCEDURE (Mendocino County Code Chapter 16.30 et.seq.) requires any person performing construction and grading work anywhere in the county shall implement appropriate Best Management Practices (BMP) to prevent the discharge of construction waste, debris, sediment or contaminants from construction materials, tools and equipment from entering the storm drainage system or natural waterways (off-site).
- B. By commencing work in this contract, the contractor agrees to comply with Mendocino County Code Section 16.30.140 Inspection and monitoring. The County may enter the worksite whenever necessary to perform inspections related to the Storm Water Runoff Pollution Prevention Procedures for the project including inspection of BMP's and records relating to storm water plan compliance.

## 1.2 SUBMITTALS

- A. Prior to beginning construction activities, submit construction site Best Management Practice (BMP) Plans and Specifications prepared by a Qualified Storm Water Developer (QSD) or the Contractor referencing Mendocino County Building and Planning Services Documents noted below:
  - 1. Construction Best Management Practices for over-the-counter building permits for projects that do not disturb any soil.
  - 2. Small Construction Site Storm Water Erosion and Sediment Control Plan Template for projects that will disturb any soil.
- B. Submittal shall include a project specific BMP plan for all areas of soil disturbance and possible contamination source generated by the project. Attach copies of the relevant current BMP fact sheets from the California Storm Water BMP Handbook Portal planned to address each potential source of contamination generated by the project.
- C. A County approved BMP plan is required prior to beginning work on the project.

## Part 2 – PRODUCTS

## 2.1 MATERIALS

- A. Provide Materials in Compliance with Approve BMP fact sheets in appropriate quantities to mitigate possible runoff, sedimentation and/or contamination in accordance with the approved BMP plan.

## Part 3 – EXECUTION

### 3.1 PREPARATION

- A. Prepare BMP schedule to identify dates when BMP's will be installed.
- B. Ensure that BMP Materials are on site in the event of an untimely rain event and prior to October 15<sup>th</sup>.
- C. Identify and mark Storm Drain Inlets and drainage features leading to storm drains or natural waterways.
- D. Identify and provide instruction and training to on site personnel responsible for installation and management of BMP's.

### 3.2 INSTALLATION

- A. Complete BMP installation Prior to October 1<sup>st</sup> or prior to ground disturbance activities between October 1<sup>st</sup> and April 15<sup>th</sup>, and call the project manager for an inspection of the installed BMP plan. Do not start grading activities without BMP's in place.
- B. Comply with installation guidelines included with BMP fact sheets and suitable to site conditions.
- C. Remove Contamination and Sediment BMP's after sources of sedimentation, or contamination have been removed from the site or final soil stabilization is complete. Do not remove Erosion Control BMP's until permanent Erosion Control features are established unless directed by the County.

### 3.3 INSPECTION

- A. It is the responsibility of the Contractor to provide regular inspection of BMP's throughout the rainy season. Maintain and replace all BMP's in accordance with the approved BMP plan.
- B. Prior to significant rain events, inspect installed BMP's to ensure all potential sources of contamination, sedimentation or erosion are protected by approved BMP's.
- C. During significant rain events verify that installed BMP's are adequate to the flows on the project site.
- D. Record inspection findings as required by approved BMP plan.
- E. Maintain Inspection records and a copy of the approved BMP plan on the project site for inspection by County and NCWRCB.
- F. Failure of the Contractor to comply with the requirements of these specifications and the provisions of the approved Storm Water pollution Prevention Plan or BMP plan may result in work stoppage, a written citation, monetary fine or any combination thereof.

END OF SECTION

## SECTION 00700 - GENERAL CONDITIONS

## 1. DEFINITIONS

Whenever in the Specifications and other Contract Documents the following abbreviations and terms are used, the intent and meaning shall be interpreted as follows:

- A. "Owner" - Board of Supervisors, County of Mendocino, or its authorized agents or assignees.
- B. "Agent" - The Agent acting for the County, which shall be either the County General Services Agency Director or his/her designee, or the County Executive Officer or his/her designee.
- C. "Contractor" - The person or persons, partnership, corporation, or combination thereof, private or municipal, who have entered into a contract with the County, as party or parties of the second part or his/her or their legal representatives.
- D. "Specifications" - The directions, provisions and requirements contained in these Specifications as supplemented by the Supplementary Conditions. Whenever the term "These Specifications" is used in this book, it means the provisions as set forth in this book.
- E. "Paragraph" - The particular section of subdivision herein designated by a number.
- F. "Laboratory" - The designated laboratory authorized by the County to test materials and work involved in the Contract.
- G. In the case of conflict between the Standard Specification and these Specifications, these Specifications shall take precedence over and be used in lieu of such conflicting portions:
  - A.W.S. American Welding Society
  - A.S.T.M. American Society for Testing Materials
  - A.S.A. American Standard Association
  - N.B.F.U. National Board of Fire Underwriters
  - N.B.S. National Bureau of Standards
  - A.S.M.E. American Society of Mechanical Engineers
  - A.R.I. American Refrigeration Institute
  - N.E.M.A. National Electrical Manufacturers Association
  - U.L. Underwriter's Laboratories
  - E.T.L. Electrical Testing Laboratories
  - A.C.I. American Concrete Institute
  - F.A. Federal Specifications
  - A.I.S.C. American Institute of Steel Construction
- H. The County and the Contractor are those named as such in the Agreement. They are treated throughout the Contract Documents as if each were of the singular number and the masculine gender.
- I. When the words "Approved", "Satisfactory", "Equal", or "As Directed", etc. are used, approval by the County is understood.

- J. All Federal, State laws and local laws shall govern the construction of the Contract and all rules, ordinances and requirements of authorized officials shall be complied with.
- K. It is understood that any reference to the Specifications or designation of the American Society for Testing Materials, Federal Specifications or other standard, code, or order, refers to the most recent or latest amended specification or designation.

## 2. EXAMINATION OF PLANS AND SPECIFICATIONS

The Bidder shall examine carefully the site of the work contemplated and the proposal, plans, specifications, and Contract forms thereof. It will be assumed that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and material to be furnished, and as to the requirements of these Specifications.

## 3. DRAWINGS AND SPECIFICATIONS

- A. Figured dimensions on the drawings shall govern, but work not dimensioned shall be as directed. Work indicated but not particularly detailed or specified shall be equal to similar parts that are detailed or specified, or as directed. Full-size detailed shall take precedence over scale drawings as to shape and details of construction. It is intended that scale drawings, full-size details and specifications should agree, but should any discrepancy or apparent error occur in plans and specifications or should any work of others affect this work, the Contractor shall notify the County at once; if the Contractor proceeds with the work affected without instruction from the County he shall make good any resultant damage or defect.
- B. All misunderstandings of drawings or specifications shall be clarified by the County, whose decision shall be final.
- C. Any work called for by the drawings and not mentioned in the Specifications, or vice versa, is to be furnished as though fully set forth by both. Where not specifically stated otherwise, all work and materials necessary for each unit of construction, including special construction for any specific brand or shape of material called for even though only briefly mentioned or indicated, shall be furnished and installed fully and completely as a part of the Contract.
- D. Lists, rules and regulations referred to are recognized printed standard and shall be considered as one and a part of these Specifications within the limits specified.
- E. "General Conditions" apply with equal force to all of the work, including extra work authorized.
- F. For convenience, the Technical Specifications are arranged in Divisions and further divided into various sections. It is to be understood, this separation is for convenience of all parties involved and is not to be considered as the limits of the work required of any separate trade. The terms and conditions of such limitations are wholly between the County and the Contractors during bidding and construction phases; i.e., all work shown, as well as for the proper completion of the project as a whole, shall be coordinated by the Contractor and his Subcontractors during bidding and construction and shall be provided in this Contract.



4. CONDUCT OF WORK

- A. The County reserves the right to do other work in connection with the project by contract or otherwise. Contractor shall at all times conduct his work so as to impose no hardship on the County or others engaged in the work. Contractor shall adjust, correct, and coordinate his work with the work of others so that no discrepancies shall result in the whole work.
- B. The Contractor shall provide at his own cost and risk all labor, material, water, power tools, machinery, scaffolding, and framework for the execution of the work. Equipment shall be adequate and as approved.

The Contractor shall obtain all necessary measurements from the work and shall check dimensions, levels, and construction and layout and supervise the construction, for correctness of all of which he shall be responsible.

- C. Where work of one trade joins or is on other work, there shall be no discrepancy when same is completed. In engaging work with other materials, marring or damaging same shall not be permitted. Should improper work of any trade be covered by another which results in damage or defects, the whole work affected shall be made good without expense to the County.
- D. The Contractor must anticipate relation of all parts of the work and at the proper time furnish and set anchorage, blocking or bonding as required. Anchorage and blocking necessary for each trade shall be a part of same, except where stated otherwise.
- E. Assistance required by the County in obtaining measurements or information on the work shall be furnished accurately and fully without cost to the County.

5. OWNERSHIP OF DRAWINGS

All plans and specifications shall remain the property of the County and shall be returned to the office of the County Director of General Services or shall be accounted for by the Contractor before the final certificate will be issued.

6. PUBLIC AND COUNTY CONVENIENCE AND SAFETY

The Contractor shall furnish, erect, and maintain such fences, barriers, lights and signs as are necessary to give adequate warning to the public at all times and of any dangerous conditions until final acceptance of the work by the County.

7. ACCIDENT PREVENTION

- A. It shall be the Contractor's responsibility to keep himself fully informed of all existing and future safety regulations, Codes, OSHA requirements, and other laws and regulations governing the work which may in any manner affect anyone in and around the project or engaged or employed in the work, or materials, equipment, etc. used in the work or which in any way affect the conduct of the work.
- B. The Contractor shall appoint a Safety Officer for the project and submit his name to the County.

- C. The Contractor shall supply the County with a Material Safety Data Sheet (MSDS) on each hazardous substance to be used by the Contractor on the project.
- D. The Contractor and his Safety Officer shall be solely responsible for insuring compliance with those Codes, regulations, OSHA requirements, and for discovering and correcting any code violations or unsafe conditions.
- E. Reports of all lost-time accidents shall be promptly submitted to the Owner, giving all pertinent information.

8. RESPONSIBILITY FOR DAMAGE

The County shall not be answerable or accountable in any manner for: (1) any loss or damage that may happen to the work or any part thereof, for any loss or damage to any of the materials or other things used or employed in performing the work; (2) injury to or death of any person or persons, either workers or the public; (3) damage to property from any cause which might have been prevented by the Contractor or his workers or anyone employed by him. The Contractor shall be responsible for any liability imposed by law for injuries to or death of any person including, but not limited to, workers and the public or damage to property resulting from defects or obstructions or from any cause whatsoever during the progress of the work or at any time before its completion and final acceptance. The Contractor shall indemnify, save harmless and defend the County of Mendocino, its elected or appointed officers, agents, employees or volunteers connected with the work, from all claims or actions for injuries or death of any person, or damage to property, resulting from the Contractor's performance of the Contract. With respect to third party claims against the Contractor, the Contractor waives any and all rights to any type of express or implied indemnity against the County of Mendocino, its elected or appointed officers, agents, employees or volunteers.

In addition to any remedy authorized by law, so much of the money due the Contractor under and by virtue of the Contract as shall be considered necessary by the County may be retained by the County until disposition has been made of such suits or claims for damages as aforesaid.

9. LAWS TO BE OBSERVED

The Contractor shall keep himself fully informed of all existing and future State, Federal and local laws, codes and regulations which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies and tribunals having any jurisdiction or authority over the same and shall be solely responsible for insuring compliance with those laws, codes and regulations.

A partial, though not necessarily complete listing of laws to be observed by the Contractor is as follows:

- A. Federal Americans with Disabilities Act of 1990.
- B. Federal Labor Standards Act.
- C. The Anti Kick-Back regulations found in 29 CFR Part 3.
- D. All contract clauses required by 29 CFR 5.5 (a) and (c), 20 U.S.C. 1232b ; 40 U.S. C. 276a, 276c, 327-332; 29 CFR Parts, (926).

- E. Nondiscrimination clause and Certification of Non-Segregated Facilities prescribed by Executive Order No. 11246, September 24, 1965 as amended by Executive Order 11375.
- F. Executive Order No. 11288 of July 7, 1966 (31 FR 9261) "Prevention, Control and Abatement of Water Pollution".
- G. Executive Order 11988, relating to evaluation of flood hazards.
- H. Compliance with all Federal, State and local requirements for handicapped access, fire safety and seismic resistance.

10. BONDS REQUIRED

The successful bidder shall furnish bonds as required in the document entitled "Instructions to Bidders" which is part of these Contract documents.

11. INSURANCE

The Contractor, at his expense, shall secure and maintain at all times during the entire period of performance under this Contract, insurance as set forth below with insurance companies acceptable to the County of Mendocino.

The Contractor shall provide to the County of Mendocino certificates of insurance with endorsements properly executed by an officer or authorized agent of the issuing insurance company evidencing coverage and provisions as stated below:

A. INSURED

Name the County of Mendocino, its elected or appointed officials, employees, agents and volunteers as additional insured with regard to damages and defense of claims arising from: (a) activities performed by or on behalf of the Named Insured, (b) products and completed operations of the Named Insured, (c) Premises owned, leased or used by the Named Insured, or (d) Ownership, operation, maintenance, use, loading or unloading of any vehicle owned, leased, hired or borrowed by the Named Insured, regardless of whether liability is attributable to the Named Insured or a combination of the Named Insured and the County of Mendocino, its elected or appointed officials, employees, agents and volunteers.

B. SEVERABILITY OF INTEREST

Provide that the inclusion of more than one named insured shall not operate to impair the rights of one insured against another insured, and the coverages afforded shall apply as though separate policies had been issued to each insured.

C. CONTRIBUTION NOT REQUIRED

Provide that as respects: (a) work performed by the Named Insured on behalf of the County of Mendocino; or (b) products sold by the Named Insured to the County of Mendocino; or (c) premises leased by the Named Insured from the County of Mendocino; or (d) ownership, operation, maintenance, use, loading or unloading of any vehicle owned, leased, hired or borrowed by the Named Insured, the insurance afforded by this policy shall be primary

insurance as respects the County of Mendocino, its elected or appointed officials, employees, agents and volunteers; or stand in an unbroken chain of coverage excess of the Named Insured's scheduled underlying primary coverage. In either event, any other insurance maintained by the County of Mendocino, its elected or appointed officials, employees, agents and volunteers shall be excess of this insurance and shall not contribute with it.

D. COVERAGE BELOW MINIMUM REQUIRED NOTICE

Provide that the limits of insurance afforded by this policy shall not fall below the minimum requirements of the County of Mendocino without notice to the County of Mendocino by certified mail return receipt requested. Such notice shall be addressed to: County of Mendocino, 501 Low Gap Road, Ukiah, Calif. 95482, Attn: Risk Management.

E. CANCELLATION NOTICE

Provide that the insurance afforded by this policy shall not be suspended, voided, canceled, non-renewed or reduced in coverage or in limits except after thirty (30) day's prior written notice, delivered in person or by First Class U.S. Mail, has been given to the County of Mendocino. Such notice shall be addressed to: County of Mendocino, 501 Low Gap Road, Ukiah, Calif. 95482, Attn: Risk Management.

Contractor shall furnish to the County of Mendocino certificate(s) of insurance evidencing Workers Compensation Insurance coverage to cover its employees. The Contractor shall require all subcontractors similarly to provide Workers Compensation Insurance as required by the Labor Code of the State of California for all of the Contractor's and subcontractors' employees.

The Contractor shall not commence work, nor shall he allow his employees or subcontractors or anyone to commence work until all insurance required and provisions contained herein have been submitted to and accepted by the County of Mendocino. Failure to submit proof of insurance as required herein may result in awarding said Contract to another bidder. Failure to comply with the insurance requirements set forth herein shall constitute a material breach of contract and, at County of Mendocino's option, shall subject this Contract to termination.

Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve the Contractor for liability in excess of such coverage, nor shall it preclude the County of Mendocino from taking such other action as is available to it under any other provisions of this Contract or otherwise in law.

#### SCOPE OF LIABILITY COVERAGES

Contractor shall furnish to the County of Mendocino certificates of insurance evidencing at the minimum the following:

1. Public Liability-Bodily Injury (not auto) \$500,000 each person; \$1,000,000 each accident,

and

Public Liability-Property Damage (not auto) \$500,000 each occurrence; \$1,000,000 aggregate.

---or---

Combined Single Limit Bodily Injury Liability and Property Damage Liability (not auto) \$1,000,000 each occurrence.

2. Vehicle-Bodily Injury \$500,000 each person, \$1,000,000 each occurrence,

and

Vehicle-Property Damage \$1,000,000 each occurrence.

---or---

Combined Single Limit Vehicle Bodily Injury and Property Damage Liability \$1,000,000 each occurrence.

12. WORKERS COMPENSATION CERTIFICATION

Contractor certifies as follows:

"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 of this Contract". (Labor Code Section 1861)

13. CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the formal acceptance of the work by the County, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof or to materials or thing employed in doing the work or stored on the site by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, replace, and make good all injuries or damages to any portion of the work occasioned by any of the above caused before final acceptance and shall bear the expense thereof, except such injuries or damages occasioned by acts of the Federal Government or the public enemy. The Contractor's responsibility also extends to adjoining property as related to the construction operation.

14. RESPONSIBILITY OF COUNTY

The County shall not be held responsible for the care or protection of any material or parts of the work prior to final acceptance, except as expressly provided in these Specifications.

15. COOPERATION BETWEEN CONTRACTORS

Where two or more contractors are employed on related or adjacent work, each shall conduct his operations in such a manner as not to cause any unnecessary delay or hindrance to the other. Each

contractor shall be responsible to the other for all damage to work, to person or property, or for loss caused by failure to furnish the work within the time specified for completion.

Should the Contractor, through acts of neglect on the part of any Contractor, suffer loss or damage to the Work, the Contractor agrees to settle with such other Contractor by agreement. If such other Contractor should file claim against the County on account of alleged damages to be sustained, the County shall notify the Contractor who shall, at his expense, indemnify and save harmless the County against any such claim.

16. SUBCONTRACTING AND ASSIGNMENT

The Contractor shall give his personal attention to the fulfillment of the Contract and shall keep the work under his control. Should the Contractor subcontract any part of his Contract, the Contractor shall be fully responsible to the County for the acts and omissions of his subcontractor and of the persons either directly or indirectly employed by the subcontractor as he is for the acts and omissions of persons directly employed by himself.

No subcontractor will be recognized as such, and all persons engaged in the work on construction shall be considered as employees of the Contractor.

17. PERMITS AND LICENSES

The Contractor shall procure all permits and licenses, pay all charges and fees, and file all notices necessary and incidental to the due and lawful prosecution of the work.

18. PATENTS

The Contractor shall assume all responsibilities arising from the use of patented materials, equipment, devices or processes used on or incorporated in the work.

19. LIENS

Liens shall be enforced as provided by California State Law pertaining to Public Works.

20. CHANGES IN THE WORK

A. The County may order changes in the work, in which event the Contract sum shall be adjusted by one or more, or a combination of, the following methods:

1. Unit bid prices previously approved or as may be agreed upon.
2. An agreed lump sum substantiated by Contractor, itemizing labor, material, equipment, overhead, profit, bond, etc.
3. By ordering Contractor to proceed with work and keep correct account with vouchers the actual cost of:
  - a. Labor, including foreman;
  - b. Materials entering permanently into the work;

- c. The ownership or rental cost of construction plant and equipment during the time of use on the extra work;
  - d. Power and consumable supplies for the operation of power equipment;
  - e. Insurance;
  - f. Social Security and old age and employment contribution.
- B. To the cost under (2) and (3), there may be added a fixed fee to be agreed upon but not to exceed fifteen percent (15%) for the estimated cost of the work. The fee shall be compensation to cover the cost of administrative overhead, and profit.
- C. On changes which involve a credit to the County, no allowances for overhead need be figured.
- D. All such change orders and adjustments shall be in writing.
- E. Claims by Contractor for extra cost shall be made in writing before executing the work involved. If approved by the County, costs for changes to the work claimed by the Contractor shall be adjusted according to Section A above. Contractor is referred to Specification Section 00811 Unforeseen Physical Conditions for additional information.
- E. All change orders shall be reviewed and approved by the County.

21. COUNTY'S RIGHT TO TERMINATE CONTRACT

If the Contractor should refuse or neglect to properly perform or prosecute the work or if he should substantially violate any provision of the Contract, then the County may, without prejudice to any other right or remedy upon seven (7) days written notice to the Contractor, terminate the services of the Contractor and take possession of the premises, and all materials, tools, and equipment thereon and complete the work. The expense thereof shall be deducted from the balance otherwise due the Contractor. If such expense should exceed such unpaid balance, then the Contractor shall pay the difference to the County.

22. CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

If the work is stopped for a period of thirty (30) days under an order of any court or other public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the work under a contract with the Contractor, or if the work should be stopped for a period of thirty (30) days by the Contractor because no certificate for payment has issued as provided in Paragraph 25 or because the County has not made payment thereon as provided in Paragraph 25, then the Contractor may, upon seven (7) additional days' written notice to the County, terminate the Contract and recover from the County payment for all work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery, including reasonable profit and damages.

23. TIME OF COMPLETION AND LIQUIDATED DAMAGES

- A. In case all the work called for under the Contract is not completed before or upon the expiration of the time limit as set forth in these specifications, damage will be sustained by the County, and it is impracticable to determine the actual damage which the County will sustain in the event of and by reason of such delay. It is therefore agreed that the Contractor will pay to the County the sum of money per calendar day for each day's delay beyond the time prescribed as required in the document entitled "Instructions to Bidders", which is a part of these Contract Documents. The Contractor agrees to pay such liquidated damages as herein provided, and in case the same are not paid, agrees that the County may deduct the amount thereof from any money due or that may become due the Contractor under the Contract.
- B. In case the work called for under the Contract is not finished and completed in all parts and requirements within the time specified, the County shall have the right to extend the time for completion or not, as may best serve the interest of the County. If the County decides to extend the time limit for the completion of the Contract, the County shall further have the right to charge the Contractor, his heirs, assigns or sureties, and to deduct from the final payment for the work, all or any part, as it may deem proper, of the actual cost of County, including inspections, superintendence, and other overhead expenses directly chargeable to the Contract, and which accrue during the period of such extension. The cost of final inspections shall not be included in such charges.
- C. The Contractor shall not be assessed with liquidated damages nor the cost of County's services and inspection during any delay in the completion of the work caused by acts of God or the public enemy, acts of the County, fire, flood, earthquake, epidemics, quarantine restrictions, strikes, freight embargoes, shortages of materials, labor, fixtures or equipment (provided the Contractor furnishes satisfactory and acceptable proof that he has made diligent attempts to obtain same) and unusually severe weather or delays of subcontractors due to such causes, provided the Contractor shall within ten (10) days from the beginning of such delay notify the County in writing of the delay. County's findings of fact thereon shall be final and conclusive.
- D. The County agrees that changes in work ordered pursuant to Paragraph 20 and extensions of completion time made necessary by reasons thereof, shall in no way release any guarantee given by the Contractor or the Contract let hereunder, nor shall such changes in the work relieve or release the sureties on bonds executed pursuant to these specifications. Sureties shall be deemed to have expressly agreed to any change in the work and to any extension of time made by reason thereof.

24. ACCEPTANCE

- A. The Contract will be accepted as completed only when the whole and entire Contract shall have been completed satisfactorily to the County. In judging the work, no allowance for deviations from the original plans and specifications will be made unless already approved in writing at proper times and in a manner as called for herein.
- B. Should it become necessary to occupy a portion of the work before the Contract is fully completed, such occupancy shall not constitute acceptance.

25. PARTIAL PAYMENTS

On the twenty-fifth (25th) day of each month, the Contractor shall submit to the County an application for payment, using the forms supplied in Section 00505, showing an itemized statement



for work that has been performed. The County within thirty (30) days of receipt of application, shall issue to the Contractor a certificate for ninety percent (90%) of the amount the County finds due for work that has been performed.

Contractor shall submit certified copy of payroll showing payment of Davis-Bacon Act wages with each request for payment submitted.

26. FINAL PAYMENT

Upon completion of the Contract, the County will cause to be made a final estimate of the amount of work done, and the value of such work. After approval by the County representative, the County shall pay the remainder due on the contract (with the exception of retainage) after deducting there from, all previous payments. All amounts retained (retainage) under the provisions of the Contract shall be due and payable 30 days from the date of acceptance in writing of the completion of Contract and / or Notice of Completion issued by the County representative. All prior partial estimates and payments shall be subject to correction in the final estimate and payments. Payment and the final estimate is due within thirty-five (35) days from the recorded date of the Notice of Completion, provided all as-built drawings, equipment manuals, instructions to the owner and guarantees have been received and accepted by the County.

27. PAYMENT WITHHELD

The County may withhold or, on account of subsequently discovered evidence, may nullify the whole or part of any certificates to such extent as may be necessary to protect the County from (1) defective work not remedied, (2) asserted claims against Contractor, (3) failure of the Contractor to make payments properly to employees or for material or labor, (4) any reasonable doubt that the Contract work can be completed for the balance then unpaid, or (5) damage to another contractor.

28. FAULTY WORK AND MATERIALS

The Contractor shall promptly remove from the premises all materials condemned by the County as failing to conform to the Contract, whether incorporated in the work or not. The Contractor shall promptly replace and re-execute his own work in accordance with the Contract and without expense to the County. The Contractor shall bear the expense of making good all work of other contractors destroyed or damaged by such removal.

If the Contractor does not remove such condemned work and materials within reasonable time, fixed by written notice, the County may remove them and may store the materials at the expense of the Contractor. If the Contractor does not pay the expenses of such removal within ten (10) days thereafter, the County may upon ten (10) days written notice, sell such materials at auction or at private sales and shall account for the net proceeds thereof after deducting all costs and expenses that should have been borne by the Contractor.

29. TEMPORARY SUSPENSION OF WORK

The County shall have the authority to suspend the work wholly or in part, for such period as it may deem necessary, due to unsuitable weather or to such other conditions as are considered unfavorable for the suitable progression of the work, or for such time as it may deem necessary due to the failure of the Contractor to carry out orders given by County, or to perform any provision of the Contract. The Contractor shall immediately obey such order of the County and shall not resume work until ordered in writing by the County.

30. SAMPLES

When requested, the Contractor shall submit for the County's review samples of the various materials, together with the finish thereof, as specified for and intended for use in the work. Samples of bulk materials shall be selected by the lab. All materials and workmanship shall in all respects be equal to the samples so submitted and reviewed. Samples shall be sent or delivered to the County, samples and delivery charges paid by Contractor. Samples will be returned to the Contractor if requested, shipping or delivery charges collect.

31. CLEANING AND REMOVAL OF DEBRIS

The Contractor shall, as directed by the County during the progress of the work, remove and properly dispose of dirt and debris and shall keep the premises reasonably clean. Upon completion of the work, the Contractor shall remove all of his equipment and unused materials provided for the work, and shall put the building and appurtenances in a neat and clean condition and shall do all cleaning and washing required by the specifications.

32. OBSTRUCTIONS

The Contractor may be required to work around public utility facilities and other improvements which are to remain in place within the construction area. The Contractor shall be held liable to the owners of such facilities and improvements for any damage or interference with service resulting from the Contractor's operation.

The exact location of underground facilities and improvements within the construction area, whether shown on the drawings or not, shall be ascertained by the Contractor before using equipment that may damage such facilities or interfere with their service.

33. SUPERINTENDENT IN CHARGE

The Contractor shall keep on the work at all times and until the acceptance certificate is issued a competent superintendent or foreman for the purpose of receiving and executing without delay any orders from County in keeping with the terms of the Contract. This foreman shall have charge of the plans and specifications kept on the job. He shall be instructed to familiarize himself closely with all provisions of the plans and specifications and to follow the same accurately.

34. STORAGE OF MATERIALS AND EQUIPMENT

Materials and equipment shall not be stockpiled or placed outside of the site property lines unless written permission is obtained by the appropriate owner or political subdivision having jurisdiction over the adjacent property, roads, streets, etc.

35. GENERAL GUARANTY

Neither the final payment nor any partial payment, nor partial or entire use of the premises by occupancy by the County shall constitute an acceptance of the work not completed in accordance with the Contract. Final Payment or partial payment or partial or entire use of the premises by occupancy shall not relieve the Contractor of liability with respect to any warranties or responsibilities for faulty materials or workmanship. The Contractor shall remedy any defect in the

work and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from the date of final acceptance of the work, unless a longer period is specified elsewhere in these specifications. The County shall notify the Contractor of observed defects with reasonable promptness.

36. MATERIALS AND SUBSTITUTIONS

- A. Specific reference to materials, appliances, fixtures and equipment by trade name is intended to be used as standard, but this implies no right on the part of the Contractor to use other materials, fixtures, appliances, equipment, until review by the County.
- B. The County alone shall determine what will be considered as equal, but the burden of proof as to quality, utility and function, etc. shall be upon the Contractor.

If the Contractor desires to substitute any item, he shall in writing state the cost of such item and the original item named in the specifications if requested and shall submit a substitution warranty in the format shown in the specifications.

- C. As soon as practicable and within twenty (20) days after official award of Contract and before any fixtures, materials or equipment are purchased, the Contractor shall submit to the County a complete list of materials, fixtures and equipment in triplicate, giving the manufacturers' names, catalog numbers, etc., and, when requested, the original and substitute item of each article which he proposes to install as a substitution.
- D. Requests for substitution will not be considered after the above period of time unless the item specified is not obtainable or, in the opinion of the County, such substitution would serve the County's interest.

37. CONSTRUCTION, MATERIAL AND LABOR COST SCHEDULES

- A. The successful Contractor shall submit the following schedules to the County within ten (10) days after commencing the work:
  - 1. A construction schedule indicating the start and finish of each phase of the work.
  - 2. A detailed statement of the cost of material and labor included in the original estimate for each phase of the work so arranged that the value of the work as it progresses may be readily determined.

38. CONFERENCES

At any time during the progress of the work, the County may request the Contractor to attend a conference of any or all of the Contractors engaged on the work, and any notice of such conference shall be duly observed and complied with by the Contractor.

39. INSPECTION AND PAYMENTS - NOT ACCEPTABLE

The fact that the work and materials have been inspected by the County of Mendocino and payments on account have been made does not relieve the Contractor from the responsibility of replacing and making good any defective work or materials that may be discovered within one (1)

year from the date of the completion of the work by the Contractor and its acceptance by the County. [Five (5) years for roof.]

40. RETURN OF DRAWINGS AND SPECIFICATIONS

All plans and specifications shall be returned to the Office of the County Director of General Services or shall be accounted for by the Contractor before the final certificate will be issued.

41. ARRANGEMENT OF SPECIFICATION SECTION

- A. For convenience, these specifications are arranged in several sections, but such separation shall not be considered as limiting any work required to a particular trade. The Contractor shall in cooperation with other contractors establish responsibility for any work required by the plans and specifications which may be improperly arranged or not included in the appropriate section.
- B. In areas where one trade meets another for joining, the Contractor is responsible to be certain that all work shown is included in his bid.

42. QUALITY OF MATERIALS AND LABOR

All materials used on this Contract shall be new and the best market quality, unless specified or shown otherwise. All labor used on this Contract shall be competent and skilled for the work. All work executed under this Contract shall be done in the best, most thorough, substantial and workmanlike manner.

All material and labor not meeting these standards shall be removed. The County may refuse to issue any certificate of payment until all defective materials or work have been removed, and other material of proper quality substituted therefor.

43. INCOMPETENT WORKERS

If at any time any foreman or worker who shall be employed by the Contractor shall be declared by the County to be incompetent or unfaithful in executing the work, the Contractor, on receiving written notice, shall forthwith initiate appropriate action to dismiss such person from the work.

44. COUNTY TO DECIDE

All matters of color, texture, design, interpretation of plans and specifications shall be referred by the Contractor to County, whose decision thereon shall be final.

45. CODES

All work and materials shall be in full accordance with the latest rules and regulations of the State Fire Marshal; the Safety Orders of the Division of Industrial Safety; the California Electric Code; the California Building Code; California Mechanical Code; the California Fire and Plumbing Codes; OSHA and other applicable State and local codes and laws. Nothing in these plans or specifications is to be construed to permit work not conforming to these Codes.

46. PAYMENT OF FEDERAL, STATE OR LOCAL TAXES

Any Federal, State or Local tax payable on articles furnished by the Contractor under the Contract shall be included in the Contract price and paid by the Contractor.

47. LIMITATIONS OF HOURS OF WORK

Eight (8) hours labor constitutes a legal day's work. The Contractor shall forfeit as a penalty \$25.00 for each worker employed in the execution of the Contract by the Contractor for each calendar day which such worker is required or permitted to work more than eight (8) hours in one (1) calendar day and forty (40) hours in any one (1) calendar week in violation of the provisions of the California Labor Code, and in particular Sections 1810 and 1816. Work performed by employees of Contractors in excess of eight (8) hours per day and forty (40) hours during any one (1) week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1 & 1/2) times the basic rate of pay, as provided in Section 1815.]

48. PAYMENT OF NOT LESS THAN THE GENERAL PREVAILING RATE OF PER DIEM WAGES

- A. The Contractor shall pay his workers on all work included in this Contract not less than the general prevailing rate of per diem wages for legal holiday and overtime work in said locality. Such per diem wages shall not be less than the stipulated rates contained in a schedule thereof which has been ascertained and determined by the State Director of Industrial Relations to be the general prevailing rate of per diem wages for each craft or type of worker needed to execute this Contract.
- B. The Contractor shall comply with Labor Code Section 1775. In accordance with Section 1775, the Contractor shall forfeit as a penalty twenty-five dollars (\$25.00) for each calendar day or portion thereof, for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed for any work done under the Contract in violation of the provisions of the Labor Code in particular Labor Code Sections 1770 and 1780. In addition to said penalty, and pursuant to Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

49. LABOR CODE CLARIFICATION

It is to be understood that references to the California Labor Code shall mean the current Code or as may be amended during the period of the Contract.

50. NOTIFICATION OF READINESS FOR REQUIRED TESTS AND INSPECTIONS

The Contractor shall be responsible to notify all inspectors, testing agencies, and County representatives a minimum of seventy-two (72) hours before required tests and/or inspections.

51. RESPONSIBILITY FOR PROJECT SAFETY AND CONSTRUCTION TECHNIQUES

Specifically omitted from the services of the County are all design and construction review services relating to the Contractor's safety precautions or to means, methods, techniques, sequences, or procedures required for the Contractor to perform his work.

Omitted services include, but are not limited to, shoring, scaffolding, underpinning, temporary retention of excavations and any erection methods and bracing.

52. RECORD DRAWINGS

- A. The Contractor shall furnish one complete set of clean "Record" drawings to the County prior to project acceptance, showing clearly any changes made during construction. The Contractor shall use one of the blue line contract sets issued for construction for "Record" drawings. The set used must be complete, clean, and in good condition.
- B. In addition to any changes, all mechanical, electrical and plumbing items concealed in the building and underground, actually installed and routed. Depth below surface to top of underground item shall be indicated.
- C. All underground items shall be dimensioned from permanent reference points in a manner that they can be easily found in the field at a later time.
- D. Each sheet of the "Record" drawings shall be identified with the following label to be signed by the Contractor:

\_\*\_

These are record drawings which have been prepared or supervised by the undersigned.

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Contractor                                      Date

\_\*\_

- E. The Contractor is solely responsible for the preparation, completeness, and accuracy of the "Record" drawings. The County and its representatives are not responsible to review the "Record" drawings.

53. OCCUPANCY OR USE BEFORE ACCEPTANCE OF COMPLETION

The County may occupy any building or portion thereof or use any improvement contemplated by the Contract prior to the completion of the entire work. A list of work to be completed and corrected by the Contractor, if any, shall be prepared and agreed to between the County and the Contractor before occupancy or use. Such occupancy or use shall not operate as an acceptance of any part of the work but shall start the guaranty-warranty period on the structure or portion thereof so occupied or improvement of equipment so used, provided, however, that such occupancy shall not start the guaranty-warranty period as to items appearing on the list of work to be completed and corrected. No such occupancy or use shall be deemed to have occurred unless and until the County has given the Contractor formal written notice of intention to so occupy or use, specifying the portion or portions of the structure, improvement or equipment which will be deemed so occupied or used.

54. COMPLIANCE WITH HANDICAPPED ACCESS LAWS

- A. It is the County's intent for all features on these plans and specifications to conform to applicable regulations for the accommodations of physically handicapped persons in buildings and facilities used by the public, whether or not said plans and specifications so conform.
- B. It shall be the responsibility of the manufacturers, suppliers and distributors to insure that all manufactured and fabricated products, devices and items they supply for this project conform to applicable regulations of Title 24 of the California Code of Regulations.
- C. When shop drawings and/or manufacturers product literature, and other matters subject to handicapped regulations are submitted to County, the following shall be provided:
  - 1. Statement that the item shown complies with the handicapped regulations of Title 24 of the California Code of Regulations.
  - 2. Show all required dimensions, heights, clearances, and locations that must be followed when items are installed on project.

55. CONTRACT AMBIGUITY

This Contract shall be deemed to have been prepared jointly by the parties signing the Contract and if any inconsistencies or ambiguities exist, they shall not be interpreted or construed against any of the parties as the drafter.

56. FAIR EMPLOYMENT PRACTICES/NONDISCRIMINATION

The Contractor shall comply with Federal and State Fair Employment Practices provisions.

The Contractor, in connection with performance of work under this agreement, agrees to comply with the rules and regulations which deal with or relate to nondiscrimination set forth as follows:

- A. During the performance of this Contract, the Contractor and its subcontractors shall not deny the Contract's benefits to any person on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex or age, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, age, or sex. Contractor shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination.
- B. The Contractor shall comply with the provisions of the California Fair Employment and Housing Act (Gov. Code, sections 12900 *et seq.*), the regulations promulgated thereunder (2 Cal. Code of Regulations sections 7285.0 *et seq.*), and Government Code Sections 11135 - 11139.5).
- C. The Contractor shall permit access by representatives of the Department of Fair Employment and Housing and the County upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours notice, to view such of its books, records, accounts, other sources of information and its facilities as said Department or County shall require to ascertain compliance with this clause.

- D. The Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- E. The Contractor shall include the above nondiscrimination and compliance provisions in above subparagraphs 1 and 2 in all subcontracts to perform work under the Contract.

END OF SECTION



## SECTION 00811- UNFORESEEN PHYSICAL CONDITIONS

## PART 1 - GENERAL

## 1.1 SUMMARY

This Section includes special requirements for unforeseen hidden conditions, differing site conditions and underground facilities as required for California Public Works Contracts.

## 1.2 UNFORESEEN SITE CONDITIONS

- A. Pursuant to Section 7104 of the California Public Contract Code, if any of the following conditions, hereinafter called hidden conditions, are encountered at the site, then Contractor shall promptly, before such conditions are disturbed and in no event later than three (3) days after discovery, notify County in writing using the "Hidden Conditions Report" attached to this Document:
1. Material that Contractor believes may be hazardous waste material, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or a Class III disposal site in accordance with provisions of existing law.
  2. Subsurface or latent physical conditions at the site or in the building differing materially from those represented in the Contract Documents.
  3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents or conditions that could be observed by examination of the site and the Reference Documents.
- B. Conditions that are not unforeseen, hidden, unknown or differing site and building conditions include but are not limited to, the following.
1. All that is indicated in or reasonably interpreted from the Contract Documents.
  2. All that is indicated in or reasonably interpreted from the Reference Documents specified in Section 01010, "Summary of Work".
  3. All that could be seen on site and that could be observed.
  4. Conditions that are materially similar or characteristically the same.
  5. Conditions where the location of the building component is in the proximity where indicated in or reasonably interpreted from the Contract Documents or Reference Documents.
- C. County will promptly investigate the conditions reported which appear to be unforeseen conditions.
1. If County determines that the reported conditions are inherent in work of the character provided for in the Contract Documents or observed by examination of the site and Reference Documents, or that the condition is not hidden, unforeseen or materially different, Contractor shall execute the Work at no additional cost to County.

2. If County determines that the conditions are hidden or differing conditions and that they will materially cause a decrease or increase in Contractor's cost of any portion of the work, a Contract Modification will be issued for compensation of such portion of the work as provided in the General Conditions.
  3. If County determines that the conditions are hidden or differing conditions and that they will materially affect the performance time, Contractor, upon submitting a written request, will be granted an extension of time subject to the provisions of the General Conditions.
    - a. Time extensions or contract costs will not be granted for delays that could be or could have been avoided by Contractor redirecting his forces and equipment to perform other work on the Contract.
- D. Should Contractor disagree with County's determination, Contractor shall submit a Request for Change (RFC) to County that the condition is not indicated in or reasonably interpreted from the Contract Documents, and that the condition is not similar in character to the material that could have been observed by examination of the site and Reference Drawings, but that the condition is materially different and the condition is unforeseen and unknown.
1. Contractor shall submit proof with written explanation, drawings, photographs, material and labor cost breakdowns, and other relevant data to show the condition.
  2. County will review Contractor's submission and make a determination. Contractor shall not file for claim or RFC before County makes the determination.
  3. In the event of continued disagreement, Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all work to be performed under the Contract.
  4. Contractor shall retain any and all rights provided either by the Contract or by law which pertain to the resolution of RFC and protests between the contracting parties.

### 1.3 REMOVAL, RELOCATION, OR PROTECTION OF EXISTING UTILITIES

- A. In accordance with the provisions of Section 4215 of the California Government Code, County will assume the responsibility for the removal, relocation, or protection of existing main or trunk-line utilities located on the site of the Contract work, if such utilities are not identified in the Contract Documents.
- B. Contractor shall immediately notify County and the public utility in writing of such utility facilities it discovers while performing the work which are not identified in the Contract Documents.
1. Contractor shall negotiate with the owner of the utility, who shall have the sole discretion to perform repairs or relocation work or permit Contractor to do such repairs or relocation work at a reasonable price.
- C. Contractor shall not be assessed liquidated damages for delay in Substantial Completion if the delay was caused by such existing utilities in direct conflict with the work and not shown on the Drawings.
- D. Contractor will be compensated under the provisions of Article 7 for extra work involving existing utilities not shown on the Drawings or included in the Specifications but in direct physical conflict with Contractor's operations.

1. This extra work shall include the following costs:
  - a. Locating, supporting, working around, and protecting or repairing damage not due to the failure of Contractor to exercise reasonable care.
  - b. Removing and relocating, as directed by County, existing main or trunk line utility facilities located on site but not indicated on the Drawings and Specifications with reasonable accuracy.
  - c. Equipment on the project necessarily idled during such work.
  
- E. Contractor shall not be entitled to any adjustment in the Contract Sum or Time if the existence of such condition:
  1. Could have been reasonably discovered or revealed as a result of any examination, investigation, exploration, test or study of the site and contiguous areas required by the Contract Documents to be conducted by or for Contractor prior to commencing such work, or
  2. Could have been inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the work site.

PART 2 - PRODUCTS  
NOT USED

PART 3 - EXECUTION  
NOT USED

END OF SECTION

**HIDDEN CONDITIONS REPORT (HCR)**

Willits Veterans Hall Accessible Ramps Project

HCR No. \_\_\_\_\_

Submitted By: \_\_\_\_\_ Date: \_\_\_\_\_

	Ctr to PM	PM to Arch	Arch to PM	PM to Ctr
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Date Sent: \_\_\_\_\_

Date Received: \_\_\_\_\_

Type of Conditions Reported:

- |                                    |  |  |                                |
|------------------------------------|--|--|--------------------------------|
| <input type="checkbox"/> Site Work | <input type="checkbox"/> Structural      | <input type="checkbox"/> Architectural | <input type="checkbox"/> HVAC  |
| <input type="checkbox"/> Plumbing  | <input type="checkbox"/> Fire Protection | <input type="checkbox"/> Electrical    | <input type="checkbox"/> Other |

Location and Reference to Drawing: \_\_\_\_\_

Conditions Reported: \_\_\_\_\_

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Investigated By: \_\_\_\_\_ Firm: \_\_\_\_\_ Date: \_\_\_\_\_

Check this box if the hidden condition reported is not hidden. Reply with location(s) where the information can be obtained.

Reply of Findings: \_\_\_\_\_

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By: \_\_\_\_\_ Firm: \_\_\_\_\_ Date: \_\_\_\_\_

The reply is a finding from the investigation. No change in the Contract Sum or Time is authorized. See Specifications Document 00811 for the timeliness of investigation.

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

- A. The General Conditions and Division 1 - General Requirements apply to the Work of all Sections.
- B. Contractor is hereby specifically directed to notify and apprise all subcontractors and other parties engaged in the Work as to the Contents of the General Conditions and Division 1 - General Requirements.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work shall be performed at a Project site located at the Ukiah Veterans Hall, 293 Seminary Avenue, Ukiah, County of Mendocino.
- B. The Work of this Contract comprises installation of new heating ventilation and air conditioning system and related work as per attached plans and per the Scope of Work below:

Scope of Work:

1. Work shall include but is not limited to, demolition, two (2) new attic mounted furnace units, pad mounted outdoor compressors, supply and return ducting systems, electrical work, temperature controls, balancing and all appurtenant work required under the Contract Documents.
2. Additional requirements of all parties to the Contract are included in the Contract Forms and General Conditions part of the Project Manual.
3. If certain features or systems are not fully shown or called for in the Contract Documents, their construction shall be of the same character and quality as for similar conditions that are shown, called for, or reasonably inferred.
4. Contractor shall provide all labor, equipment, and materials that are required to provide a complete properly operating facility or system and a safe site. The extent of the work as indicated on the Drawings and as described in the Specifications shall include all that may be reasonably inferred to be required for proper execution or installation of work and for complete systems.
5. Should the General Conditions or Contract Documents contradict themselves, Contractor shall provide the more stringent or higher quality or quantity unless otherwise accepted by County.
6. The Drawings shall be recognized as diagrammatic in nature and not completely descriptive of all requirements for construction. Whatever work may be specified, and not drawn, or drawn and not specified, is to be executed as fully as if described in both these ways; and should any workmanship or material be necessary which is not either directly or indirectly noted in these specifications, or shown on the Drawings, but is nevertheless necessary for the purpose of properly carrying out the obvious intention thereof, Contractor is to understand the same to be implied, and is to provide for the same in its bid, as fully as if it were particularly described or delineated.

### 1.3 TYPE OF CONTRACT

- A. Contractor shall construct the Work under a single fixed-price Contract incorporating segregated lump sum prices for various optional "alternate" portions of the Work.
  - 1. Where the term "Contractor" is used in the Specification, the General Contractor is referred to.
  - 2. Where the terms "Plumbing Contractor," "Electrical Contractor," etc., are used, it has been for convenience only and in no way affects the overall responsibility of the General Contractor.

### 1.4 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 and in alphanumeric order.
  - 2. Signed Agreement and terms and conditions referenced in the Signed Agreement.
  - 3. Supplemental Conditions.
  - 4. General Conditions.
  - 5. Division 1 specifications.
  - 6. Drawings and Division 2 through 16 specifications.
  - 7. Written numbers and figures, unless obviously incorrect.
  - 8. Figured dimensions over scaled dimensions.
  - 9. Large format drawings over small-scale drawings.
- B. Any conflict between the Drawings and Division 2 through 16 specifications will be resolved in favor of the document of the latest date (i.e., the most recent document), and if the dates are not the same or are not determinable, then in favor of the specifications.
- C. Any conflict between a schedule or list of equipment or materials shown in the Contract Documents and the actual quantities required to complete the Work required, then the actual quantity shall take precedence.

### 1.5 USE OF PREMISES

- A. The Ukiah Veterans Hall is used for meetings and events by veterans groups, county departments, non-profit organizations and the public, mostly in the evenings and on week-ends. The schedule for use of the building is kept by the Executive Office and building use will continue through the course of construction. Building schedule information will be made available to the Contractor upon request.
- B. During the work week, from 7:00 am to 5:00 pm, the contractor will have full access to the building as required to complete the work. During construction, the basement and storage rooms will be available to the Contractor for staging, storage and access to the attic.
- C. The main hall, meeting room, dining room and kitchen are to be considered occupied areas for evening and week-end use and subject to the limitations below.
- D. Work in occupied areas of the building:

1. Within 48 hours of notice of award provide a construction schedule including a plan showing areas of work and duration of impacts in occupied areas.
  2. Notify the County at least 24 hours prior to commencing work in occupied areas.
  3. While working in occupied areas clean up thoroughly and return furnishings at the end of each work day. Do not leave materials, tools, equipment, dust or debris in any occupied areas after 5 pm.
  5. Provide adequate signage and protection for proper curing of patching compounds and wet paint.
- E. In addition to the evening and week-end reservations a small number of daytime uses may need to be accommodated.

#### 1.6 EXAMINATION

- A. General: As stipulated in Document 00100, Contractor is responsible for inspection of the existing site conditions prior to bidding and shall include in the Contract price any such work required to produce the expressed intent of the Contract Documents identified as a result of Contractor's inspection. Such modifications shall be included in the bid.
- B. Persons performing work shall examine conditions that affect their work and shall report in writing to Contractor, with a copy to County, conditions detrimental to work.
1. Failure to examine and report makes the person responsible, at no increase in the Contract Sum, for corrections necessary for the proper installation of their work.
  2. Commencement of Work constitutes acceptance of existing condition.
- C. Field Verification: Contractor shall verify all existing conditions in the field prior to commencing the Work.

#### 1.7 PERMITS FOR WORK

The work shall be performed under a Mendocino County Building Permit. It is the contractor's responsibility to secure the final permit from the Planning and Building Department, schedule all required inspections including the final inspection and return the finalized permit to the County.

#### 1.8 USE AND OCCUPANCY BY COUNTY PRIOR TO COMPLETION

County and approved users may occupy portions of the building during construction under the conditions stipulated in the General Conditions and the following:

- A. Contractor will not be held responsible for any damage to the occupied portion of the site directly resulting from County's occupancy.
- B. Access by County shall not be deemed to constitute a waiver of existing claims on behalf of County or Contractor against each other.
- C. Contractor shall ensure that utility service to the building and other operational systems are not interrupted except under advance arrangements.

- D. Interior work shall be scheduled with the County to minimize the disruption to scheduled activities in the building. Active work areas shall be secured from public access.

1.9 REQUEST FOR INFORMATION (RFI)

- A. Requirement: It is Contractor's responsibility to review Contract Documents a in advance of the work to be executed, and to request information so that County will have sufficient time to respond to Requests for Information prior to the start of actual construction of that part of the Work to which the RFI relates. Contractor shall be responsible for all delays, disruptions and other related impacts as a result of untimely RFI's submitted to County.
- B. Contractor shall coordinate all requests for information to prevent duplication. Requests for information that are duplicative, uncoordinated with each other, or do not allow for a reasonable time for response will be returned to Contractor.
  - 1. Contractor shall promptly notify County in writing of any discrepancies, and shall not proceed with the Work until such discrepancies have been resolved.
  - 2. Failure to notify County shall not relieve Contractor of its responsibility for resulting damage and/or defect, and for the cost of any corrective work that may be required due to Contractor's failure to notify.
- C. Contractor shall prioritize RFI's and request a response based on its most current and accepted CPM schedule.
- D. Contractor shall submit RFI's electronically and on a form acceptable to the County.
- E. Reply:
  - 1. County will endeavor to reply to all RFI's promptly as work schedule of the consultants allows; generally no later than fifteen (15) days from the day received.
  - 2. When an RFI involves a complex subject, extensive research or development, or substantial input from other governmental agency, County will inform Contractor and request additional time to prepare the reply. Contractor shall cooperate and agree to a reasonable time extension.
  - 3. The reply shall be a clarification or an interpretation of the Contract Documents; the reply is not an authorization of change in the Contract Sum or Time.
  - 4. Such written interpretation or clarification will be binding on Contractor and County. If County or Contractor believes that a written interpretation or clarification justifies an adjustment in the Contract Sum or Time, then County or Contractor may make a written request for change therefor as provided in the General Conditions, Article 20.

PART 2 – PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION



SECTION 01100 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. The Alternate proposals as described herein and identified on the drawings shall state the net sum to be deducted from the lump sum base bid in the event that the Alternate proposal is accepted. Dollar amounts for Alternate proposals shall be inserted in the "Bid Form" Section 00310.
- B. **The low bidder will be determined by the total of the base bid only.** The Board reserves the right to accept or reject any or all Alternate proposals.
- C. Include in each Alternate proposal all changes in cost resulting in the work of all trades affected thereby. Work shall be performed in accordance with drawings and specifications affected unless otherwise specified.
- D. Each bidder shall determine to its own satisfaction the full extent to which the Work is affected by each Alternate proposal and shall make full and proper allowance therefore in preparation of its proposal.

1.2 ALTERNATES

- A. **Deductive Alternates:**
  - 1. **Deductive Alternate No. 1: Delete Air Conditioning Compressors.** Delete outdoor air conditioning compressors including concrete pads, electrical feeders from new service panel, control and refrigerant connections to the AC units.
  - 2. **Deductive Alternate No. 2: Delete Service Panel upgrade.** Delete new main service panel change out.

Cooling coils at furnace unit shall be included in base bid.



## SECTION 15800 - HEATING, VENTILATION AND AIR CONDITIONING

## PART 1 – GENERAL

## 1.1 SCOPE OF WORK

- A. Furnish and install a complete heating and ventilating system as shown on the Drawings and specified herein. The general extent of the work is outlined below but is not limited to the following:
  - 1. Two (2) attic mounted furnace units.
  - 2. Two (2) pad-mounted outdoor cooling units (Alternate 1).
  - 3. All related coils, mixing boxes, volume dampers, ductwork, air outlets, grilles and diffusers as shown on Drawings.
  - 4. All related gas supply piping, valves, control valves and refrigerant lines.
  - 5. Project Record Documents including O&M manuals and “as-built” drawings.
- B. County standard Delta temperature control system by ESI, Sacramento: 1-916-344-1711.
- C. Hangers, vibration isolators and other supports for equipment, ductwork, exhaust fans and diffusers, including seismic bracing of all equipment and ductwork per SMACNA, PPIC Guidelines.
- D. Testing and balancing of each system.
- E. All hoisting, transportation and associated work necessary for placement of equipment in the final location shown.
- F. Repair all damage done to premises as a result of this installation and removal of all debris left by those engaged in this installation.
- G. Clear identification of all materials delivered to the site.
- H. Cleanliness of all fixtures, equipment and apparatus when the complete work is accepted by Owner.
- I. Removal of debris.

## 1.2 REFERENCE STANDARDS AND CODES

Work and materials shall be in full accordance with all applicable local or state ordinances, and the latest edition of the California Building Code, California Plumbing Code, California Mechanical Code, California Code of Regulations Titles 20 and 24, National Fire Protection Association, State of California Safety Orders, State Fire Marshal, and all other applicable codes including local codes and regulations. Whenever Drawings and Specifications require larger sizes or higher standards than are required by regulations, Drawings or Specifications govern. Whenever Drawings or Specifications require something which will violate regulations, regulations govern. Nothing contained herein or on the accompanying drawings shall be construed as permitting work that is

contrary to these codes, rules or regulations. No extra charge will be paid for furnishing items required by regulations but not specified or shown on drawings.

### 1.3 LICENSES, PERMITS, AND FEES

- A. Provide, procure and pay for all incidental permits, services, meters, licenses, fees, etc., required to carry on and complete this work.
- B. Contractor is responsible for all utility services fees and connections to existing mains. For utility connections which are made by the Local Utility Authority, Contractor shall arrange with this authority to make the connection.
- C. Upon completion of the work, deliver to Architect all certificates of approval, signed by the aforementioned authorities.

### 1.4 GENERAL REQUIREMENTS

- A. Visit the site of the Work, take measurements and such other information as may be necessary for an intelligent bid. Failure to do so shall not lessen Contractor's responsibility or entitle it to additional compensation for work not included in its estimate.
- B. Follow manufacturer's directions in all cases where manufacturer of equipment used furnishes directions covering points not shown on the drawings or specified herein.
- C. Mechanical drawings are generally diagrammatical except where specifically dimensioned. Mechanical work shall be coordinated with the work of other trades and equipment suppliers for proper installation of equipment. Reasonable offsets, relocations and transitions shall be made to avoid interference with existing fixtures, other work and with the structure. Pipes and ducts shall be concealed in occupied areas unless otherwise shown or specified.
- D. Quiet and vibration-free operation of all equipment is a requirement of this installation. Properly adjust, repair, balance or replace any equipment producing objectionable noise or vibration in any of the occupied areas of the building including providing additional brackets, bracing, vibration isolators, etc. to prevent objectionable noise or vibration.
- E. Be responsible for damage to any of this work before acceptance. Securely cover all openings, apparatus, fixtures and appliances, both before and after setting into place, to prevent destruction or breakage of equipment. Should the equipment become damaged, restore it to its original condition and finish before final acceptance without change in contract cost.
- F. Before beginning any installation work, Contractor shall carefully check any piping, ductwork and equipment locations for interference with other trades. If conflicts are discovered then, or as Work progresses, a set of prints marked with a red pencil showing recommended installation methods shall be submitted to Architect for approval prior to the installation of work in question. No additional costs to Contractor will be considered for work which must be relocated due to conflicts between work of different sections.

- G. Workmanship shall be first class throughout and performed only by competent and experienced workmen in a manner satisfactory to Architect. Constant supervision of the work either by Contractor or its competent representative shall be maintained.
- H. The Work may be inspected at any time by the owner or its representative. Work covered or concealed before being inspected and approved shall be opened and uncovered upon request. Any materials, labor, etc. required to recover or re-conceal work under this circumstance shall be done at no additional cost to Owner.
- I. Confer with Architect to establish exact locations, mounting heights, and arrangements of all the finish work prior to roughing in. Minor relocations and rearrangements of the work requested at this time shall be included at no additional cost to Owner.
- J. Consider all space requirements for all Work indicated in the contract documents and subsequent drawings before installing any portion of the Work. Space conflicts which occur during or after installation of work caused by failure to consider all such requirements shall be resolved by Contractor to the satisfaction of Architect at no additional cost to Owner.

## 1.6 SUBMITTALS

- A. Materials and substitutions:
  - 1. When specific names are used in connection with materials hereinafter mentioned, they are mentioned as standards, but this implies no right to use other materials or methods unless approved as equal in quality and utility by Architect. Approval of substitute materials does not relieve Contractor of responsibility for providing a workable and functioning system as designed.
  - 2. Product material data shall be submitted for furnaces, coils, compressors, and all major equipment including dampers, grilles and registers, thermostats and time clock.
  - 3. Submit electronic copies of submittal to Owner including a list of materials and equipment proposed for use. Give name of manufacturer, brand name, and catalog number of each item. Submit complete list at one time. Partial or incomplete lists of material will not be considered. Only one request for substitution will be considered on each item of material or equipment. Submit complete description, information and performance data covering equipment which is specified but for which brand names or specified models have not been used.
  - 4. Substitutions of products or changing of size, capacity, performance or function of any specified product shall be clearly marked and identified in a cover letter.
- B. Manuals: Bind all bulletins, instructions, operation sheets and part sheets for each and every piece of equipment furnished. Folder shall be indexed into sections and labeled for easy reference. Bulletins containing more information than equipment concerned shall be stripped and reassembled. All pertinent information required for proper operation and maintenance of equipment supplied shall be clearly and legibly set forth in memoranda. Copies of all component guarantees shall be included as an Addendum at the end of the manual. Operating instructions shall show sequence of all equipment. The description of the sequence of operations shall include a control logic narrative. Submit two copies for approval. Following approval, provide four copies.

- C. Balancing Report: Submit to Architect one electronic certified copy of the balancing report.

1.7 INSTRUCTION

Contractor shall be responsible for proper instruction of Owner for operation and maintenance of equipment and apparatus installed as specified in this Section. A minimum of one full day and up to two days shall be allocated for instruction.

PART 2 – PRODUCTS

2.1 GENERAL

All materials and equipment shall be new and free from defects. Materials and equipment shall be of the same brand or manufacturer throughout for each class of material or equipment. The equipment to be furnished under each division of the specifications shall be essentially the standard product of a manufacturer regularly engaged in the production of the required type of equipment and shall be the manufacturer's latest approved design.

2.2 DUCTWORK

- A. Unless otherwise indicated, ducts, dampers, plenums, flashings and other duct appurtenances shall be fabricated of U.S. Steel prime galvanized sheets and shall conform to the construction standards of the "Duct Manual and Sheet Metal Construction for Ventilating and Air Conditioning Systems," latest edition, of the "Sheet Metal Construction for Ventilating and Air Conditioning," latest edition, of the "Sheet Metal and Air Conditioning Contractors National Association of ASHRAE Guide."

- B. Low pressure duct gages:

- 1. Rectangular Ducts:

Maximum Width (inches)	Minimum Gage (USS Gage)
to 24"	24
24 to 30	22
31 to 60	20
60 to 72	18

- 2. Round Ducts: Round ducts in attic areas, up to 14 inches in diameter shall be constructed from a minimum of 26 gage galvanized sheet metal. Duct sizes greater than 14 inches in diameter shall be constructed of 24 gage GSM.

- C. Turning vanes at all square elbows shall be H.E.P. High Efficiency Profile type as manufactured by Aero/Dyne Co.

- D. Duct connections to fans shall be made with Elgen SDN-6 flexible duct connections or approved alternate.
- E. Any duct exposed to the weather shall be water tight.
- F. Where internal sound insulation is applied, duct sizes indicated shall be inside clear dimensions.
- G. Hangers shall be provided at not more than 8' centers:  
1" x 1/8" straps for ducts less than 24" wide, 1 - 1/2" x 1/8" straps for ducts up to 42" wide.
- H. All duct and plenum joints and field formed seams in the building shall be taped for air tightness. Tape shall be type "DT" Pressureless tape and HD-20 Adhesive, as manufactured by Hardcast, Inc. or 602 canvas saturated with Arabol Adhesive or equal.
- I. Manual volume dampers shall be equal to Duro-Dyne or Air Balance Inc. or equal.

### 2.3 AIR OUTLETS

- A. All grilles and diffusers shall be those noted on Drawings or approval equal. Color to be selected by Architect.
- B. All ceiling grilles and diffusers shall be located symmetrically with lights and shall be centered on ceiling bays. Coordinate placement with Architect.
- C. Where substitutions are offered diffusers must be sized for the air quantities, pressure drops and location indicated and provide adequate throw without objectionable noise.
- D. Fire Dampers: Fire dampers, frames and sleeves shall be fabricated and installed in accordance with the requirements of State Fire Marshal Std. No. 43-2 and shall be installed at all locations indicated on the plans and where required by Code. Ruskin, fire smoke damper.

### 2.4 SPECIALTIES

- A. Air Filtration: Cambridge, or equal 2" thick filters; sizes as per drawings and schedules and to fit equipment openings. All air entering the AC and furnace units must be filtered. Install temporary disposable filters for start-up and change to specified filters prior to turning over building to Owner.
- B. No units shall be operated without filters in place. Change filters immediately prior to acceptance, and provide Owner with one additional complete change of filters for all units.
- C. Air filters shall be approved type tested in accordance with test method SFM-51-6 as shown in Article 80, Calif. Adm. Code. Preformed filters having combustible framing shall be tested as a complete assembly. Air filters shall be Class 2 or better, and shall have approved CSFM numbers.

- D. Flashing and waterproofing: furnish and install 20 gauge galvanized sheet metal flashings for ducts passing through roof. Counter flashing shall be soldered to ducts; penetration shall be made watertight.
- E. Vibration isolators shall be Vibrex, Mason Industries or approved equal, vibration isolators shall be calculated and sized by the manufacturer for the specific piece of equipment and the manufacturer's specified corner weights.
- F. Access panels: provide access panels for reaching duct volume dampers, extractors, etc. Panels shall be Krueger, Elmdor or approved equal of 10 Gauge steel, 16" x 16" for reaching small items and 16" x 24" for larger items and shall be provided with a baked gray prime coat finish coat color per Architect. Elmdor Slammer SLA security access door.

2.5 HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT: Shall be as noted in the equipment schedule on the plans. Basis of design is Trane as noted; trade names are used to indicate capacities, characteristics and qualities. Unless otherwise noted, you may propose to provide equipment or materials of a different manufacturer in conformance with General Conditions and Division One.

- A. Wherever you submit equipment that is different from that scheduled on the Drawings or noted in these Specifications, conform to the following:
  - 1. Quality and Performance: All proposed equipment shall be of equal or better quality, features and performance than the equipment scheduled.
  - 2. Size, weight and access: All proposed equipment shall be similar in size, configuration, weight and access requirements to that scheduled.
  - 3. Electrical and Gas: All proposed equipment shall be similar in electrical power and gas requirements to that scheduled. Where the electrical power or gas requirements of the proposed equipment is different, coordinate with the Drawings and Electrical Division of these Specifications to accommodate changed power requirements without additional cost to the Owner.
- B. Unit shall be designed to conform to the following:
  - 1. ANSI B9.1
  - 2. ANSI/ASHRAE 15-1978
  - 3. UL tested and certified per ANSI Z21.47
  - 4. American Gas Association certified as a total package.
- C. Controls:
  - 1. Unit Controls shall be complete with self-contained low voltage control circuit.
  - 2. Safeties: The HVAC unit shall come supplied with the following refrigerant circuit protection:
    - a. Loss of charge/low pressure protection switch.
    - b. Freeze protection thermostat.



- c. High pressure switch.
  - d. Filter dryers.
3. The heating section shall be provided with the following minimum protections:
  - a. High temperature limit switch.
  - b. Induced draft motor centrifugal switch.
  - c. Flame rollout switch (manual reset).
  - d. Flame proving controls.
4. Integrated Economizer:
  - a. Shall be manufacturer supplied or manufactured by Micrometal, or Equal, integrated type capable of simultaneous economizer and compressor operation.
  - b. Shall include all hardware and modulating controls to provide cooling with outside air.
  - c. Shall be capable of introducing 100% outside air.
  - d. Shall be equipped with 100% gravity relief damper and hood.

## 2.6 GAS FLUES

Furnish and install manufacturer recommended flue for furnaces. Flue assemblies shall be UL listed, and sized as recommended by equipment manufacturer. Provide all support plates, spacers, weather cones and roof or wall caps as required.

## 2.7 INSULATION

### Duct Insulation:

- A. All outlet boxes, control devices, transitions, etc. shall be covered with insulation except where acoustical lining occurs.
- B. Where internal sound insulation is applied duct sizes shown on drawings shall be inside clear dimensions.
- C. Thermal insulation: Owens Corning Fiberglas, Gustin-Bacon, or equal, flexible duct insulation 11b per cubic foot 1-1/2in. thick. The blanket will be wrapped around ducts lapping 2" minimum and securely stapled on 4" centers. On ducts greater than 24" wide, the insulation will be additionally secured with wires on approximately 18" centers. Duct thermal insulation shall have, as a minimum, an "R" value as required by code.

## 2.8 FLEXIBLE DUCTWORK

- A. Flexible ductwork may be used as a final connection to air terminals, when not exposed to view from inside the building, and shall not exceed five feet in length. All flexible ductwork shall be pre-insulated, with vapor barrier, and shall meet Class 1 requirements of flame spread rating of 25 or less and smoke developed rating of 50 or less when tested in accordance with NFPA Standard 255. Thermal resistance "R" shall be 4.2 or greater.

- B. Install all flexible ductwork per SMACNA and CMC standards. Seal ductwork per Section 1 above. Insulation and vapor barriers present on factory fabricated ducts shall be fitted over the core connection and shall be supplementally secured with a draw band.

## 2.9 COUNTY STANDARD CONTROLS

- A. Temperature control system shall be design-build Delta Controls by Environmental Systems, Inc., Sacramento, CA 916-344-1711. NO SUBSTITUTIONS.
- B. Wiring of low voltage temperature control equipment and functional operation of the temperature control system will be the responsibility of Contractor. Submit control plan for approval before commencing any control work. The control manufacturer shall secure the complete wiring diagram of the various pieces of equipment such as fan units, AC units, etc. and these shall be incorporated into the submittal drawings.
- C. Occupancy of the building is sporadic and settings for occupancy shall be adjustable remotely.

- 2.10 Automatic Dampers: Opposed blade balanced type factory fabricated of extruded aluminum or galvanized steel with neoprene or felt edges and anti-friction pivot bearings. Provide oil immersed gear train electric motor type damper actuators with spring return for FAIL-SAFE operations as specified in NFPA-90A.

## PART 3 – EXECUTION

### 3.1 CUTTING AND PATCHING:

- A. Do all cutting and drilling necessary for the proper installation of the Work except through structural members, where before cutting or drilling Contractor shall first notify Architect and receive written permission from Architect to continue. Once permission from Architect has been received, Contractor shall be responsible for the exact layout of all necessary penetrations through structural members. Contractor shall do all repairs of damage to work under other headings caused by work under this heading. These repairs and patching shall be made in a manner satisfactory to Architect. Contractor shall seal all openings through floors, walls and ceilings.
- B. Keep all ductwork concealed within the attic space or chases shown.
- C. Should any other openings or space be found necessary under this Section they shall be proposed to the owner for approval prior to proceeding.

### 3.2 DUCTWORK

- A. Installation shall conform with NFPA-90A and SMACNA standards for low pressure sheet metal ducting. Provide mounting and supporting of ductwork and accessories including, but not limited to structural supports, hangers, vibration isolators, stands, clamps and brackets, access doors, and dampers. Use electrical isolation between dissimilar metals. Install ductwork accessories as indicated in accordance with the manufacturer's printed instruction. Allow clearance for inspection, repair, replacement, and service.

- B. Install air tight ductwork. When air distribution system is operated, there shall be no clatter, vibration, or dust marks.
- C. Field changes of ducts such as those required to suit the sizes of factory fabricated equipment actually furnished shall be designed to minimize expansion and contraction. Increase and decrease duct sizes and construct rectangular to round fittings gradually, not to exceed 15° divergence wherever possible. Use gradual transitions in field changes as well as modifications to connecting ducts.
- D. Dampers: When installed on ducts to be thermally insulated, equip each damper-operator with stand off mounting brackets, bases or adapters to provide clearance between the duct and operator not less than the thickness of insulation. Stand off mounting items shall be integral with the operator or standard accessory of damper manufacturer.
- E. Provide catwalk for access to manual and automatic dampers and other apparatus requiring service and inspection.
- G. Prepared openings: Contractor shall be responsible for the proper size and location of prepared openings in the ceiling.
- H. Duct supports: Attach supports only to structural framing members. Where supports are required between structural framing members, provide suitable intermediate framing.
- I. Elbows: Ductwork elbows and bends shall be smooth type with a minimum 6" internal radius of curvature and shall include internal vanes. Square elbows shall be used only where space does not permit the use of smooth radius elbows, and must be supplied with HEP turning vanes.

### 3.3 CONTROLS

- A. Provide all wiring and conduit required for control system. Submit for approval, before ordering controls for authorizing and control installation, control diagram showing all controls, wiring, piping, etc.
- B. Mount thermostats at locations suitable for proper performance and where they can be accessed from the floor.
- C. Provide for motorized volume dampers and control logic for 100% fresh air system on furnace F-1.
- D. Control wire shall be in conduit.

### 3.4 CLEANING AND PRESERVATION

- A. All equipment and other materials furnished under the mechanical section of the Work shall be thoroughly cleaned free from rust scale and other dirt before any covering or painting is done and before the systems are put in operation.
- B. Ductwork shall be protected thoroughly cleaned before grilles are installed.

- C. After completion of the work all resulting debris shall be removed to leave the entire work area in a complete and undamaged condition.

### 3.5 RECORD DRAWING AND AS BUILT DRAWING:

- A. Obtain, pay for and keep up-to-date, complete prints of the project drawings clearly annotated with "as-built" data as the Work is performed; this data shall include exact sizes, locations and elevations of all buried or concealed pipe, conduit, ductwork and equipment, and the locations of services, meter disconnects, and shutoffs as installed.
- B. If Contractor fails to provide proper "as-built" drawings or maintain records of the location of piping equipment, etc., it shall reimburse Owner for the cost of having this work done by registered Mechanical Engineer including expenses of locating all elements and measuring up the entire job in the field.

### 3.6 OPERATION AND MAINTENANCE INSTRUCTIONS

- A. Submit to the Owner an electronic copy of operation and maintenance instructions for each item of equipment.
- B. Upon completion of the work Contractor shall instruct the Owner in the operation and maintenance of the equipment and system.

### 3.7 TESTS AND ADJUSTMENTS

- A. All air supply outlets shall be adjusted for the air quantities indicated on the drawings. Air balancing shall be done in accordance with SMACNA standards by a certified testing and balancing firm regularly engaged in this type of work and other than the firm performing the installation. All air measurement readings taken during the adjustment work shall be recorded and the resulting data shall be presented to Architect for review.
  - 1. Testing shall be done under conditions of both heating and cooling. Run tests with filters moderately dirty or compensate if cleaner filters are used. State static pressure at all critical areas throughout the system.
  - 2. Correct measurement for elevation.
  - 3. The following must be submitted in tabular form to Architect:
    - a. Air readings for all ducts, grilles and registers including fresh air intakes and exhaust air discharge at all AC units and furnaces:
      - 1) Make readings with recently calibrated velometer, anemometer, or anemotherm or any combination of them all.
      - 2) Pitot tube traverses shall be made where necessary to ensure even air distribution throughout the system and where other measurement devices are not applicable.
      - 3) Make static pressure readings with inclined tube or vertical manometer.
      - 4) Make electrical readings with clamp-on type ammeter.
      - 5) Record duct air temperatures during tests.

- 6) CFM quantities at each outlet shall be 5-10% in excess of quantities listed on the drawings since testing is done with new equipment and clean filters.
      - b. Conduct test under normal conditions after all doors and windows are in place.
      - c. Fan delivery in CFM (tolerance 0 to 5%).
      - d. Fan RPM and rotation.
      - e. Motor HP, amperage and voltage.
      - f. Thermal elements (heater sizes in motor starters).
      - g. Test all and adjust all air inlets, outlets, outside air, return air, exhaust air and/or supply air totals for all fan systems to the requirements of the contract documents. Indicate location of fan and outlets, sizes and factors (air quantity tolerance plus or minus 10%).
      - h. Test and record static pressure drop across all filters and note condition of the filter at the time of the test.
    4. Submit a complete balance report consisting of typewritten or computer-printed data sheets covering all phases of the work specified herein. Submit a single line drawing, duplicates of Architect's drawings (reduced size is acceptable) showing all significant deviations from the original design. Submit an electronic copy of the test and balance reports. The reports shall be signed by the principal of the firm and shall list all persons in charge of onsite work.
  - B. All automatic control systems shall also be adjusted for the normal operating conditions.
  - C. Contractor shall make such tests of any portion of the installation as may be required by Architect to determine if it is in accordance with these Specifications.
  - D. Balancing Inspection: Upon completion of the balancing and receipt of the balance report by Architect, Contractor shall provide such men as are necessary to assist Architect in checking and system balance. Contractor shall provide ladders and such other items required to check the system.
  - E. Final Balance Inspection: If during the above balance inspection, any portion of any system is found in improper balance due to lack of adjustment, that system shall be rebalanced and a new report shall be submitted. This procedure shall be repeated until the system is properly balanced to the satisfaction of Architect.
  - F. The balancing contractor shall provide all pulleys, belts, motors and etc. required to achieve the air flow balance shown on drawings.
- 3.8 Guarantee:
  - A. Contractor shall warrant the HVAC system installation against defective workmanship, materials, and equipment furnished under this section under normal use and service, for a period of one (1) year from the time the system is put into operation and formally accepted by Owner, Architect, and Engineer.

- B. If the system is not in satisfactory operation at the time the building is accepted, the warranty shall be extended to include a one-year period from the time the system is in satisfactory operation and accepted.

END OF SECTION

## SECTION 16000 - ELECTRICAL

## PART 1 - GENERAL

- 1.1 THIS SECTION outlines the general requirements for the electrical system. The electrical system includes, but is not limited to, all wiring, devices, grounding, circuit protection, switches, outlets, panel boxes, meters, connectors, accessories and fixtures necessary for a complete installation with all equipment, appliances and controls connected and ready for use. The job entails new construction and interfacing with existing Work.
- 1.2 QUALITY ASSURANCE:
- A. Building Code: California Building Code most recent edition with current State and local amendments.
  - B. Electrical Code: California Electric Code most recent edition with current State and local amendments.
  - C. Energy Requirements: All materials and workmanship shall comply with the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Building Energy Efficiency Standards published by the California Energy Commission.
  - D. Comply with all applicable local codes and regulations unless stricter standards are indicated.
  - E. All equipment, materials, fixtures shall bear U/L label rating. All exterior components and those in bathroom areas shall bear U/L label rating for damp locations.
  - F. Accessibility Requirements: All materials and workmanship shall comply with the all requirements for accessibility as set forth in the most recent editions of the California Code of Regulations, Title 24 (California Building Standards Code) with current State and local amendments and the most recent edition of the Federal Americans with Disabilities Act in effect at the time of construction.
- 1.3 SUBMITTALS:
- A. Provide manufacturer's Literature describing all manufactured products proposed for inclusion in the Work of this Section.
  - B. Submit electrical load calculations for review by Architect.

## PART 2 - PRODUCTS

## 2.1 LOADCENTERS

- A. Manufacturer: Square-D, Westinghouse, ITE, or equivalent.
- B. Construction: Boxes shall be made from cold rolled code gauge sheet steel having multiple knockouts and shall be factory assembled into a single rigid structure. Hinged doors covering all circuit breaker handles shall be included in all trims. Doors shall have a manually operated spring latch.

- C. Finish: Finish shall be medium light gray ASA49 enamel.
- D. Bussing: Bus bars for the mains and cross connectors shall be of copper or tin plated aluminum in accordance with UL standards. Bussing shall be braced throughout to conform to industry standard practice governing short circuit stresses in load centers. Neutral bussing shall have a suitable lug for each outgoing feeder requiring a neutral connection of same ampacity as branch.
- E. Overcurrent Devices: Plug-on type circuit breakers. All breakers shall be full-size. No "half-size", or "wafer-size" breakers shall be allowed.

## 2.2 METER ASSEMBLIES

### A. General

- 1. Meter Assemblies shall meet the enclosure requirements established by UL and shall be furnished with a UL label stating the switchboard is "Suitable for use as a Service Equipment" and shall meet the requirements of PG&E as service entrance equipment.
- 2. Metering sections shall be provided with 5-jaw meter sockets for 120/240V 1 phase 3 wire service. All meter sockets shall be UL approved for "continuous duty".
- 3. Shall be as manufactured by Square-D, Westinghouse, ITE, GE or equivalent.
- 4. Underground Termination Facilities: Provide termination facilities in accordance with PG&E standards.

## 2.3 CONDUIT AND FITTING

### A. Rigid Steel Conduit

- 1. Conduit, rigid steel: full weight, threaded, hot-dip galvanized, inside enameled, conforming to ANSI C80.1.

### B. Electrical Metallic Tubing (EMT)

- 1. Conduit: Shall be formed of cold rolled strip steel, electrical resistance welded continuously along the longitudinal seam and hot-dip galvanized after fabrication. Conduit shall conform to ANSI C90.3 specifications and shall meet UL requirements.

### C. Non-Metallic Conduit

- 1. Conduit: Carlon schedule 40 PVC.
- 2. All fittings solvent welded.

## 2.4 WIRE AND CABLE

### A. General

- 1. Acceptable manufacturers: General Electric Co., Rome Cable, Southwire, Triangle, PWC Inc., or equivalent.
- 2. Conductor material: All wire and cable shall be insulated copper conductors for all wire sizes.
- 3. Insulation: Insulation shall be THWN-THHN for wire sizes through size 1/0 AWG. For larger sizes insulation shall be THWN, XHHW, THW or as required to suit application.



4. Fixture wire: Type AF
5. Armored Cable: Type MC with ground. Romex type not permitted for new work.
6. Service-Entrance Cable: Not permitted.
7. Telephone and computer network cable to be Category Six type communications cable.
8. Minimum conductor size:

Power and lighting branch circuits:	#12 AWG
Small appliance circuits:	#12 AWG
Signal and control circuits under 100 volts:	#14 AWG

Provide low voltage wiring as required in the National Electrical Code.

## 2.5 OUTLET BOXES AND COVERS

- A. Standard Outlet Boxes: Galvanized, one-piece, drawn steel, knock-out type of size and configuration best suited to the application indicated on the plans. Minimum box size, 4 inch square by 1-1/2 inch deep.
- B. Switch Boxes: Two inch by 3 inches long, galvanized steel switch boxes shall be used only for the installation of single switches. Install multiple switches in standard gang boxes with raised device covers suitable for the application indicated.
- C. Nonmetallic Outlet Boxes: PVC type nonmetallic boxes, and nonmetallic raised covers as manufactured by Carlon or equivalent may be used in lieu of standard steel boxes in conformance with the requirements of the National Electrical Code.

## 2.6 SWITCHES AND RECEPTACLES

### A. General

1. All general purpose 15 and 20 ampere, 125-250 volt receptacles and 120-277 volt switches shall conform to NEMA WD-1 and applicable UL tests.

### B. Receptacles:

1. Ground fault circuit interrupter receptacle: NEMA type 5-15R residential grade, LEVITON MFG. CO. #6599-W or equivalent.
2. Duplex receptacles; NEMA type 5-15R residential grade, LEVITON #5096-W or equivalent. NEMA type 5-20R for damp locations.

- C. Switches: Fifteen and Twenty ampere, 120-277 volts, fast make-slow break, quiet type switch with silver cadmium alloy contacts, binding head terminal screws, back and side wired. All switches shall be of color approved by Architect.

1. Single pole, single throw, residential grade, LEVITON #53501-W or equivalent.
2. Three-way, residential grade, LEVITON 53503-W or equivalent.

- D. Outdoor receptacles: Weatherproof PVC construction, corrosion resistant, heavy duty, hinged cover flap, and gasket.

## 2.7 SERVICE DISCONNECT SWITCHES

- A. Service disconnect switches shall be heavy duty type, cover interlocked with operating handle so that cover cannot be opened with switch in closed position and switch cannot be closed with cover in open position. 120 pr 240 volt rating as required or in NEMA 1 enclosure indoors, NEMA 3R enclosure outdoors.

## 2.8 PROTECTIVE DEVICES

- A. Circuit Breakers: Molded case, bolt-on, thermal magnetic type, 40 degrees C. Ambient temperature compensated, fixed mounting, with quick-make, quick-break switching mechanism mechanically trip-free from the operating handle and conforming to applicable codes.
- B. Ratings: Refer to drawings and prepare panel schedules for trip frame and poles required. Minimum short circuit rating for 120/240 volt breakers is 22,000 A.

## 2.9 IDENTIFYING DEVICES

- A. Panelboard Directories: Shall be typewritten, arranged in numerical order and shall show the number where the circuit is located. The room numbers used shall be verified with the Owner and shall not necessarily be those used in the drawings. Mount directories in a 6"x8" metal frame under glass inside each panelboard.
- B. Wire and Terminal Markers: Self-adhering, pre-printed vinyl with self-laminating wrap around strip. Brady B191 series, Thomas & Betts WSI series, or equivalent.

## 2.10 GROUNDING

- A. Enclosures of equipment, raceways, and fixtures shall be permanently and effectively grounded. Provide code sized (unless otherwise indicated) copper, insulated green equipment ground with non-metallic conduit runs. Equipment ground shall originate at panelboard ground bus and shall be bonded to all switch and receptacle boxes and electrical equipment enclosures.
- B. Building services shall be grounded using concrete encased electrode installed in footings, per NEC Article 250. Bonding shall be made to cold water pipe and gas pipe.

## PART 3 -- EXECUTION

### 3.1 CONDUIT AND RACEWAY APPLICATIONS

- A. Rigid Steel Conduit: For all exposed conduit exposed to mechanical damage.
- B. PVC Conduits: Schedule 40 PVC may be used underground with 3" sand under and 6" sand over when serving lighting circuits and power secondary circuits. PVC conduit may be used exposed at meter assemblies where protected from damage.

### 3.2 CONDUIT INSTALLATION

#### A. General

1. Conduit system shall be concealed unless exposed work is clearly called for on the drawings.

2. Conduits shall be tightly covered and well protected during construction using metallic bushings and bushing “pennies” to seal open ends.
3. In all empty conduits or ducts, install a 200-pound tensile strength polyethylene pulling rope.
4. Conduit systems shall be electrically continuous throughout. Install code size, insulated, copper, green grounding conductor in all conduit runs as required by code, or as indicated on drawings.

#### B. Layout

1. Locations of conduit runs as indicated on site and electrical plans.
2. Where practical, install conduits in groups in parallel, vertical or horizontal runs and at elevations that avoid unnecessary offsets.
3. Exposed conduit shall be run parallel or at right angles to the centerlines of columns and beams.
4. Conduits shall not be placed closer than 12 inches from a parallel hot water or steam line or 3 inches from such lines crossing perpendicular to the runs.

#### C. Supports

1. All raceway systems shall be secured to the building structures using specified fasteners, clamps and hangers spaced according to code requirements.
2. Support single runs of conduit using one hole pipe straps. Where run horizontally on walls in damp or wet location, install “clamp backs” to space conduit off the surface.

### 3.3 CABLE AND WIRE INSTALLATION

#### A. General

1. Conductors shall not be installed in conduit until all work of any nature that may cause injury is completed. Care shall be taken in pulling conductors that insulation is not damaged. UL approved non-petroleum base and insulating type pulling compound shall be used as needed.
2. All cables shall be installed and tested in accordance with manufacturer’s requirements and warranty.

#### B. Splicing and Terminating

1. All aspects of splicing and terminating shall be in accordance with cable manufacturer’s published procedures.
2. Make up all splices in outlet boxes with conductors as specified herein with separate tails of correct color to be made up to splice. Provide at least six (6) inches of tails packed in box after splice is made up.

### 3.4 INSTALLATION OF BOXES AND WIRING SERVICES

#### A. General

1. All outlets shall finish FLUSH with building walls and ceiling, except where exposed work is called for. There shall be no gap between box and wall or ceiling material. Any opening between box and wall or ceiling shall be caulked airtight at party wall boxes shall be sealed with approved acoustic sealant.

2. Install raised device covers on all outlet boxes as required to finish flush with surface. Covers shall be of a depth to suit the wall or ceiling finish.
3. Exposed outlet boxes and boxes in damp and wet locations shall be cast metal with gasketed cast metal cover plates.

**B. Box Layout**

1. Outlet boxes shall be installed at the locations and elevations shown on the drawings or specified herein. Make adjustments to locations as required by structural conditions and to suit coordination requirements of other trades.
2. Outlet boxes in stud walls and partitions shall not be mounted back-to-back nor shall through-wall boxes be permitted.

**C. Mounting Heights:** Mounting heights of devices as measured from the top of the faceplate shall be as follows:

Device	Height (Inches)
Convenience receptacles	12
Convenience receptacles above counters or at lavatories unless otherwise noted.	44
Switches, light + 46" at kitchen	48
Telephone Outlet	12

**3.5 INSTALLATION OF MANUFACTURED ITEMS**

For all manufactured products, follow manufacturer’s installation instructions and details as specifically modified by the Drawings and Specifications using materials and methods described in the installation instructions. Contractor shall provide any and all fasteners, hardware, mounting devices, brackets, valves, special fittings, or other specialty items called for in the installation instructions in order to assure proper installation. All such items required by the installation instructions shall be provided by the Contractor at no additional cost to the Owner.

3.6 COORDINATE installation and connection of the work with other affected trades.

3.7 TEST, ADJUST and balance system for proper operation

3.8 WARRANTIES: At the conclusion of the job, deliver to the Owner full manufacturer’s warranties for all manufactured products used in the Work. It is the responsibility of the Contractor to contact manufacturer’s representatives and to register the product purchases and installations. Warranties shall be registered in the Owner’s name. Delivery of completed warranty papers shall be a requirement necessary for the issuance of the Certificate of Substantial Completion.

3.9 INTERFACE WITH EXISTING WORK: The work involves remodeling of an existing structure. Prior to submitting a bid, it is the Contractor’s responsibility to examine the existing site and structures, and to verify the construction details as well as all other existing conditions which must mesh with new work. Include in the bid price a sum to cover costs of items necessary to perform work. No allowance will be

made to a bidder because of a lack of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examinations.

### 3.10 EXISTING SERVICES

- A. Active Services: When encountered in work, protect, brace, support existing active gas, electric, other services where required for proper execution of work. If existing active services are encountered that require relocation make request in writing for determination. Do not proceed with work until written directions are received. Do not prevent or disturb operation of active services that are to remain.
- B. Inactive Services: When encountered in work, remove, cap, or plug inactive services. Notify utility companies or municipal agencies having jurisdiction; protect or remove these services as directed.

### 3.11 CUTTING, PATCHING, RESTORING

- A. Unless otherwise specified, each contractor shall do all cutting, drilling, patching, restoring that may be required in connection with his work, he shall restore work of other contractors damaged by him.
- B. No contractor shall do any cutting that may impair strength of building construction. No holes, except for small screws, may be drilled in beams or other structural members without prior approval.
- C. Patch and/or trim with materials that match existing to correct unsightly conditions caused by remodeling.