

**The
COUNTY OF MENDOCINO**

**Demolition Of Existing Structure for Future
Psychiatric Health Facility**

**131 Whitmore Lane
Ukiah, Ca 95482**

BID # 001-23

**ISSUE DATE:
APRIL 25, 2023**

**Bid Documents &
Technical Specifications**



SECTION 00 00 02 - PROJECT DIRECTORY

PROJECT Demolition of Existing Structure for Future Psychiatric Health Facility
131 Whitmore Lane
Ukiah, CA 95482

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

AGENT: General Services Agency
Facilities and Fleet Division
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Ukiah, CA 95482
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SECTION 00 00 20 - NOTICE INVITING BIDS

Notice is hereby given that sealed bids will be received at the Mendocino County General Service Agency Office, 841 Low Gap Road, Ukiah, California 95482 until the hour of 2:00 p.m., as determined by the clock on the wall in the General Services Agency Office, on May 25, 2023 and then publicly opened and read aloud in the General Service Division Conference Room, 841 Low Gap Road, Ukiah, California for the following project:

Mendocino County BID# 001-23 Demolition of Existing Structure for Future Psychiatric Health Facility

Electronic Plans and Documents may be seen or downloaded from the Mendocino County Web Page for Open RFP, Quotes & Bids: <https://www.mendocinocounty.org/departments/general-services/central-services/open-rfp-quotes-bids>. Additionally plans and documents have been distributed to builder's exchange plan rooms throughout Northern California.

Bids shall be made on the form provided in this Manual and accompanied by a form of bid security as provided in Section 00100 Instructions to Bidders.

The successful Bidder will be required to furnish a Labor and Material Bond and a Performance Bond as required in Section 00100 Instructions to Bidders.

Bidders' attention is called to Instruction to Bidders and other related documents in this Manual for full directions and information as to bidding and other requirements.

NON-MANDATORY PRE-BID CONFERENCE

Non-mandatory pre-bid conferences and site inspections will be held on THURSDAY, May 4th, 2023 @ 10:00 AM at the Project Site, and WEDNESDAY, May 17th, 2023 @ 10:00 AM at the Project Site, 131 Whitmore Lane, Ukiah, California.

The County reserves the right to schedule additional mandatory pre-bid conferences to ensure adequate bid representation.

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: <https://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 Chapter 6.04 – Business Licenses, 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.

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

END OF SECTION

SECTION 00 01 00 - INSTRUCTIONS TO BIDDERS

PART 1 – GENERAL

1.1 BIDS RECEIVED

- A. Sealed bids for **Mendocino County BID# 001-23 Demolition of Existing Structure for Future Psychiatric Health Facility** will be received at the Mendocino County General Service Agency Office, 841 Low Gap Road, Ukiah, California, until 2:00 p.m. as determined by the clock on the wall of the General Service Agency Office, on May 25, 2023, and then publicly opened and read aloud in the General Service Agency Conference Room, 841 Low Gap Road, Ukiah, California.
- 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

The license required for this Project is an “A” or “B” License.

1.3 BIDS AND BID SECURITY

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

- A. Bids must be submitted on the bid form provided in this Manual, 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.
- C. A Bidder’s Bond, Certified Check or 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. The above-mentioned bid security 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 contract documents. Such guaranty to be forfeited should the Bidder to whom the contract is awarded fail to enter into the contract.
- D. Responsive Bids shall include completed and executed copies of the following sections if included in the project Manual:

- a. 00120 Qualification Application
- b. 00307 Non-Collusion Affidavit
- c. 00308 Public Contract Code Questionnaire
- d. 00310 Bid Form
- e. 00430 Subcontractor Listing Form

1.4 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.

1.5 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.

- A. 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].

- X
1. The lowest bid shall be the lowest bid price on the base contract without consideration of the prices on the additive or deductive items.
 2. 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.
 3. 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.
 4. 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 1. shall be used to determine the lowest bid.

- B. 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.
- C. 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.

1.6 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 (120) calendar days from date of the written "Notice to Proceed".

1.7 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 (7) days prior to bid opening date.

1.8 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.

1.9 WITHDRAWAL OF BID

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

1.10 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. Said Bonds shall be obtained from a surety company satisfactory to County.

1.11 SUBSTITUTIONS

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

1.12 SUBSTITUTION OF SECURITY

Pursuant to California Public Contract Code Section 22300, the Contractor may substitute securities for retention 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.

1.13 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.

1.14 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.
- F. 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 this Manual as section 00120 Qualification Application.

1.15 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.

1.16 ENVIRONMENTAL AND PLANNING CONDITIONS OF APPROVAL

Bidder agrees to perform its work in conformance with all environmental and planning conditions of approval applicable to the project. Bidders' attention is directed to specification section 00700 General Conditions and the source documents for specific conditions of approval

1.17 AGREEMENT

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

1.18 PRE-CONSTRUCTION CONFERENCE

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

END OF SECTION

SECTION 00 01 20 - 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):

PART I.

ESSENTIAL REQUIREMENTS FOR QUALIFICATION

The Contractor will be immediately disqualified if the answer to any of questions 1 through 5 is “no”.¹

The Contractor will be immediately disqualified if the answer to any of questions 6, 7, 8 or 9 is “yes”². If the answer to question 8 is “yes”, and if debarment would be the sole reason for denial of qualification, any qualification issued will exclude the debarment period.

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. Contractor has attached its latest copy of a reviewed or audited financial statement with accompanying notes and supplemental information.³
 Yes No

NOTE: A financial statement that is not either reviewed or audited is not acceptable. A letter verifying availability of a line of credit may also be attached; however, it will be considered as supplemental information only, and is not a substitute for the required financial statement.

¹ A “no” answer to Question 4 will not be disqualifying if the Contractor is exempt from complying with Question 4, for reasons explained in footnote 3.

² A contractor disqualified solely because of a “yes” answer given to questions 6, 7, or 9 may appeal the disqualification and provide an explanation of the relevant circumstances during the appeal procedure.

³ Public Contract Code Section 20101(e) exempts from this requirement a contractor who has qualified as a small business pursuant to Government Code Section 14837(d)(1), if the bid is “no more than 25 percent of the qualifying amount provided in Section 14837(d)(1)”. As of January 1, 2001, the qualifying amount is \$10 million, and 25 percent of that amount, therefore, is \$2.5 million.

5. Contractor has attached a notarized statement from an admitted surety insurer (approved by the California Department of Insurance) and authorized to issue bonds in the State of California, which states that Contractor's current bonding capacity is sufficient for the project for which it seeks qualification.
- Yes No

NOTE: Notarized statement must be from the surety company, not an agent or broker.

6. Has Contractor's license been revoked at any time in the last five (5) years?
- Yes No
7. 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
8. 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:

-
9. 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

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 #

- 1d. Identify every construction firm that any person listed above has been associated with (as owner, general partner, limited partner or officer) at any time during the last five (5) years.

NOTE: For this question, "owner" and "partner" refer to ownership of ten percent (10%) or more of the business, or ten percent (10%) or more of its stock, if the business is a corporation.

Person's Name	Construction Firm	Date of Person's Participation with Firm

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 #

- 1d. Identify every construction company that any partner has been associated with (as owner, general partner, limited partner or officer) at any time during the last five (5) years.

NOTE: For this question, “owner” and “partner” refer to ownership of ten percent (10%) or more of the business, or ten percent (10%) or more of its stock, if the business is a corporation.

Person’s Name	Construction Firm	Date of Person’s Participation with Firm

For firms that are sole proprietorships:

- 1a. Date of commencement of business: _____
- 1b. Social security number of company owner: _____
- 1c. Identify every construction firm that the business owner has been associated with (as owner, general partner, limited partner or officer) at any time during the last five (5) years. _____

NOTE: For this question, “owner” and “partner” refer to ownership of ten percent (10%) or more of the business, or ten percent (10%) or more of its stock, if the business is a corporation.

Person’s Name	Construction Firm	Date of Person’s Participation with Firm

For firms that intend to make a bid as part of a joint venture:

- 1a. Date of commencement of joint venture: _____
- 1b. Provide all of the following information for each firm that is a member of the joint venture that expects to bid on one or more projects:

Name of Firm	% Ownership of Joint Venture

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

Year	Gross Revenue

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

8. Was Contractor's firm in bankruptcy at any time during the last five (5) years? (This question refers only to a bankruptcy action that was not described in answer to question 7 above.)
 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, and a copy of the Bankruptcy Court's discharge order, or of any other document that ended the case, if no discharge order was issued.

Licenses

9. List all California construction license numbers, classifications and expiration dates of the California contractor licenses held by Contractor's firm:

10. If any of Contractor's firm's license(s) are held in the name of a corporation or partnership, list below the names of the qualifying individual(s) listed on the CSLB records who meet(s) the experience and examination requirements for each license:

11. Has Contractor's firm changed names or license numbers in the past five (5) years?

Yes No

If "yes", explain on a separate signed page, including the reason for the change.

12. Has any owner, partner, or (for corporations) officer of Contractor's firm operated a construction firm under any other name in the last five (5) years?

Yes No

If "yes", please explain on a separate signed sheet.

Disputes

13. 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.

14. 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, and which is listed in response to question 1c or 1d on this form.

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.

16. 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.

17. 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).

18. 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).

19. At any time during the last five (5) years, has any surety company made any payments on Contractor's behalf as a result of a default, to satisfy any claims made against a performance or payment bond issued on Contractor's behalf, in connection with a construction project, either public or private?

Yes No

If "yes", explain on a separate signed page the amount of each such claim, the name and telephone number of the claimant, the date of the claim, the grounds for the claim, the present status of the claim, the date of resolution of such claim if resolved, the nature of the resolution, and the amount, if any, at which the claim was resolved.

20. In the last five (5) years, has any insurance carrier, for any form of insurance, refused to renew the insurance policy for Contractor's firm?

Yes No

If "yes", explain on a separate signed page. Name the insurance carrier, the form of insurance, and the year of the refusal.

Criminal Matters and Related Civil Suits

21. 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.

22. 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.

23. 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

24. Bonding capacity: Provide documentation from surety identifying the following:

Name of bonding company/surety: _____

Name of surety agent, address, and telephone number:

25. If Contractor’s firm was required to pay a premium of more than one percent (1%) for a performance and payment bond on any project(s) on which the firm worked at any time during the last three (3) years, state the percentage that the firm was required to pay. (An explanation for such percentage rate may be provided at Contractor’s discretion.)

26. List all other sureties (name and full address) that have written bonds for Contractor’s firm during the last five (5) years, including the dates during which each wrote the bonds:

27. During the last five (5) years, has Contractor's firm ever been denied coverage by a surety company, or has there ever been a period of time when your firm had no surety bond in place during a public construction project when one was required?
 Yes No

If "yes", provide details on a separate signed sheet indicating the date when Contractor's firm was denied coverage, the name of the company or companies which denied coverage, and the period during which no surety bond was in place.

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

28. 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.

29. 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.

30. 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.

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

32. 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 1.00 or higher, Contractor may, at its discretion, attach a letter of explanation.

33. Within the last five (5) years, has there ever been a period when Contractor had employees but was without workers' compensation insurance or state-approved self-insurance?

Yes No

If "yes", please explain the reason for the absence of workers' compensation insurance on a separate signed page. If "no", please provide a statement from Contractor's current workers' compensation insurance carrier that verifies periods of workers' compensation insurance coverage for the last five (5) years. (If Contractor has been in business less than five (5) years, provide a statement from the workers' compensation insurance carrier verifying continuous workers' compensation insurance coverage for the period that Contractor has been in the construction business.)

Prevailing Wage and Apprenticeship Compliance Record

34. Has there ever been more than one occasion during the last five (5) years in which Contractor was required to pay either back wages or penalties for its failure to comply with the *state's* prevailing wage laws?

NOTE: This question refers only to Contractor's violation of prevailing wage laws, not to violations of the prevailing wage laws by a subcontractor.

Yes No

If "yes", attach a separate signed page describing the nature of each violation, identifying the name of the project, the date of its completion, the public agency

for which it was constructed, the number of employees initially underpaid, and the amount of back wages and penalties Contractor was required to pay.

35. During the last five (5) years, has there been more than one occasion in which Contractor has been penalized or required to pay back wages for failure to comply with the *federal* Davis-Bacon prevailing wage requirements?
 Yes No

If “yes”, attach a separate signed page describing the nature of each violation, identifying the name of the project, the date of its completion, the public agency for which it was constructed, the number of employees initially underpaid, and the amount of back wages and penalties Contractor was required to pay.

36. 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:

37. If Contractor operates its own State-approved apprenticeship program:
- (a) Identify the craft(s) in which Contractor provided apprenticeship training in the past year.
 - (b) State the year in which each such apprenticeship program was approved, and attach evidence of the most recent California Apprenticeship Council approval(s) of Contractor’s apprenticeship program(s).
 - (c) State the number of individuals who were employed by Contractor as apprentices at any time during the past three (3) years in each apprenticeship and the number of persons who, during the past three (3) years, completed apprenticeships in each craft while employed by Contractor:

38. At any time during the last five (5) years, has Contractor been found to have violated any provision of California apprenticeship laws or regulations, or the laws pertaining to use of apprentices on public works?

NOTE: Contractor may omit reference to any incident that occurred prior to January 1, 1998, if the violation was by a subcontractor and Contractor, as general contractor on a project, had no knowledge of the subcontractor's violation at the time it occurred.

Yes No

If "yes", provide the date(s) of such findings, and attach copies of the Department's final decision(s).

PART III. RECENT CONSTRUCTION PROJECTS COMPLETED

39. Contractor shall provide information about its six most recently completed public works projects and its three largest completed private projects within the last three (3) years.⁴ Names and references must be current and verifiable. Use separate sheets of paper that contain all of the following information:

- Project Name
- Location
- Owner
- Owner Contact (name and current phone number)
- Architect or Engineer
- Architect or Engineer Contact (name and current phone number)
- Construction Manager (name and current phone number)
- Description of Project, Scope of Work Performed
- Total Value of Construction (including change orders)
- Original Scheduled Completion Date
- Time Extensions (number of days)
- Actual Date of Completion

I, the undersigned, certify and declare that I have read all the foregoing answers to this qualification questionnaire and know its contents. The matters stated in the questionnaire answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California that the foregoing is correct.

Dated: _____
Contractor

⁴ Contractor may, using the same format, provide information about other projects that it has completed that are similar to the project for which it wishes to bid.

SECTION 00 03 06 - 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 00 03 07 - 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 00 03 08 - 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 00 03 10 – BID FORM

Demolition of Existing Structure for Future Psychiatric Health Facility

FOR MENDOCINO COUNTY

TO: Honorable Board of Supervisors

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 one hundred twenty (120) 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 General Services Agency 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 (\$_____)

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.

Name Of Organization _____

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 00 04 30 - SUBCONTRACTORS LISTING

Demolition of Existing Structure for Future Psychiatric Health Facility

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, Department of Industrial Relations (DIR) Registration 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		<u>CONTRACTOR LIC. #</u>
LOCATION			

DIR REG #

SECTION 00 05 00 - AGREEMENT FOR LUMP SUM BID

THIS AGREEMENT, made effective on the date it becomes fully executed by all parties, 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 **Demolition of Existing Structure for Future Psychiatric Health Facility at 131 Whitmore Lane, Ukiah**, 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 (120) calendar 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. Bidding Documents
4. Agreement
5. Construction Site Storm Water Policy
6. General Conditions
7. Unforeseen Physical Conditions
8. Summary of Work
9. Temporary Facilities and Building Services
10. Project Plans and Drawings
11. Technical Specifications
12. Addendum to the Bid

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

\$

This sum constitutes the base bid and bids for the following allowance 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:

CONTRACTOR/COMPANY NAME:

DEPARTMENT HEAD _____ DATE _____

By: _____

Budgeted: Yes No

NAME AND ADDRESS OF CONTRACTOR:

Budget Unit: _____

Line Item: _____

Grant: Yes No

Grant No.: _____

COUNTY OF MENDOCINO

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

By: _____
GLENN MCGOURTY, Chair
BOARD OF SUPERVISORS

Date: _____

ATTEST:

COUNTY COUNSEL REVIEW:

DARCIE ANTLE, Clerk of said Board

APPROVED AS TO FORM:

By: _____
Deputy

CHRISTIAN M. CURTIS,
County Counsel

I hereby certify that according to the provisions of Government Code section 25103, delivery of this document has been made.

By: _____
Deputy

DARCIE ANTLE, Clerk of said Board

Date: _____

By: _____
Deputy

INSURANCE REVIEW:

EXECUTIVE OFFICE/FISCAL REVIEW:

By: _____
Risk Management

By: _____
Deputy CEO

Date: _____

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 00 05 01 - 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 00 05 10 - CONTRACTOR GUARANTEE

CONTRACTOR GUARANTEE FOR

Demolition of Existing Structure for Future Psychiatric Health Facility

Contractor hereby guarantees that the labor and material furnished for this project is in accordance with the drawings and specifications. Contractor agrees to repair or replace any or all of the work, together with any other adjacent work which may be displaced in so doing, that may prove to be defective in its workmanship or material within a period of ONE (1) YEAR from date of acceptance of the above named project by County without any expense whatsoever to County, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of Contractor's failure to comply with the above-mentioned conditions within fifteen (15) calendar days after being notified in writing by County, Contractor authorizes County to proceed to have said defects repaired and made good at Contractor's expense. Contractor shall honor and pay the costs and charges therefore upon demand.

SIGNED _____

COUNTERSIGNED _____

CONTRACTOR _____

DATED _____

DATE OF BUILDING ACCEPTANCE _____

SECTION 00 06 50 - 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 Construction Plans, Specifications and SWPPP Documents 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 21st.
- 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 21st or prior to ground disturbance activities between October 21st and April 15th, and call the project manager for an inspection of the installed BMP plan. Do not start demolition or grading activities without BMP's in place.
- B. 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 by a qualified QSP throughout the rainy season. Maintain and replace all BMP's in accordance with the approve 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.
- G. The project schedule allows the site to qualify for a SWPPP, Low Erosivity Waiver from the State Construction Storm Water Permit. Should the construction not be completed, and a Notice of Termination be filed with the State Water Board prior to October 21st, 2023, the Contractor shall be responsible for the costs to prepare a SWPPP and Fees associated with the filing of a Notice of Intent (NOI).

END OF SECTION

SECTION 00 07 00 - 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", or "Equal", "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, Courthouse, 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, 841 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. Commercial General Liability (CGL) including products and completed operations, property damage, bodily injury and personal & advertising injury \$1,000,000 each occurrence and \$2,000,000 aggregate.
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.

3. Contractor shall obtain, at Contractor's expense, and keep in effect until final acceptance by the County, all risk Builder's Risk Insurance (including earthquake and flood) covering the real and personal property of others in the care, custody, and control of the contractor. Coverage shall include theft and damage to building interiors. The minimum amount of coverage to be carried shall be equal to the full amount of the contract. Contractor shall be financially responsible for any deductible applied to loss. This insurance shall include Mendocino County, the Contractor and its subcontractors as their interests may appear.

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 County shall procure the demo permit. Contractor shall schedule any and all inspections 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 authorize or 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. The work of subcontractors, accounted for as described herein;
 - e. Power and consumable supplies for the operation of power equipment;
 - f. Insurance;
 - g. 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 or actual direct cost to the contractor and ten percent (10%) for costs of subcontractors. 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. All Claims by Contractor for extra cost shall be made in writing before executing the work involved. Refer to specification section 00811 – Unforeseen Physical Conditions for Claims procedures.

F. 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 for approval an application for payment, using the standard AIA forms, showing an itemized statement for work that has been performed. The County within thirty (30) days of receipt of an approved application, shall issue to the Contractor a certificate for the amount the County has approved for work that has been performed less retention as authorized by law.

Contractor shall submit certified copy of payroll showing payment of California State Prevailing 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.

- 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 00 08 11 - 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 01 11 00, "Summary".
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
END OF SECTION

HIDDEN CONDITIONS REPORT (HCR)

Whitmore Lane Demo Project

HCR No. _____

Submitted By: _____ Date: _____

 Ctr to PM PM to Arch Arch to PM PM to Ctr

Date Sent: _____

Date Received: _____

Type of Conditions Reported:

- Site Work Structural Architectural HVAC
- Plumbing Fire Protection Electrical Other

Location and Reference to Drawing: _____

Conditions Reported: _____

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: _____

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 00 08 51 – DRAWING INDEX

GENERAL

G111 PROJECT DATA

CIVIL

C1.0 EXISTING CONDITIONS

C1.1 SITE SURFACE DEMOLITION

C1.2 SITE UTILITY DEMOLITION

C1.3 SITE FINISHED GRADE/EROSION CONTROL

C1.4 SITE DEMOLITION NOTES/DETAILS

ARCHITECTURAL

A111D DEMOLITION FLOOR PLAN

A112D DEMOLITION REFERENCE PHOTOGRAPHS

DOCUMENT 00 31 26 - EXISTING HAZARDOUS MATERIAL INFORMATION

1.1 EXISTING HAZARDOUS MATERIAL INFORMATION

- A. This Document with its referenced attachments is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidders' convenience and information but are not a warranty of existing conditions. This Document and its attachments are not part of the Contract Documents.
- B. An existing asbestos report for Project, prepared by Forensic Analytical Consulting Services, dated June 13, 2022, is available for viewing as appended to this Document.
- C. An existing lead report for Project, prepared by Forensic Analytical Consulting Services, dated June 13, 2022, is available for viewing as appended to this Document.
- D. An existing PCB (Polychlorinate Biphenyl) information report for Project, prepared by Forensic Analytical Consulting Services, dated June 13, 2022, is available for viewing as appended to this Document.
- E. Related Requirements:
 - 1. Document 00 01 00 "Instructions to Bidders" for the Bidder's responsibilities for examination of Project site and existing conditions.
 - 2. Section 02 41 16 "Structure Demolition" for notification requirements if materials suspected of containing hazardous materials are encountered.

END OF DOCUMENT 00 31 26

SECTION 01 11 00 - 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 in Mendocino County at 131 Whitmore Lane, Ukiah, County of Mendocino.
 - 1. Scope of Work:
 - a. All work consisting of the demolition of structures and tree removal at the project site and related grading, backfill, utility removal, erosion and sediment control, and site cleanup work.
 - b. Provide and maintain barricades, fences and other protective devices as required by County ordinances and codes, and as required to protect the public and personnel, for the duration of demolition.
 - 2. Regulatory Requirements for Construction Safety: Contractor shall provide and use all means necessary to ensure that physical work to be performed is within construction standards as set by CBC Chapter 33, CFC Chapter 33, NFPA 241, General Safety Orders of Title 8, California Code of Regulations, and as set by CAL-OSHA requirements, local, State and National Building, Mechanical and Electrical Codes, latest editions, and safety requirements for secondary structures.
 - 3. Existing Site Conditions: Contractor shall make a thorough examination of the Site to determine all existing conditions affecting the Work.

1.3 TYPE OF CONTRACT

- A. Project will be constructed under a Single Prime Contract

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 bill or list of 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. General: Comply with requirements in General Conditions and Section 00700.
- B. Construction Work Hours:
 - 1. Construction work hours for this Project are 7:00 AM to ~~7~~5:00 PM, Monday through Friday.
 - 2. Contractor may submit a written request to begin earlier and/or work later than the hours prescribed above, which request may be granted by the County. However, should the County receive complaints regarding noise outside the allowable hours prescribed in the County Code, then the Contractor will have to return to conducting business within the County Code limits.
 - 3. Weekend Work: Contractor shall provide an advance written notice to the County, Construction Manager, and neighboring properties at least 48 hours prior to working on the weekend.
- C. Contractor shall obtain minimum 48 hour advance approval of the specific scope of work that will be occurring on the weekend.
 - 1. Premium Time Work: Contractor shall provide advance written notice to the County, Construction Manager, and neighboring properties at least 48 hours prior to performing premium time work.

- D. Contractor shall obtain minimum 48 hour advance approval of the specific scope of work that will require premium time work.
- E. Vehicle access to Project Site shall be held to a minimum. Vehicle access will be on one specific route approved by County; no exceptions will be allowed.
- F. Coordinate use of the premises under the direction of County.
- G. Assume full responsibility for the protection and safekeeping of materials, products, and equipment under this Contract, stored on the Site.
- H. Obtain and pay for the use of additional storage or work areas needed for Contractor's operations
- I. Fire Department Access: Contractor's use of premises shall not limit required Fire Department access.

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 any modifications of the Contract Documents proposed 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

- A. The County will obtain a Demolition Permit from the Mendocino County Planning and Building Services.

1.8 ENVIRONMENTAL MANAGEMENT

- A. Contractor shall begin Construction and Operation MCAQMD permit applications no later than 14 days following Notice to Proceed.
- B. Spills: Contractor shall clean up all fluid spills caused by leaks in the equipment or generated while Contractor is performing the Work under this Contract. Contractor shall

provide drip catch pans for all equipment that drips or leaks oils or other fluids. Spills generated by Contractor's operation shall be cleaned up by Contractor at no cost to County.

C. Dust and Noise Control:

1. Precaution shall be exercised at all times to control dust and excessive noise created as a result of any operations during the construction period.
2. If serious problems and/or complaints arise due to airborne dust and excessive noise, and when directed by Construction Manager and County, operations causing such problems shall be temporarily discontinued until a suitable remedy is established. The remedy shall be approved by Construction Manager and County before implementation and shall be considered part of Contractor's normal effort to maintain safety and cleanliness without cause for further payment.

1.9 ACCIDENT PREVENTION AND PROTECTION OF LIVES AND HEALTH

- A. Precaution shall be exercised at all times for protection of all personnel and occupants, including employees of Contractor and County and property.
- B. The California Department of Industrial Relations, Division of Occupational Safety and Health (DOSH, also known as Cal/OSHA) requirements for safety and health protection of workers and public apply. Other requirements not covered by Cal/OSHA, shall be in accordance with
- C. U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) requirements.
- D. Comply with safety requirements of California Code of Regulations, Title 8, Division 1, Chapter 4, "Division of Industrial Safety," and Title 8, Division 1, Chapter 3.2, "Cal/OSHA Regulations"; California Code of Regulations, Title 24, California Building Code; and other applicable building and construction codes. Machinery, equipment, openings, power lines, and all other safety hazards shall be guarded or eliminated in accordance with safety requirements of Title 8, and Manual of Accident Prevention in Construction published by the Associated General Contractors of America.

1.10 EXISTING UTILITIES

- A. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by adjacent properties, or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 1. Notify County not less than five days in advance of proposed utility interruptions.
 2. Obtain County's written permission before proceeding with utility interruptions.

- B. Provide necessary protection to existing utility services and repair work damaged as a result of operations under this Contract.
- C. In the event Contractor discovers utilities not identified in the Contract Plans or Specifications, Contractor shall immediately notify County and the utility owner by the most expeditious means available and later confirm in writing.
- D. Contractor shall contact and obtain inspection from the City of Ukiah Water and Sewer Department for any Sanitary Sewer related work.
- E. Contractor shall contact and obtain inspection from Willow County Water District for Water Service disconnection and Water System related work.
- F. Contractor shall contact and obtain inspection from Pacific Gas and Electric Co. (PG&E) for Gas and Electric Utility service disconnection and associated work with these utilities.

1.11 COORDINATION WITH ADJACENT PROPERTY OWNERS

- A. Demolition operations that may affect adjacent property owners shall be coordinated with the adjacent property owners.

1.12 PROTECTION OF EXISTING ADJACENT FACILITIES

- A. Contractor shall take appropriate measures to prevent damage to existing adjacent facilities, site work, landscaping, and adjoining property. Should damage occur, such facilities, site work, landscaping, and property shall be restored to original condition, at no cost to County.
 - 1. Contractor shall arrange for protection of existing adjacent buildings at all times. Contractor shall furnish, install, and maintain, necessary barricades, temporary coverings, etc., as required for protection, and remove them at completion of the Work. When all Work is complete, damaged areas of the premises shall be restored to original undamaged condition that existed prior to installation of temporary protection.
- B. Housekeeping: The premises shall be kept in a clean, safe condition at all times. Rubbish shall be removed as fast as it accumulates.
- C. Burning: Burning of refuse, debris, and construction waste at Project Site will not be permitted.

1.13 RESPONSIBILITY FOR THEFT AND DAMAGE

- A. County will not be responsible for the loss or theft of Contractor's tools, equipment and materials.

1.14 FIRE PROTECTION

- A. Contractor shall at all times maintain good housekeeping practices to reduce the risk of fire and water damage. All scrap materials, rubbish and trash shall be removed daily from Jobsite, inside and around the buildings or structures, as applicable, and shall not be scattered on adjacent property.
- B. Suitable storage space shall be provided outside immediate building areas during construction for temporary storage of flammable materials and paints, as required by CFC Chapter 33 and NFPA 241. Excess flammable liquids being used shall be kept in closed metal containers during unused periods.
- C. Contractor shall provide temporary fire extinguishers during construction in accordance with the recommendations of CBC Chapter 33, CFC Chapter 33, and NFPA Bulletins Nos. 10 and 241. However, in all cases a minimum of one fire extinguisher shall be available for use.
- D. Under provisions of CFC Chapter 26 and Chapter 33, provide a fire extinguisher at each location where cutting, soldering, or welding is being performed. Where electric or gas welding or cutting work is done, interposed shields of noncombustible material shall be used to protect against fire damage due to sparks and hot metal. When temporary heating devices are used, a watchman shall be present to cover periods when other workmen are not on the premises.

1.15 PROTECTION OF ARCHAEOLOGICAL RESOURCES

- A. Cultural Resources/Ground Disturbance - Workers shall monitor their ground-disturbing activities for the presence of previously unknown archaeological resources and/or human remains. Archaeological resources are broadly defined as the remains of past human activity. Such resources may include prehistoric or historic-period materials such as tools and tool fragments (e.g., arrowheads or stone chipping debris), hearth and food remains (e.g., fire-cracked rock, bones, shell, or historic-period trash), structural remains, and human remains. In the event of the discovery of such materials, all work shall be halted within a 50-foot radius of the discovery, and Construction Manager, County, and Architect shall be contacted for instruction.
- B. In accordance with CEQA Subsection 15064.5 (f), should any previously unknown historic or prehistoric resources, including, but not limited to, charcoal, obsidian or chert flakes, grinding bowls, shell fragments, bone, pockets of dark, friable solids, glass, metal, ceramics, wood or similar debris be discovered during grading, trenching, or other on-Site excavation(s), earth work within 100 feet of these materials will be stopped until a professional archaeologist certified by the Registry of Professional Archaeologists (RPA) has had an opportunity to evaluate the significance of the find and suggest appropriate mitigation(s), as determined necessary.
- C. In the event that paleontological resources are discovered, all construction activity will be halted within ten feet of the discovery. Notification procedures provided during the

preconstruction meeting(s) will be followed. The decision to conduct paleontological salvage operations will be determined by the paleontologist in consultation with County staff and project management. If deemed significant, the paleontological finds will be salvaged in accordance with professional paleontological standards. This will include removal of identifiable paleontological remains, fossil preparation, and subsequent curation of these remains at a recognized repository such as the University of California Museum of paleontology.

- D. If human remains are encountered, the Mendocino County Sheriff Coroner Division will be informed to determine if an investigation of the cause of death is required and/or if the remains are of Native American origin. Pursuant to Public Resources Code Section 5097.98, if such remains are of Native American origin, the nearest tribal relatives as determined by the State Native American Heritage Commission will be contacted to obtain recommendations for treating or removal of such remains, including grave goods, with appropriate dignity.
- E. All persons working on-Site will be bound by contract and instructed in the field to adhere to these provisions and restrictions.

1.16 REQUEST FOR INFORMATION (RFI)

- A. Requirement: It is Contractor's responsibility to review Contract Documents a minimum of thirty (30) days 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. Form:
 - 1. When an interpretation or clarification of the Contract Documents is required from County, Contractor shall make the request on a copy of the RFI form included in the end of this section.
 - 2. Contractor shall fill in all applicable information on the form.

3. Contractor shall limit the subject to one design discipline to expedite reply and attach supplementary information where necessary.
4. County will reply or give summary of reply on the same form and include supplementary information where necessary.
5. The completed form shall be the written record of each RFI.
6. Contractor shall not use any other RFI form on this Project.

E. Uses:

1. The RFI form shall be used for interpretation or clarification of the Contract Documents only.
2. Contractor shall not use the RFI form for the following; County will not reply and will reject the RFI:
 - a. Product or material substitution.
 - b. Questions relating to construction means, methods, techniques, sequences, procedures or safety precautions. (These are Contractor's responsibilities exclusively.)
 - c. Questions relating to construction schedule, coordination between trades, or division of work among subcontractors. (These are also Contractor's responsibilities exclusively.)
 - d. Questions on contract administration procedural matters, unless they require interpretation or clarification of the Contract Documents.
 - e. Dimensions or quantities which are shown on the Contract Documents, or which can be measured from the building, or calculated from the information contained in the Contract Documents.
 - f. Confirmation of interpretations or clarifications previously provided by County.

F. 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 1.07.

PART 2 - PRODUCTS

PART 3 - EXECUTION

END OF SECTION 01 11 00

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
 - 1. Section 01 10 00 "Summary" for work restrictions and limitations on utility interruptions.

1.3 USE CHARGES

- A. Installation, removal, and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, Architect, testing agencies, and authorities having jurisdiction.
- B. Sewer Service: Pay sewer-service use charges for sewer usage by all entities for demolition operations.
- C. Water Service: Pay water-service use charges for water used by all entities for demolition operations.
- D. Electric Power Service: Pay for temporary power service connection and electric-power-service use charges for electricity used by all entities for demolition operations.

1.4 INFORMATIONAL SUBMITTALS

- A. Implementation and Termination Schedule: Within 15 days of date established for commencement of the Work, submit schedule indicating implementation and termination dates of each temporary utility.

- B. Noise and Vibration Control Plan: Identify construction activities that may impact the occupancy and use of existing spaces within the building or adjacent existing buildings, whether occupied by others, or occupied by the Owner. Include the following:
 - 1. Methods used to meet the goals and requirements of the Owner.
 - 2. Concrete cutting method(s) to be used.
 - 3. Location of construction devices on the site.
 - 4. Show compliance with the use and maintenance of quieted construction devices for the duration of the Project.

- C. Fire-Safety Program: Show compliance with requirements of NFPA 241 and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program.

- D. Dust- and HVAC-Control Plan: Submit coordination drawing and narrative that indicates the dust- and HVAC-control measures proposed for use, proposed locations, and proposed time frame for their operation. Include the following:
 - 1. Locations of dust-control partitions at each phase of work.
 - 2. HVAC system isolation schematic drawing.
 - 3. Location of proposed air-filtration system discharge.
 - 4. Waste-handling procedures.
 - 5. Other dust-control measures.

1.5 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Chain-Link Fencing: Minimum 2-inch, 0.148-inch- thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts , with 1-5/8-inch- OD top rails

- B. Portable Chain-Link Fencing: Minimum 2-inch, 0.148-inch- thick, galvanized-steel, chain-link fabric fencing; minimum 6 feet high with galvanized-steel pipe posts; minimum 2-3/8-inch- OD line posts and 2-7/8-inch- OD corner and pull posts, with 1-5/8-inch- OD top and bottom rails. Provide concrete bases for supporting posts.

- C. Fencing Windscreen Privacy Screen: Polyester fabric scrim with grommets for attachment to chain-link fence, sized to height of fence, in color selected by Architect from manufacturer's standard colors.

2.2 TEMPORARY FACILITIES

- A. Field Offices: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.
- B. Common-Use Field Office: Of sufficient size to accommodate needs of Owner, Architect, Construction Manager, and construction personnel office activities and to accommodate Project meetings specified in other Division 01 Sections. Keep office clean and orderly. Furnish and equip offices as follows:
 - 1. Furniture required for Project-site documents, including file cabinets, plan tables, plan racks, and bookcases.
 - 2. Conference room of sufficient size to accommodate meetings of 10 individuals. Provide electrical power service and 120-V ac duplex receptacles, with no fewer than one receptacle on each wall. Furnish room with conference table, chairs, and 4-foot- square tack and marker boards.
 - 3. Drinking water and private toilet.
 - 4. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 72 deg F.
 - 5. Lighting fixtures capable of maintaining average illumination of 20 fc at desk height.

2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 TEMPORARY FACILITIES, GENERAL

- A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

3.2 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

1. Locate facilities to limit site disturbance as specified in Section 01 10 00 "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.3 SUPPORT FACILITIES INSTALLATION

- A. Comply with the following:
 1. Provide construction for temporary field offices, shops, and sheds located within construction area or within 30 feet of building lines that is noncombustible in accordance with ASTM E136. Comply with NFPA 241.
- B. Temporary Roads and Paved Areas: Construct and maintain temporary roads and paved areas adequate for construction operations. Locate temporary roads and paved areas within construction limits indicated on Drawings.
 1. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust.
- C. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 1. Protect existing site improvements to remain, including curbs, pavement, and utilities.
 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- D. Parking: Provide temporary onsite parking areas for construction personnel.
- E. Storage and Staging: Use designated areas of Project site for storage and staging needs.
- F. Project Signs: Provide Project signs as indicated. Unauthorized signs are not permitted.
 1. Identification Signs: Provide Project identification signs as indicated on Drawings.
 2. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - a. Provide temporary, directional signs for construction personnel and visitors.
 3. Maintain and touch up signs, so they are legible at all times.
- G. Waste Disposal Facilities: Comply with requirements specified in Section 01 74 19 "Construction Waste Management and Disposal."

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
 - 1. Where access to adjacent properties is required in order to affect protection of existing facilities, obtain written permission from adjacent property owner to access property for that purpose.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - 1. Comply with work restrictions specified in Section 01 10 00 "Summary."
- C. Temporary Erosion and Sedimentation Control: Comply with requirements of County of Mendocino NPDES Permit and State of California, Construction General Permit, see requirements specified in Section 31 10 00 "Site Clearing."
- D. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people from easily entering site except by entrance gates.
 - 1. Extent of Fence: As required to enclose entire Project site.
 - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.
 - 3. Transfer rental agreement for security fencing to Owner after final acceptance.
- F. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- G. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.
 - 1. Prohibit smoking in construction areas. Comply with additional limits on smoking specified in other Sections.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition in accordance with requirements of authorities having jurisdiction.

3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign, stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, or no later than Substantial Completion.
 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner shall take possession of the temporary chain-link fencing at completion of demolition work.
 2. Remove temporary roads and paved areas not intended for or acceptable for integration into permanent construction. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.

END OF SECTION 01 50 00

SECTION 01 57 23 - STORMWATER POLLUTION CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Stormwater pollution controls to be implemented if construction is not completed by the expiration date of the Low Erosivity Waiver, and a SWPPP is required.

1.3 STORMWATER POLLUTION PREVENTION PLAN

- A. The Stormwater Pollution Prevention Plan (SWPPP) is part of the Contract Documents and is bound into this Project Manual.

1.4 INFORMATIONAL SUBMITTALS

- A. Stormwater Pollution Prevention Plan (SWPP): Within 15 days of date established for commencement of the Work, submit completed SWPPP.
- B. EPA authorization under the EPA's "2017 Construction General Permit (CGP)."
- C. Stormwater Pollution Prevention (SWPP) Training Log: For each individual performing Work under the SWPPP.
- D. Inspection reports.

1.5 QUALITY ASSURANCE

- A. Stormwater Pollution Prevention Plan (SWPPP) Coordinator: Experienced individual or firm with a record of successful water pollution control management coordination of projects with similar requirements.
 - 1. SWPPP Coordinator shall complete and finalize the SWPPP form.
 - 2. SWPPP Coordinator shall be responsible for inspections and maintaining of all requirements of the SWPPP.

- B. Installers: Trained as indicated in the SWPPP.

PART 2 - PRODUCTS

2.1 STORMWATER POLLUTION CONTROLS

- A. Provide stormwater pollution controls as required by the SWPPP.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with all best management practices, general requirements, performance requirements, reporting requirements, and all other requirements included in the SWPPP.
- B. Locate stormwater pollution controls in accordance with the SWPPP.
- C. Conduct construction as required to comply with the SWPPP and that minimize possible contamination or pollution or other undesirable effects.
 - 1. Inspect, repair, and maintain SWPPP controls during construction.
 - a. Inspect all SWPPP controls not less than every seven days, and after each occurrence of a storm event, as outlined in the SWPPP.
- D. BMP's to remain in place at completion of demolition and finished site grading.

END OF SECTION 01 57 23

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Recycling nonhazardous demolition waste.
 - 2. Disposing of nonhazardous demolition waste.
- B. Related Requirements:
 - 1. Section 31 10 00 "Site Clearing" for disposition of waste resulting from site clearing and removal of above- and below-grade improvements.
 - 2. Section 02 41 16 "Structure Demolition" for disposition of waste resulting from structure demolition.

1.3 DEFINITIONS

- A. Demolition Waste: Building, structure, and site improvement materials resulting from demolition operations.
- B. Disposal: Removal of demolition or construction waste and subsequent salvage, sale, recycling, or deposit in landfill, incinerator acceptable to authorities having jurisdiction, or designated spoil areas on Owner's property.
- C. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- D. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- E. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition and construction waste become property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
 - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.5 ACTION SUBMITTALS

- A. Waste Management Plan: Submit plan within 7 days of date established for commencement of the Work.

1.6 INFORMATIONAL SUBMITTALS

- A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Use Form CWM-8 for demolition waste. Include the following information:
 - 1. Material category.
 - 2. Generation points of waste.
 - 3. Total quantity of waste in tons.
 - 4. Quantity of waste salvaged, both estimated and actual in tons.
 - 5. Quantity of waste recycled, both estimated and actual in tons.
 - 6. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- C. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- D. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- E. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and

that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

- F. Refrigerant Recovery: Comply with requirements in Section 02 41 16 "Structure Demolition" for refrigerant recovery submittals.

1.7 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, or individual employed and assigned by General Contractor, with a record of successful waste management coordination of projects with similar requirements. Superintendent may serve as Waste Management Coordinator.
- B. Refrigerant Recovery Technician Qualifications: Comply with requirements in Section 02 41 16 "Structure Demolition."
- C. Regulatory Requirements: Comply with transportation and disposal regulations of authorities having jurisdiction.

1.8 WASTE MANAGEMENT PLAN

- A. General: Develop a waste management plan according to requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Indicate quantities by weight or volume but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition site-clearing waste generated by the Work. Use Form CWM-2 for demolition waste. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Use Form CWM-4 for demolition waste. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
 - 1. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 - 2. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
 - 3. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.

- D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there were no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Use Form CWM-6 for demolition waste. Include the following:
1. Total quantity of waste.
 2. Estimated cost of disposal (cost per unit). Include transportation and tipping fees and cost of collection containers and handling for each type of waste.
 3. Total cost of disposal (with no waste management).
 4. Revenue from recycled materials.
 5. Savings in transportation and tipping fees by donating materials.
 6. Savings in transportation and tipping fees that are avoided.
 7. Handling and transportation costs. Include cost of collection containers for each type of waste.
 8. Net additional cost or net savings from waste management plan.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General: Achieve end-of-Project rates for salvage/recycling of 50 percent by weight of total nonhazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials.

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
1. Comply with operation, termination, and removal requirements in Section 01 50 00 "Temporary Facilities and Controls."
- B. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.
1. Distribute waste management plan to everyone concerned within three days of submittal return.
 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.

- C. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged and recycled.
 - 2. Comply with Section 01 50 00 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

3.2 RECYCLING DEMOLITION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Contractor.
- C. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- D. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Remove recyclable waste from Owner's property and transport to recycling receiver or processor as often as required to prevent overfilling bins.

3.3 RECYCLING DEMOLITION WASTE

- A. Asphalt Paving: Break up and transport paving to asphalt-recycling facility.
- B. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
- C. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.

- D. Metals: Separate metals by type.
 - 1. Structural Steel: Stack members according to size, type of member, and length.
 - 2. Remove and dispose of bolts, nuts, washers, and other rough hardware.
- E. Asphalt Shingle Roofing: Separate organic and glass-fiber asphalt shingles and felts. Remove and dispose of nails, staples, and accessories.
- F. Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.
- G. Acoustical Ceiling Panels and Tile: Stack large clean pieces on wood pallets and store in a dry location.
- H. Metal Suspension System: Separate metal members, including trim and other metals from acoustical panels and tile, and sort with other metals.
- I. Carpet and Pad: Roll large pieces tightly after removing debris, trash, adhesive, and tack strips.
 - 1. Store clean, dry, carpet and pad in a closed container or trailer provided by carpet reclamation agency or carpet recycler.
- J. Carpet Tile: Remove debris, trash, and adhesive.
 - 1. Stack tile on pallet and store clean, dry carpet in a closed container or trailer provided by carpet reclamation agency or carpet recycler.
- K. Piping: Reduce piping to straight lengths and store by material and size. Separate supports, hangers, valves, sprinklers, and other components by material and size.
- L. Conduit: Reduce conduit to straight lengths and store by material and size.
- M. Lamps: Separate lamps by type and store according to requirements in 40 CFR 273.

3.4 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged or recycled, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

- B. Burning: Do not burn waste materials.

3.5 ATTACHMENTS

- A. Form CWM-2 for demolition waste identification.
- B. Form CWM-4 for demolition waste reduction work plan.
- C. Form CWM-6 for cost/revenue analysis of demolition waste reduction work plan.
- D. Form CWM-8 for demolition waste reduction progress report.

END OF SECTION

Attachment A

FORM CWM-2: DEMOLITION WASTE IDENTIFICATION				
MATERIAL DESCRIPTION	EST. QUANTITY	EST. VOLUME CY (CM)	EST. WEIGHT TONS (TONNES)	REMARKS AND ASSUMPTIONS
Asphaltic Concrete Paving				
Concrete				
Brick				
CMU				
Lumber				
Plywood and OSB				
Wood Paneling				
Wood Trim				
Miscellaneous Metals				
Structural Steel				
Rough Hardware				
Insulation				
Roofing				
Doors and Frames				
Door Hardware				
Windows				
Glazing				
Acoustical Tile				
Carpet				
Carpet Pad				
Demountable Partitions				
Equipment				
Cabinets				
Plumbing Fixtures				
Piping				
Piping Supports and Hangers				
Valves				
Sprinklers				
Mechanical Equipment				
Electrical Conduit				
Copper Wiring				
Light Fixtures				
Lamps				
Lighting Ballasts				
Electrical Devices				
Switchgear and Panelboards				
Transformers				
Other:				

Attachment B

FORM CWM-4: DEMOLITION WASTE REDUCTION WORK PLAN						
MATERIAL CATEGORY	GENERATION POINT	TOTAL EST. QUANTITY OF WASTE TONS (TONNES)	DISPOSAL METHOD AND QUANTITY			HANDLING AND TRANSPORTION PROCEDURES
			EST. AMOUNT SALVAGED TONS (TONNES)	EST. AMOUNT RECYCLED TONS (TONNES)	EST. AMOUNT DISPOSED TO LANDFILL TONS (TONNES)	
Asphaltic Concrete Paving						
Concrete						
Brick						
CMU						
Lumber						
Plywood and OSB						
Wood Paneling						
Wood Trim						
Miscellaneous Metals						
Structural Steel						
Rough Hardware						
Insulation						
Roofing						
Doors and Frames						
Door Hardware						
Windows						
Glazing						
Acoustical Tile						
Carpet						
Carpet Pad						
Demountable Partitions						
Equipment						
Cabinets						
Plumbing Fixtures						
Piping						
Supports and Hangers						
Valves						
Sprinklers						
Mechanical Equipment						
Electrical Conduit						
Copper Wiring						
Light Fixtures						
Lamps						
Lighting Ballasts						
Electrical Devices						
Switchgear and Panelboards						
Transformers						
Other:						

Attachment D

FORM CWM-8: DEMOLITION WASTE REDUCTION PROGRESS REPORT								
MATERIAL CATEGORY	GENERATION POINT	TOTAL QUANTITY OF WASTE TONS (TONNES) (A)	QUANTITY OF WASTE SALVAGED		QUANTITY OF WASTE RECYCLED		TOTAL QUANTITY OF WASTE RECOVERED TONS (TONNES) (D = B + C)	TOTAL QUANTITY OF WASTE RECOVERED % (D / A x 100)
			ESTIMATED TONS (TONNES)	ACTUAL TONS (TONNES) (B)	ESTIMATED TONS (TONNES)	ACTUAL TONS (TONNES) (C)		
Asphaltic Concrete Paving								
Concrete								
Brick								
CMU								
Lumber								
Plywood and OSB								
Wood Paneling								
Wood Trim								
Miscellaneous Metals								
Structural Steel								
Rough Hardware								
Insulation								
Roofing								
Doors and Frames								
Door Hardware								
Windows								
Glazing								
Acoustical Tile								
Carpet								
Carpet Pad								
Demountable Partitions								
Equipment								
Cabinets								
Plumbing Fixtures								
Piping								
Supports and Hangers								
Valves								
Sprinklers								
Mechanical Equipment								
Electrical Conduit								
Copper Wiring								
Light Fixtures								
Lamps								
Lighting Ballasts								
Electrical Devices								
Switchgear and Panelboards								
Transformers								
Other:								

* * * * *

SECTION 02 41 16 - STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of buildings and site improvements.
2. Removing below-grade construction.
3. Disconnecting, capping or sealing, and removing site utilities.

B. Related Requirements:

1. Section 01 10 00 "Summary" for use of the premises and phasing requirements.
2. Section 31 10 00 "Site Clearing" for site clearing and removal of above- and below-grade site improvements not part of building demolition.
3. Section 02 82 00 "Asbestos Remediation"
4. Section 02 83 00 "Lead Remediation"

1.2 DEFINITIONS

- #### A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged.

1.3 MATERIALS OWNERSHIP

- #### A. Unless otherwise indicated, demolition waste becomes property of Contractor.

- #### B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.

1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.4 PREINSTALLATION MEETINGS

- #### A. Pre-Demolition Conference: Conduct conference at Project site.

1. Inspect and discuss condition of construction to be demolished.
2. Review structural load limitations of existing structures.

3. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
4. Review and finalize protection requirements.
5. Review procedures for noise control and dust control.
6. Review procedures for protection of adjacent buildings.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For refrigerant recovery technician.
- B. Engineering Survey: Submit engineering survey of condition of building.
- C. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection , for dust control and , for noise control. Indicate proposed locations and construction of barriers.
- D. Schedule of Building Demolition Activities: Indicate the following:
 1. Detailed sequence of demolition work, with starting and ending dates for each activity.
 2. Temporary interruption of utility services.
 3. Shutoff and capping of utility services.
- E. Pre-demolition Photographs or Video: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by salvage and demolition operations.
- F. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.6 CLOSEOUT SUBMITTALS

- A. Inventory: Submit a list of items that have been removed and salvaged.

1.7 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

1.8 FIELD CONDITIONS

- A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Hazardous Materials: Present in buildings and structures to be demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
 - 1. Hazardous material remediation is specified elsewhere in the Contract Documents.
 - 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
- D. On-site storage or sale of removed items or materials is not permitted.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- B. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.

3.2 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Utilities to Be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished.
 - 1. Arrange to shut off utilities with utility companies.
 - 2. Cut off pipe or conduit a minimum of 24 inches below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.
 - 3. Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.4 PROTECTION

- A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.
- B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
 - 1. Strengthen or add new supports when required during progress of demolition.
- C. Existing Utilities to Remain: Maintain utility services to remain and protect from damage during demolition operations.

3.5 DEMOLITION, GENERAL

- A. General: Demolish indicated buildings and site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
 - 2. Maintain fire watch during and for at least 24 hours after flame-cutting operations.
 - 3. Maintain adequate ventilation when using cutting torches.
 - 4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.

2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.

C. Explosives: Use of explosives is not permitted.

3.6 DEMOLITION BY MECHANICAL MEANS

A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.

B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.

C. Below-Grade Construction: Demolish foundation walls and other below-grade construction.

1. Remove below-grade construction, including basements, foundation walls, and footings, completely.

D. Existing Utilities: Demolish and remove existing utilities and below-grade utility structures.

3.7 SITE RESTORATION

A. Below-Grade Areas: Rough grade below-grade areas ready for further excavation or new construction.

B. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

3.8 REPAIRS

A. Promptly repair damage to adjacent buildings caused by demolition operations.

3.9 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having

jurisdiction. and recycle or dispose of them according to Section 01 74 19 "Construction Waste Management and Disposal."

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Do not burn demolished materials.

3.10 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.

1. Clean roadways of debris caused by debris transport.

END OF SECTION 02 41 16

SECTION 02 82 00 - ASBESTOS REMEDIATION

PART 1 - GENERAL

1.1 SUMMARY

- A. SCOPE OF WORK: Except as otherwise expressly provided herein, Contractor shall supply all labor, supervision, installed and consumable materials, equipment, tools, services, testing devices, warehousing, and each and every item of expense necessary for the supply, fabrication, erection, installation, application, handling, hauling, unloading and receiving, construction, evaluation, engineering, testing, and assembly of the abatement of asbestos-containing or contaminated materials herein called the Work. This work shall include the abatement of any materials identified herein as containing detectable concentrations of asbestos or asbestiform minerals.
- B. ASBESTOS-CONTAINING MATERIALS: In accordance with all drawings, specifications and instructions, Contractor shall remove all asbestos-containing materials (ACM) identified herein and as may be subsequently revealed during the work. To date, the following ACM has been identified:
1. 9” Vinyl Floor tiles – Approximately 200 sq. ft.
 2. Black/Yellow floor mastic – Approximately 20,000 square feet (sq. ft.)
 3. Resilient sheet flooring – Approximately 300 sq. ft.
 4. Ceiling wallboard with joint compound (point counted to be <1%) – Approximately 4,000 sq. ft.
 5. Roof penetration black mastic – Approximately 200 sq. ft.
 6. Roof black mastic on parapet wall metal – Approximately 20 sq. ft.
 7. The Contractor is responsible to field verify all estimated quantities provided in this Specification.
- C. RELATED SECTIONS:
1. DIVISION 1 – GENERAL REQUIREMENTS
 2. DIVISION 2 – SITE CONSTRUCTION
 - a. Section 02 22 00 – Structure Demolition

1.2 SUBMITTALS

A. SCHEDULE AND FORMAT:

1. Delivery: Submittals listed in this section shall be delivered to the Owner and or Owner’s Representative (Owner’s Consultant) at:
 - a. County of Mendocino
 - b. Forensic Analytical Consulting Services Inc.

2. Quantity: Two legible (2) copies each of all submittals shall be delivered in an organized fashion suitable for review by the Owner and or Owner's Representative.
3. Work Commencement: No portion of the work requiring submittals shall be commenced until the submittals are approved by the Owner and or Owner's Representative.
4. Delays: Delays to the work caused by late or disapproved submittals shall be the sole responsibility of the Contractor. No extensions will be made to the contract time on account of such delays.
5. Schedule: Submittals shall be received by the Owner and or Owner's Representative in accordance with the following timetable:
 - a. Pre-work Submittals – Not less than five (5) working days prior to the Contractor's mobilization onto the work site the Contractor shall submit to the Owner's Consultant two (2) legible copies of the submitted documents on 8-1/2" x 11" format. Illegible submittals will be considered deficient and returned for correction. Owner's Consultant will review submittals and return deficient submittals within three (3) days after receipt. Deficient submittals shall be resubmitted by the Contractor within two (2) working days after return of review copy. Once accepted, one reviewed copy shall be returned to the Contractor, who shall maintain one (1) reviewed copy at the job site.
 - b. Product Submittals – Not less than two (2) working days prior to the initial use of the product on the work site.
 - c. Post-work Submittals – In addition to any requirements of Section 01770 – CLOSEOUT PROCEDURES and Section 01330 – SUBMITTALS, the Contractor (or asbestos abatement sub- contractor) shall, within two weeks of demobilization from the project site, submit 2 copies (in three-ring binders, indexed and separated by tabs) of the post-work submittals. If the Consultant or Owner determines that the post-work submittals are inadequate, the Contractor will be required to correct the deficiencies. The cost of the Consultant's time to perform a subsequent review of post-work submittals will be paid by the Contractor.

B. PRE-WORK SUBMITTALS:

1. Progress Schedule: Provide a proposed work schedule indicating the following items:
 - a. Show the complete sequence of the abatement plan by activity and the sequencing of work within each building, floor, or regulated work area.
 - b. Show the dates for beginning and completion of each major element (set-up, removal, testing, reapplication, etc.) of abatement work, including substantial completion dates for each building, floor, or regulated work area.
 - c. Show manpower distribution per activity and schedule. Distinguish between trained full-time personnel and unskilled or temporary labor.
 - d. Show anticipated final inspection dates.
 - e. The schedule shall be formulated on a day/week basis, updated weekly, and revised as required.
 - f. Deviations from, or changes to the initially established daily work shift hours and/or the weekly work days shall be submitted in writing to the Owner's

Consultant for approval not less than 24 hours prior to the anticipated implementation of said changes. The Contractor shall not implement such work schedule changes without the prior expressed approval of the Owner's Consultant. The Contractor shall be responsible its Subcontractor's compliance with this requirement.

2. Notices:
 - a. Written Notice of Proposed Abatement activity to the applicable air quality district/pollution control agency California Air Resources Board (CARB).
 - b. Written Notice of Proposed Abatement activity to the Cal-OSHA Regional Office or any other agency having jurisdiction.
 - c. Written proof that all required permits, licenses, and registrations have been applied for and/or received. This shall include Contractor and Project Superintendent Licenses and Asbestos Workers' Registrations under the federal, state, local regulations, and regulatory agencies.
3. Worker Documentation:
 - a. Name and social security number of each employee to be engaged in asbestos abatement work.
 - b. Current valid documentation from an AHERA-accredited training provider indicating the most recent asbestos abatement training course and training date that each person listed has attended. Photocopies of recent (within the preceding 12 months) training certification or certification card will suffice, as long as both sides of the card are provided.
 - c. Name and social security number of the Asbestos Project Superintendent. Provide current valid documentation from an AHERA-accredited training provider indicating the most recent asbestos abatement contractor/supervisor training course and training date that he/she has attended. Provide evidence indicating that he/she has a minimum of one-year on-the-job experience as an Asbestos Project Superintendent.
 - d. Current valid documentation indicating the date and type of each worker's most recent respiratory training and respirator fit testing.
 - e. Current valid medical documentation indicating the date of each worker's most recent asbestos medical examination. Illegible or incomplete photocopies, or preliminary results reports will be rejected as deficient.
 - f. Current valid medical documentation indicating each worker's medical respiratory compliance status. Illegible or incomplete photocopies, or preliminary results reports will be rejected as deficient.
 - g. Completed Certificates of Worker's Release Forms. No Contractor's employee will be allowed to engage in asbestos removal work prior to submitting a completed Certificate of Worker's Release form.
4. Subcontractors: Submit qualifications and a 24-hour point-of-contact for each subcontractor to be used. This shall include two (2) copies of federal, state, or local operating permits and identification numbers for the waste transporters and disposal facilities to be used.
5. Abatement Work Plan: Submit a detailed work plan of the practices and procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination areas; the sequencing of

asbestos work; the interface of trades involved in the performance of work; work schedule including work shift time, number of employees, date of start and completion including dates of preparation work, removal, and final clearance dates; methods to be used to assure the safety of building occupants and visitors to the site; disposal plan including location of approved disposal site; and a detailed description of the methods to be employed to control pollution. Expand upon the use of portable HEPA ventilation system, closing out of the building's HVAC system, method of removal to prohibit visible emissions in work area, and packaging of removed asbestos debris. The plan must be reviewed by the Consultant prior to the commencement of work.

6. Contingency Plan: Submit a contingency plan for emergencies including fire, accident, power failure, differential air system failure, supplied air system failure, or any other event that may require modification or abridgement of decontamination or work area isolation procedures. Include in plan specific procedures for decontamination or work area isolation. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency.
 - a. Post: In clean room of Personnel Decontamination Unit, display telephone numbers and locations of emergency services including but not limited to fire, ambulance, doctor, hospital, police, power company, telephone company, and Contractor personnel.
7. Field Logs: Submit a sample of Daily Field Logs, Work Area Entry/Exit Logs, etc. to be used during the asbestos abatement work.
8. Rental Equipment: If rental equipment is to be used in conjunction with this asbestos abatement work, a copy of a written notification provided to the rental company informing the rental company that the rented equipment will be used on an asbestos abatement project shall be submitted. The notification shall state how the equipment is to be used and that the rental company has been advised of possible contamination. A representative of the rental company shall sign an acknowledgment of such and return the notification to the Contractor for compliance with this submittal.
9. Pre-Work Punchlist: Submit a punch list of damages existing in work area(s) prior to commencement of Contractor's work. In the absence of any observed existing damage, submit a signed statement on Company letterhead stating that no existing building damage(s) were noted prior to the start of work.
10. Safety Data Sheets: Submit current Safety Data Sheets (SDS) on all potentially hazardous materials to be used on the job-site. Refer to above Section 1.2, B 5 b – Product Submittals.
11. California DOSH. Registration: Submit evidence of the Contractor's (or abatement sub-contractor's) registration with the Department of Occupational Safety and Health (Cal-OSHA) to conduct asbestos-related construction work.
12. Waste Hauling Qualifications: Submit proof of hazardous waste transporter's registration and employee's training (if not subcontracting waste hauling). Submittals shall include, but not necessarily be limited to, current vehicle registration and insurance coverage; most recent vehicle inspection certificate or

report; California Waste Transporter's License; and a copy the vehicle operator's current California Driver's License and current DMV driving record.

C. POST-WORK SUBMITTALS:

1. General: In accordance with the requirements of the above Section 1.2, B 5 c – Post-Work Submittals, submit the following documentation:
 - a. Copies of employee and visitor Work Area Entry/Exit Logs and Daily Field Logs/Reports.
 - b. Waste manifests, certified weight tickets, and landfill receipts.
 - c. Results of all personnel air monitoring.
 - d. Manometer print-out(s) attached to 8½ " x 11" paper. Each page should indicate the dates, times, and work area containment(s) to which the Manometer print-out(s) apply.
 - e. Emergency reports describing events such as injuries and loss of differential air pressure.

1.3 QUALITY REQUIREMENTS

A. REFERENCE STANDARDS:

1. Regulations: Applicable regulations pertaining to asbestos abatement work include, but are not limited to, the following:
 - a. California Department of Occupational Safety and Health (Cal- OSHA) – Asbestos Standard for The Construction Industry, Title 8, California Code of Regulations section 1529, et. seq. (8 CCR 1529).
 - b. California Health and Safety Code sections 24914 (Hazardous Substance Removal Contracts); 25915, et. seq. (Asbestos Notification Act); and 19827.5 (Demolition Permits).
 - c. California Labor Code sections 6501.5 (Employer Registration); and 6501.9 (Determining the Presence of Asbestos Prior to Contracting for Work).
 - d. California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop. 65).
 - e. Title 29, Code of Federal Regulations, Parts 1910 and 1926.1101.
 - f. Title 40, Code of Federal Regulations, Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP). U.S. Environmental Protection Agency (U.S. EPA).
 - g. Title 40, Code of Federal Regulations, Part 763, Subpart E, sections 763.80 – 763.99, Asbestos Hazard Emergency Response Act. U.S. EPA.
 - h. Title 49, Code of Federal Regulations, Part 172, U.S. Department of Transportation.
 - i. All other applicable Federal, State, and/or Local regulations, codes, and ordinances.
2. Standards: Applicable industry standards pertaining to asbestos abatement work include, but are not limited to, the following:
 - a. Code of Federal Regulations (CFR)

- 1) 29 CFR 1926, Construction Standards
- 2) 29 CFR 1910, Asbestos in Construction Standard
- 3) 40 CFR Part 50.12, Ambient Air Quality Standard for Lead
- 4) 40 CFR Parts 261, 265, and 268, Hazardous Waste Management f 49 CFR Parts 172, 173, 178, 179, Hazardous Material Transportation
- b. California Code of Regulations (CCR)
 - 1) 8 CCR Division 1, Chapter 4, Subchapter 4, Construction Safety Orders
 - 2) 8 CCR 1529, Asbestos in Construction Standard
 - 3) 8 CCR 5144, Respiratory Protection
 - 4) 22 CCR Division 4 and 4.5, Hazardous Waste
- c. American National Standard Institute (ANSI) Publications: Z9.2 Fundamentals Governing The Design and Operation of Local Exhaust Systems; and Z88.2 Practices for Respiratory Protection.
- d. National Fire Protection Association (NFPA): Standard 90A Installation of Air Conditioning and Ventilation Systems.
- e. U. S. Environmental Protection Agency (EPA): Publication No. 560/5-85-024 Guidance for Controlling Asbestos-Containing Materials in Buildings, June, 1985
- f. American Society for Testing Materials (ASTM) Publications:
 - 1) 849-82 Safety and Health Requirements Relating to Occupational Exposures to Asbestos; and
 - 2) 189 Specifications for Encapsulants for Friable asbestos-containing materials.
- g. National Institute of Occupational Safety and Health (NIOSH) Publications:
 - 1) Manual of Analytical Methods, 2nd Ed., Vol. 1. Physical and Chemical Analysis Method (P&CAM): Method 239 Asbestos Fibers in Air; and Method 7400 Fibers (N1, 3rd Ed., Vol. 1.).
- h. Underwriters Laboratories, Inc. (UL) Publication:
 - 1) 586-77 Test Performance of High Efficiency,
 - 2) (R1982) Particulate, Air Filter Units
- i. Applicability. The most current issue of each document shall apply. Where conflict among requirements or with these specifications exists, the more strict or stringent requirement or interpretation shall apply.

B. DEFINITIONS: In addition to definitions provided elsewhere in these specifications, the following definitions shall apply:

1. Abatement: The procedure to control fiber release from asbestos-containing building materials. Activities include removal, encapsulation, and enclosure.
2. Adequately Wet: A term defined in 40 CFR 61, Subpart M and EPA 340/1-90-019 that means to sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed to be coming from ACM, then that material has not been adequately wetted. The absence of visible emissions, however, is not sufficient evidence of being adequately wetted.
3. Aggressive Clearance: Final clearance air monitoring of a regulated asbestos work area which utilizes leaf blowers, fans, and similar tools to “aggressively” disturb

and entrain any settled residual asbestos fibers for the purpose of capturing them during sampling.

4. Air Lock: A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area.
5. Air Monitoring: The process of measuring the fiber content of a specific volume of air in a stated period of time.
6. Amended Water: Water to which a surfactant has been added.
7. Asbestos: The general name given to a group of fibrous mineral forms including chrysotile, crocidolite, amosite, tremolite actinophylite, and actinolite and any of these minerals that have been chemically treated or altered. Asbestos-containing materials are those which contain greater than one percent (1%) asbestos as measured by the EPA interim method.
8. Asbestos-containing Hazardous Waste: Any material that contains equal to, or greater than, one percent asbestos by weight and is friable. Alternately, any mixture of material(s) which contains (i.e. is contaminated with) equal to, or greater than, one percent friable asbestos by weight is also asbestos-containing hazardous waste.
9. Asbestos Abatement Contractor: The Contractor designated in the contract documents as being responsible to the Owner for the control or abatement of asbestos-containing or contaminated materials.
10. Asbestos Permissible Exposure Limit (PEL): An airborne concentration of asbestos of 0.1 f/cc averaged over an 8-hour period.
11. Authorized Visitor: The building Owner, the Owner's representative, the Consultant, the Consultant's inspector or representative, or any representative of a federal, state, county, city, or local agency having jurisdiction over the project while acting in an official capacity. Any person whose name appears upon an approved authorized visitor's list.
12. Background Monitoring: See "Prevalent Level Monitoring."
13. Building Owner: The Owner or his authorized representative.
14. Class I Asbestos Work: Activities involving the removal of TSI and surfacing ACM and PACM.
15. Class II Asbestos Work: Activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.
16. Clean Room: An uncontaminated area or room which is part of the worker decontamination enclosure with provisions for storage of worker's street clothes and protective equipment.
17. Competent Person: In addition to the definition in 29 CFR 1926.32 (f), one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32 (f): in addition, for Class I and Class II work who is specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR 763) for supervisor, or its equivalent and, for Class II and Class IV work, who is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92 (a)(2).

18. Critical Barrier: One or more layers of plastic sealed over all openings into a work area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a work area from migrating to an adjacent area.
19. Curtained Doorway: A device to allow ingress and egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway.
20. Decontamination Enclosure System: A series of connected rooms, with curtained doorways between any two adjacent rooms, for the decontamination of workers and of materials and equipment. A decontamination enclosure system always contains at least one airlock.
21. Differential Air Pressure Equipment: A portable local exhaust system equipped with HEPA filtration and capable of maintaining a constant, low velocity air flow into contaminated areas from adjacent uncontaminated areas.
22. Disturbance: Activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM. This term includes activities that disrupt the matrix of ACM or PACM, render ACM or PACM friable, or generate visible debris. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width.
23. DOP: 0.3 μ m diocylphthalate aerosol used in connection with testing the integrity of the negative pressure system.
24. Encapsulant: A liquid material which can be applied to asbestos-containing materials and which prevents the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant). (Also sealant).
25. Encapsulation: All herein specified procedures necessary to apply an encapsulant to asbestos-containing building materials to control the possible release of asbestos fibers into the air.
26. Enclosure: All herein specified procedures necessary to completely enclose asbestos-containing material behind airtight, impermeable, permanent barriers.
27. Equipment Decontamination Enclosure: That portion of a decontamination enclosure system designed for controlled transfer of materials and equipment, typically consisting of a washroom and a holding area.
28. Equipment Room: A contaminated area or room which is part of the worker decontamination enclosure with provisions for storage of contaminated clothing and equipment.
29. Excursion Limit: An airborne concentration of asbestos of 1.0 fiber per cubic centimeters (f/cc) as an average over a sampling period of thirty minutes.

30. Fixed Object: A unit of equipment or furniture in the work area which cannot be removed from the work area.
31. Friable: Asbestos-containing material that can be crumbled, pulverized, or reduced to powder, when dry, by hand pressure.
32. Glovebag: Not more than a 60 x 60 inch impervious plastic bag-like enclosure affixed around an asbestos-containing material, with glove-like appendages through which material and tools may be handled.
33. Glovebag Technique: A method with limited applications for removing small amounts of friable asbestos-containing material from HVAC ducts, short pipe runs, valves, joints, elbows, and other non-planer surfaces in a non-contained work area. The glovebag assembly is a manufactured or fabricated device consisting of a glovebag (typically constructed of 6-mil transparent regulate plastic), two inward projecting long sleeve rubber gloves, one inward projecting sleeve, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glovebag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all asbestos fibers released during the removal process. All workers who are permitted to use the glovebag technique must be highly trained, experienced, and skilled in this method. Limitations on and requirements pertaining to glovebag work, as set forth in 29 CFR 1926.1101, shall be observed and complied with during this work.
34. Holding Area: A chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area. The holding area comprises an airlock.
35. HEPA Filter: A High-Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97 percent of particles (asbestos fibers) greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.
36. HEPA Vacuum Equipment: Vacuuming equipment with a HEPA filter system.
37. Log Book: A notebook or other book containing essential project data and daily project information and a daily project diary. This book shall be kept up to date and on the project site at all times.
38. Movable Object: A unit of equipment or furniture in the work area which can be removed from the work area.
39. SDS: Safety Data Sheet (formerly known as Material Safety Data Sheet).
40. MSHA: Mine Safety and Health Administration.
41. Negative Initial Exposure Assessment: A demonstration by the employer, which complies with the criteria in paragraph (f)(2)(iii) of this section, that employee exposure during an operation is expected to be consistently below the PELs.
42. NIOSH: National Institute of Occupational Safety and Health.
43. PACM: "Presumed asbestos containing material".
44. Phase Contrast Microscopy (PCM): NIOSH Method 7400 using "A" counting rules.
45. Plant: The tools, machinery, structures, equipment, etc., necessary to perform a mechanical operation, process, or to carry out a business.
46. Plasticize: To cover floors and walls with plastic sheeting as herein specified.

47. Presumed Asbestos Containing Material: Thermal system insulation and surfacing material found in buildings constructed no later than 1980. The designation of a material as "PACM" may be rebutted pursuant to paragraph (k)(5) of this section.
48. Prevalent Level Monitoring: Air sampling conducted for the purposes of evaluating existing ambient airborne fiber concentrations prior to starting abatement activities.
49. Regulated Area: An area established by the employer to demarcate areas where Class I, II and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the permissible exposure limit. Requirements for regulated areas are set out in paragraph (e) of this section.
50. Removal: All herein specified procedures necessary to remove asbestos-containing materials from the designated areas in an appropriate manner and to dispose of these materials at an acceptable site.
51. Shower Room: A room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold or warm running water and suitably arranged for complete showering during decontamination.
52. Surfacing Material: Material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes).
53. Surfactant: A chemical wetting agent added to water to improve penetration.
54. Thermal System Insulation (TSI): ACM applied to pipes, fittings, boilers, breaching, tanks, ducts or other structural components to prevent heat loss or gain.
55. Time Weighted Average (TWA): The TWA is an 8-hour time weighted average of the airborne concentration of fibers (longer than 5 micrometers) per cubic centimeter of air which represents the employee's 8-hour workday as determined by Appendix A of CFR 29, Part 1926, Section 1926.1101.
56. Transmission Electron Microscopy (TEM): A method of analyzing air samples for asbestos fibers using a transmission electron microscope and associated instrumentation.
57. Visible Emissions: Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
58. Washroom: A room between the work area and the holding area in the equipment decontamination enclosure system. The washroom comprises an airlock.
59. Wet Cleaning: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with water, and by afterwards disposing of these cleaning tools as asbestos-contaminated waste.
60. Wiping: Final cleanup stage performed after gross asbestos removal where all surfaces are wet cleaned.
61. Work Area: Designated rooms, spaces, or areas of the project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A contained work area is a work area which has been sealed, plasticized, and equipped with a decontamination enclosure system. A

non-contained work area is an isolated or controlled-access work area which has not been plasticized nor equipped with a decontamination enclosure system.

62. Worker Decontamination Enclosure System: That portion of a decontamination enclosure system designed for controlled passage of workers, and other personnel and authorized visitors, typically consisting of a clean room, a shower room, and an equipment room separated by air locks.

PART 2 – PRODUCTS

1.4 MATERIALS

- A. PRODUCT PROHIBITIONS: The following products or product constituents are prohibited from use during these asbestos abatement activities:

1. Any product for which a Safety Data Sheet has yet to be submitted and approved.
2. Any product for which a less hazardous substitute product is readily available, provided that the substitute product possesses similar performance characteristics.
3. Any product containing any concentration of diethylene glycol dimethyl ether; ethylene glycol monoethyl ether; or ethylene glycol mono methyl ether (skin TLV 5 ppm; CAS 109-86-4): causes reproductive damage and blood cell damage.
4. Any product containing any concentration of ethylene glycol (1,2 Ethanediol glycol; TLV = 50 ppm): causes kidney damage if ingested.
5. Any product containing any concentration of formaldehyde: a known human carcinogen (1987).
6. Any product containing any concentration of methylene chloride: metabolizes to carbon monoxide, a probable human carcinogen.
7. Any product containing any concentration of n-hexane: causes peripheral nerve damage (common ingredient in spray glues).
8. Any product containing any concentration of isocyanates: an allergic sensitizer, this group of chemicals typically has no warning properties (common ingredient in spray foams).
9. Non-fire rated visquene and/or non-fire rated lumber are prohibited from use.
10. Solvents with a flash point <140o F are prohibited from use.

- B. EQUIPMENT PROHIBITIONS: The following equipment are prohibited from use during these asbestos abatement activities:

1. Fasteners: High velocity powder-actuated fasteners are prohibited from use.
2. Torches: Open flame torches are prohibited from use for asbestos abatement purposes.
3. Compressed Air: Air compressors, leaf blowers or similar forced-air equipment is prohibited from use for asbestos abatement purposes
4. Lamps: Use of sodium or mercury lamps are prohibited from use.
5. Noise: Equipment emitting noise >85 db at 3 feet shall be prohibited from use.
6. Ladders: Wooden or metal ladders are prohibited from use.

7. Engines: Internal combustion engines shall not be permitted for operation indoors without express written permission of the Owner.
8. Grounded Electrical Equipment: Electrical equipment manufactured with internal grounding or grounded wiring shall not be used if the grounding has been removed, tampered with, or otherwise altered.

C. MATERIAL REQUIREMENTS:

1. Sealants: Sealants used shall have a flame spread, smoke and fuel contribution of zero, and shall be ASTM and UL rated for 3 hours for standard method fire test for fire stop systems.
2. Lock-down Encapsulants: Lock-down encapsulants used shall be compatible with substrate to which they will be applied, as well as with adhesives or other finish materials which will be applied over such encapsulants. Fiberlock FT or PM w/ Spatterkote type SKII, or equivalent encapsulate which is U.L. listed in a full-scale E-119 fire test, is acceptable.
3. Visquene Sheeting: Visquene sheeting used shall be in compliance with NFPA Standard 701 fire testing, with flame spread < 5 and smoke development rating of < 70 when tested by ASTM E-84. Minimal thickness shall be 6 mil.
4. Spray Poly: Spray poly as a liquid, must be non-flammable (no flash point) vapor free, and not noxious; when dry, poly must be Class A rated, with flame spread <20, have a fuel contribution of zero, and smoke development of < 110 by ASTM method E-84.
5. Waste Containers: Waste containers (bags, drums, bins, etc.) shall be suitable for loading, temporary storage, transit, and unloading of asbestos waste without rupture, or otherwise causing exposure to persons or releases to the atmosphere. Where rigid primary containers (bins, drums, etc.) are used, they shall be lined with a secondary water-tight barrier of poly sheeting or poly bags of minimal thickness of 6 mil. All containers used for disposal of asbestos-containing waste shall be labeled in general accordance with applicable regulations, and in specific with the requirements of 8 CCR 1529 (k) (8) and SMAQMD Rule 902.
6. Adhesives: Adhesives, whether tape or aerosol liquid, shall be capable of securely bonding plastic to plastic or plastic to substrate. The bonding strength and resulting seal of the material used must not be compromised by mist or water, encapsulating agent or any other product or process used in the regulated work area.
7. Warning Signs and Labels: Warning signs and labels shall be in compliance with applicable federal, state, and local regulations. They shall be lettered in the language(s) necessary to communicate the specific hazard warning(s) to workers or visitors reasonably expected to be at the job site.

D. EQUIPMENT REQUIREMENTS:

1. Differential Air Pressure Equipment: Differential air pressure equipment shall be in well-maintained condition and shall comply with ANSI Standard Z9.2-1979 for performance. Differential air pressure equipment shall bear a UL586 label. Each unit shall be DOP (or equivalent) tested on-site, in- place, and prior to use, in accordance with Military Standard Number 282 and Army Manual 136-300-175A,

so as to ensure 99.97% filtering efficiency of aerosol particulates of 0.3 microns or greater in size. Having once passed DOP testing (or equivalent), units relocated on-site to another separate building shall be re-tested prior to each subsequent re-use. Each unit shall be visibly clean and free of apparent contamination, as judged by the Owner's Consultant. If, in the opinion of the Owner's Consultant, the differential air pressure units are judged to be in need of maintenance or in any other way fail to meet typical industry standards, the units shall not be placed into operation on this project.

2. HEPA-filtered Vacuum Cleaners: HEPA-filtered vacuum cleaners shall be in well-maintained condition and shall be visibly clean and free of apparent contamination, as judged by the Owner's Consultant. Each unit shall arrive on-site empty of any debris. Each unit shall be DOP tested (or equivalent) on-site, in-place, and prior to use, in accordance with Military Standard Number 282 and Army Manual 136-300-175A, prior to its being used as an air filtration device in mini-enclosures.
3. Lights and Electrical Cords: Electrical lights and equipment utilizing electrical power cords shall be in well-maintained condition and shall be visibly clean and free of apparent contamination, as judged by the Owner's Consultant. All lighting and electrical equipment shall be fully water resistant. Work lighting shall have covers over the light bulbs. Grounded electrical equipment shall be used with grounded electrical supply and outlets. Where such equipment will be used in the near vicinity of water, ground fault interruption (GFI) protection shall be used in the wiring circuit at the first feasible point closest to the source of power.
4. Decontamination Facilities: At a minimum, a 3-stage personal decontamination chamber (decon) with functioning shower shall be constructed and used whenever Class I work is being conducted. The decon shall be constructed contiguous with the regulated work area. Use of a remote shower for Class I work may be allowed where a contiguous shower is infeasible, as judged by the Owner's Consultant. A curtained doorway (see Section 1.3 C above) shall be constructed to separate chambers within a decon unit, as well as at ingress and egress points. The decon shall be constructed in a manner so as to be free of jagged metal or exposed wood surfaces. Other alternate decontamination facilities may be used for compliance with Class II asbestos work or asbestos roofing removal work. The personal decon shall not be used for waste load-out.
5. Water Filtration Equipment: Water shall be collected from decontamination unit showers and from general asbestos abatement activities and shall be filtered prior to discharge. Water shall be filtered through a system capable of trapping particles 1 micron and larger in size, specifically designed to remove asbestos fibers. Filtered water shall be discharged into a sanitary sewer system, if acceptable to do so. The Contractor shall bear the responsibility to investigate discharge requirements and to obtain any necessary discharge permits prior to the start of work. To the extent feasible, water should be reclaimed and used on-site for application in wet method work practices prior to its discharge.
6. Fire Extinguishers: Fire extinguishers, rated not less than 2A or as specified by more stringent regulations, will be required in the work area(s) at a rate of one per 3000 square feet or within 100 feet of anywhere in the work area. The minimum

allowable number of fire extinguishers will be one in the regulated work area and one in the clean area.

7. Manometer: Manometers used to monitor air pressure within a regulated work area shall have been calibrated within manufacturer's specifications within the previous year. Manometers shall have real-time digital read-out; an audible alarm; and a hardcopy record (circular disk) or be capable of continuous data logging and printing out a data record.

PART 3 – EXECUTION

1.5 PREPARATION

- A. EXAMINATION OF CONDITIONS: The Contractor shall carefully examine the work site before beginning work and report any damage or defects to the Architect. Starting of work shall be interpreted as implied acceptance of conditions as they exist. The Contractor shall be held responsible for repairing, replacing, or restoring at his expense any existing damage which was not reported, or which was the result of the abatement or his negligence. This includes, but is not limited to, any damage to walls, finishes, fixtures, doors, windows and/or equipment, resulting from poly and tape removal or remaining residues.
- B. RESPONSIBILITY FOR WORK: The Asbestos Abatement Contractor acknowledges and agrees that he has sole and primary responsibility and obligation to the Owner to make inspections of his own work at all stages of the Work, and he furthermore acknowledges and agrees that he has sole responsibility to supervise or superintend the performance of the Work, and that said work shall be in strict adherence and compliance with the methods, materials, regulations, and required standards specified herein. The Contractor is responsible for site security upon starting the project. This responsibility extends 24 hours per day.
- C. COORDINATION OF WORK: The Asbestos Abatement Contractor is responsible to coordinate all scheduling, phasing, and completion of asbestos abatement work with the General Contractor and all other subcontractors working on the job site.
- D. MEASUREMENTS AND QUANTITIES: The Contractor is responsible to field verify all measurements and quantities before the start of work. Discrepancies between plan and field dimensions or quantities shall be reported to the Architect as soon as discovered.
- E. JOB SITE POSTINGS: Prior to commencing any preparation of the work area(s) for asbestos removal operations, the Contractor shall post all required documents, warning signs, and erect any physical barriers in order that the work area may be secured. Prior to the commencement of any work, the Contractor shall post bilingual or multi-lingual (as appropriate) EPA and OSHA caution signs in and around the work area in compliance with applicable regulations.

F. **PRE-WORK CONFERENCE:** Prior to the start of any work, the Asbestos Abatement Contractor shall meet at the project site with the General Contractor, the Owner's Consultant, the Construction Manager, and other entities concerned with the asbestos abatement work. This is an organizational meeting to review responsibilities and personnel assignments; to identify any visible damage to the existing structure or its condition; to identify the work area containment and decontamination areas; and to coordinate temporary facilities including power, light, water, etc.

G. **WORK AREA PREPARATION:**

1. **Work Area Designation:** Each work area will be designated and discussed with the Owner and or the Owner's Consultant prior to preparation. At a minimum, topics will include ingress and egress points, work areas, containment procedures, placement of viewing ports, and decontamination system. This may be accomplished at the Pre-Work Conference.
2. **Electrical Lock-out:** The Contractor is responsible for the shutdown and disconnect of all electrical power within the work area. The Contractor will provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electrical code requirements. The Contractor should notify the owner in writing before disconnecting any power or communication lines that may service other areas of the building(s).
 - a. **NOTE:** The Contractor will be responsible for all costs and damages that occur from a loss of power, water, or communication as a result of any action taken or activity performed by the Contractor.
3. **HVAC Isolation:** The Contractor shall shut down and isolate heating, cooling, and ventilating air systems to prevent contamination and fiber dispersal to other areas of the system. During the Work, vents and any other HVAC openings within the Work Area shall be covered with rigid barriers and sealed with tape and plastic sheeting. In the event of any containment breaches, filters in the HVAC system(s) shall be removed and disposed of as contaminated waste at the expense of the Contractor. The Contractor shall be responsible for main duct disconnect (cut and cap) into and out of work area.
4. **Remaining Utilities:** Exposed electrical, phone and other conduits and lines designated by the Owner or Architect to remain in the work area shall be wrapped with a minimum of two layers of 6-mil fire-rated poly before gross removal.
5. **Work Area Containment:** The Work Area shall be completely sealed airtight and isolated (contained) from all building areas not a part of the work area. All critical openings, including but not limited to doorways, windows, tunnels, ducts, grills, diffusers, skylights, or openings through which pipe conduit passes, or any other openings shall be sealed securely with plastic sheeting and other means, as necessary to prohibit the passage of air out of the work area. Any fixed objects to remain within the proposed work area will be cleaned using HEPA vacuum equipment and/or wet cleaning methods as appropriate and enclosed with plastic sheeting. The plastic sheeting shall be, at a minimum, 6-mil fire- rated poly. Once fully constructed, the Contractor shall inspect the containment for gaps, breaches, tears, leaks, holes or other unwanted passages. A similar inspection shall be conducted not less than once at the start of each work shift. The Contractor shall

remain vigilant to ensure the integrity of the containment at all times. Deficiencies shall be corrected immediately and with top priority.

6. Decontamination Facilities: Prior to the start of work, the Contractor shall erect suitable personal decontamination facilities. At a minimum, a 3-stage personal decontamination chamber (decon) with functioning shower shall be constructed and used whenever Class I work is being conducted. The decon shall be constructed contiguous with the regulated work area. Use of a remote shower for Class I work may be allowed where a contiguous shower is infeasible, as judged by the Owner's Consultant. A curtained doorway (see Section 1.3 C above) shall be constructed to separate chambers within a decon unit, as well as at ingress and egress points. The decon shall be constructed in a manner so as to be free of jagged metal or exposed wood surfaces. Other alternate decontamination facilities may be used for compliance with Class II asbestos work or asbestos roofing removal work. The personal decon shall not be used for waste load-out.
7. Temporary Closures: Open doorways, cased openings, and corridors which will not be used for passage during work shall be sealed with temporary partitions as follows:
 - a. Wood or metal studs, 16" o.c., faced with 3/8" plywood sheeting on work side only.
 - b. Both sides of partition covered with double layer of minimum 6-mil fire-rated plastic sheet with joints staggered and sealed with tape. Edges of partition at floor, walls, and ceiling shall be secured and sealed airtight.
8. Movable and Loose Items: Movable and loose items located in the work area and not removed by the Owner shall be cleaned using HEPA vacuum equipment and/or wet cleaning methods as appropriate or shall be removed from the work area to a temporary location designated by the Owner. The items will be received by and protected from future damage or loss by the Owner and relocated by the Owner.
9. Carpet Removal: As directed by the Contract documents and drawings, remove and dispose of carpeting, including pad, prior to plasticizing work area. Carpet and pad to be discarded shall be misted with amended water or with an encapsulant prior to and during removal to minimize airborne dust releases, wrapped and sealed airtight in plastic, and disposed of as an asbestos-contaminated material.
10. Pre-Cleaning: Clean the entire work area(s) prior to plasticizing, using HEPA vacuum equipment and wet cleaning methods as appropriate. Do not use methods that raise dust, such as dry sweeping or by vacuuming with equipment not equipped with HEPA filters.
11. Class I Work Area Isolation: For Work Areas where Class I asbestos work is to be conducted, the Contractor shall cover floor and wall surfaces with fire-rated plastic sheeting. A minimum of two layers of 6-mil plastic shall be used on the walls, floors, and ceilings (where applicable). Exceptions to this would include the removal of thermal system insulation (TSI) by means of glovebag techniques. In the case of TSI removal using glovebags, full-room or partial-room ("mini-enclosure") containment conditions may, at the Consultant's discretion, be required. Floor layers shall be applied making sure that plastic is turned-up the wall at least 16 inches and securely fastened. Then apply wall layers overlapping the previously turned-up floor plastic by at least 12 in. All joints and seams for each

layer shall be glued, taped, or stapled securely with care to minimize damage to existing walls or floor, yet in a manner to prohibit water or air movement through the covered areas.

12. Modified Class I Work Area Isolation: For Work Areas where Class II asbestos work is to be conducted by means or methods which would reasonably be expected to render non-friable ACM to a friable condition; or where the method of removal will necessarily entrain substantially elevated concentrations of asbestos fibers into the work area (e.g. use of non-HEPA-filtered power tools to cut wallboard), the Contractor shall cover floor and, at the discretion of the Owner's Consultant, the walls and ceilings with fire-rated plastic sheeting. A minimum of two layers of 6-mil plastic shall be used on the floors. Exceptions to this would include the removal asbestos-containing flooring within the same work area. All joints and seams for each layer shall be glued, taped, or stapled securely with care to minimize damage to remaining walls or floor, yet in a manner to prohibit water or air movement through the covered area. Cover the floor under the decontamination unit, hoses, and equipment with an additional layer of 6-mil poly. Class I Work Area Isolation procedures may be used by the Contractor in work areas where modified Class I work will be conducted.
13. Class II Work Area Isolation: For Work Areas where Class II asbestos work is to be conducted, the Contractor shall use a minimum of one layer of 6-mil plastic on the walls. The height of the wall area to be covered shall be determined on-site, at the discretion of the Owner's Consultant. 6-mil plastic on the floor and ceiling is not required in areas where only floor tile and mastic is to be removed. Cover the floor under the decontamination unit, hoses, and equipment with an additional layer of 6-mil poly.
14. Localized Limited Work Area Isolation: For Work Areas where small-scale, Class I or Class II ACM removal work will occur, the Contractor may, with the approval of the Owner's Consultant, use Localized Limited Work Area Isolation ("mini-containment") methods. For the purposes of this work, the term "small-scale" shall generally apply to work which can be completed by no more than two (2) workers in no more than four (4) hours; and which generates no more waste than can be contained in four
 - a. (4) standard-sized (60") waste bags. At a minimum, the Work Area shall be fully enclosed with two layers of 6-mil plastic, have a diminished interior pressure differential, and a curtained doorway for ingress/egress use.
15. Containment Obscurity: Work Areas with containment walls visible to the public shall have one layer of opaque poly substituted for one of the 6-mil layers.
16. Adjacent Areas: Work Areas immediately adjacent to asbestos removal areas, such as corridors or hallways which will not be subject to asbestos material removal, but are necessary routes to and from work areas, shall be protected with plastic on floors, walls, and ceilings, similar as described herein. At the Contractor's discretion, plastic-enclosed, framed-in tunnels shall be permitted to provide access in lieu of plasticizing walls and ceilings. Openings from these areas into areas where asbestos material is removed shall have curtained doorways to minimize fiber release into other areas.

17. Emergency Exits: The Contractor shall establish emergency and fire exits from the Work Areas or establish alternative exits satisfactory to fire officials or applicable fire codes.
 - a. All exits shall be marked in bold lettering "EXIT" or "Emergency Exit."
18. Work Area Communications: The Asbestos Abatement Contractor shall provide communication equipment capable of linking the personnel in the work area to those stationed outside, so that communications can be maintained without worker decontamination. Equipment should be operating properly and maintained as such during removal and clean-up operation.
19. Work Area Viewing Ports: The Contractor shall provide and construct observation/communication window(s) in location(s) specified by the Owner's Consultant. The window(s) shall be a minimum 1/8-inch Plexiglass or polycarbonate sheet, shall have a minimum size of 18" X 18", and shall be constructed and maintained so as to allow unobstructed observation of the entire work area(s).
20. Differential Air Pressure: Prior to the start of asbestos removal work, the Contractor shall install differential air pressure equipment, as specified herein, to maintain negative pressure in the Work Area during the abatement and decontamination phases of the Project until the required visual and clearance air testing has been satisfactorily achieved. A minimum pressure differential of -0.02 inches of water column (-0.02" w.c.), with respect to the air pressure of the area outside the Work Area, shall be established and maintained within the Work Area. Air exhausted from this equipment shall be exhausted to the outdoors. The Contractor shall have sufficient backup units on-site and/or in place to maintain this requirement throughout the Work. Documentation of satisfactory differential air pressure shall require the use of a manometer, as specified elsewhere herein. If, in the opinion of the Owner's Consultant, the differential air pressure units are judged to be in need of maintenance or in any other way fail to meet typical industry standards, the units shall not be placed into operation on this project.
21. Pre-Abatement Work Area Inspections: Prior to the start of asbestos removal work, the Contractor, accompanied by the Owner's Consultant, shall conduct a detailed inspection of all equipment and Work Area isolation preparations to assure that appropriate engineering controls are in place and are functioning sufficiently to contain asbestos fibers within the Work Area. The concurrence of the Owner's Consultant shall be required to determine that a Work Area has undergone adequate preparation to proceed with asbestos removal work. This Pre-Abatement Work Area inspection shall be conducted for each regulated Work Area and each individual inspection shall be documented in writing. Such documentation shall be signed by the individual(s) conducting the inspection(s). A copy of each such documentation shall be provided to the Owner's Consultant for conveyance to the Owner.

1.6 ASBESTOS REMOVAL

- A. GENERAL: The following asbestos-containing materials have been identified for removal during this Project:

1. Class I Asbestos Work: The following asbestos-containing materials have been identified for removal under Cal-OSHA's Class I work practices:
 - a. Resilient Sheet Flooring – Paper backing – Approximately 300 sq. ft.
2. Class II Asbestos Work: The following asbestos-containing materials have been identified for removal under Cal-OSHA's Class II work practices:
 - a. 9" vinyl floor tile (VFT) – Approximately 200 sq. ft.
 - b. Black /Yellow floor mastic – Approximately 20,000 sq ft..
 - c. Wallboard with joint compound – corridor ceilings – Approximately 4,000 sq. ft.
3. Asbestos Roof Work: The following asbestos-containing materials have been identified for removal under Cal-OSHA's Section (g) (11) "Alternative methods of compliance for roofing materials" 8 CCR 1529 (g) (11):
 - a. Roofing Materials, including:
 - 1) Roofing penetration black mastic – penetrations at HVAC ducts – Approximately 200 sq. ft.
 - 2) Roof black mastic on parapet wall on metal – Approximately 20 sq. ft.

B. WORK PRACTICES:

1. General: At all times, the Contractor will employ work practices intended to maintain an orderly and safe workplace. This shall include, but not be limited to, pre-cleaning the work area; wetting ACM during the work; prompt clean-up of ACM waste; use of HEPA-filtered vacuums and exhaust fans; and employing all necessary engineering controls needed to prevent elevated airborne asbestos fiber concentrations within the Work Area.
2. Class I Asbestos Work: Thermal System Insulation (TSI) removed by the use of glove-bags shall be conducted under full secondary Work Area containment, as described in the preceding Section 3.1 - PREPARATION. In this instance, a single layer of 6-mil poly sheeting will be allowed for use to cover the floors and walls. Glove bag removal work shall be conducted in full compliance with Cal-OSHA Class I work practices (8 CCR 1529). ACM shall be wetted prior to and during removal, handling, and waste disposal.
3. Class II Asbestos Work: Floor tile, mastic, baseboard, and other identified Class II materials shall be removed with hand tools and, to the extent feasible, substantially intact. At the discretion of the Owner's Consultant, use of mechanical or motorized removal methods may be permitted, provided the proposed method(s) is/are not prohibited under Cal-OSHA Class II work practices. Class I work practices may be utilized to perform Class II work. ACM shall be wetted prior to and during removal, handling, and waste disposal. Low-odor, solvent-based mastic removers may be used to remove ACM mastics, provided the product(s) meets the requirements of Section 2.1 – MATERIALS of this Specification, and provided the waste generated is managed in accordance with applicable state and federal regulations. Use of solvent-based mastic removers will be followed by a suitable rinse (as per manufacturer's recommendations) to remove any residual mastic remover. The Contractor shall be responsible for any subsequent failure of a flooring installation due the failure to adequately remove residual solvent-based mastic remover.

4. Asbestos Roof Work: Asbestos-containing roofing materials shall be removed with hand tools and, to the extent feasible, substantially intact. At the discretion of the Owner's Consultant, use of mechanical or motorized removal methods may be permitted, provided the proposed method(s) is/are not prohibited under applicable Cal-OSHA work practices. Class I or Class II work practices may be utilized to perform removal of asbestos-containing roofing material. ACM shall be wetted prior to and during removal, handling, and waste disposal. ACM waste shall not be dropped from the roof top, but shall be properly containerized (double-bagged, drummed, etc.) and lowered from the roof top for appropriate waste storage. All ACM waste shall be removed from the Work Area before the end of each shift.
5. The Contractor shall be mindful that roofing removal may reveal materials that have yet to be tested for asbestos. The Contractor shall immediately stop work upon such discovery and immediately notify the Owner's Consultant prior to disturbing untested materials.
6. Work Area Isolation: Class I and Class II Work Areas shall be regulated to prevent unauthorized entry. Isolation methods shall include, but not necessarily be limited to, the use of barrier tape (yellow "Caution" and/or OSHA's "Danger Asbestos") and OSHA's "Danger Asbestos" sign(s). The Contractor shall maintain a daily Work Area entry/exit log and require all persons entering the Work Area to sign in and out. The Contractor shall bear sole responsibility for regulating entry into the Work Area.

C. WORK AREA DECONTAMINATION

1. Initial Cleaning: Clean-up and containerization of ACM waste shall be an on-going activity throughout the removal work. ACM gross debris shall not be allowed to accumulate within the Work Area for subsequent clean-up. ACM shall be wetted and kept wet throughout the removal and clean-up work. Containerized waste may be stored within the Work Area during the work but should be removed from the Work Area for storage in a secured location on a periodic basis. In no event shall the accumulation of containerized waste within the Work Area be allowed to impede the work progress or compromise work site safety.
2. Containerization of Waste: ACM waste shall be containerized in waste containers (bags, drums, bins, etc.) suitable for loading, temporary storage, transit, and unloading of asbestos waste without rupture, or otherwise causing exposure to persons or releases to the atmosphere. Where rigid primary containers (bins, drums, etc.) are used, they shall be lined with a secondary water-tight barrier of poly sheeting or poly bags of minimal thickness of 6 mil. Waste containerized in bags shall be double-bagged, evacuated of air, and sealed with duct tape. All containers used for disposal of asbestos-containing waste shall be labeled in general accordance with applicable regulations, and in specific with the requirements of 8 CCR 1529 (k) (8) and SMAQMD Rule 902.
3. Detail Cleaning: Following gross removal of ACM, the substrate surface shall be detail cleaned using a combination of hand tools (scrapers, wire brushes, etc.), wet-wiping, and HEPA vacuuming. The substrate will be considered to be adequately cleaned when no visible and no three-dimensional remnant of the ACM can be seen or felt. Porous substrates such as wooden or concrete floors shall be considered

to be adequately cleaned when no three-dimensional remnant of the ACM can be felt and only light staining can be seen. This determination shall be made by the Owner's Consultant on a case-by-case basis. In no event shall encapsulation be used in lieu of detail cleaning.

4. Waste Load Out: Prior to the removal of containerized waste from the Work Area, each container shall be wet wiped to remove any residual asbestos contamination. Double-bagging of waste shall be completed within the regulated Work Area and the exterior of each bag (inner and outer) shall be individually wet-wiped prior to removal from the Work Area. Waste shall be loaded out of the Work Area through the equipment decontamination (waste load out) chamber and not through the personal decon. Once outside of the Work Area, the waste shall be transported in rigid movable bins or wheelbarrows directly to a secured waste storage facility.
5. Post-Abatement Work Area Inspections: Subsequent to all cleaning phases and waste load-out, the Contractor's Supervisor, accompanied by the Owner's Consultant, shall conduct a detailed visual inspection of the Work Area to assure that the identified asbestos has been removed and that the Work Area has been adequately cleaned. The concurrence of the Owner's Consultant shall be required to determine that a Work Area has undergone adequate cleaning to proceed with clearance air testing. This Post-Abatement Work Area inspection shall be conducted for each regulated Work Area and each individual inspection shall be documented in writing. Such documentation shall be signed by the individual(s) conducting the inspection(s). A copy of each such documentation shall be provided to the Owner's Consultant for conveyance to the Owner.
6. Equipment Decontamination: Prior to removal from the Work Area, the Contractor shall decontaminate all tools and equipment. Decontamination shall include, but not be limited to, wet-wiping, HEPA- vacuuming, and containerizing tools into subsequently decontaminated containers. HEPA-filtered vacuum cleaners shall be wrapped, bagged or otherwise containerized before removal from the Work Area. Likewise, differential air pressure equipment shall be sealed with poly sheeting and tape, and externally decontaminated before removal from the Work Area.
7. Encapsulation: Upon successful compliance with the requirements for Post-Abatement Work Area Inspection, the Contractor shall encapsulate the surfaces from which ACM have been removed. The encapsulant shall be compatible with the existing substrate and replacement materials and shall be rated to safely withstand the temperature of the items to which it will be applied. Following application of the encapsulant, the Contractor shall allow a sufficient amount of time (preferably overnight) for the encapsulant to dry. If clearance air samples are collected at the Contractor's request without having allowed a sufficient drying period, and if those samples are revealed by analyses to have been overloaded with encapsulant, additional clearances will be conducted at the Contractor's expense.
8. Poly Removal: After the encapsulant has been allowed to dry, the Contractor shall remove the outer layer of plastic on the walls, floors, and ceilings (where applicable). The inner plastic layer and isolation barriers on vents, grilles, diffusers, etc., shall remain in place for the clearance air sampling. Care should be taken to avoid pulling down the remaining layer of plastic sheeting. In Work Areas where a single layer of plastic has been used on the walls, floors, and ceilings (where

applicable), that plastic layer shall remain in place until air clearance sampling is completed, and satisfactory air clearance criteria have been met. Containerize removed plastic and any remaining debris, decontaminate container, and dispose of as ACM-contaminated waste. All other isolation engineering controls including decontamination facilities shall remain in place. Removal of plastic layers and isolation engineering controls (“teardown”) shall not occur without the knowledge and consent of the Owner and or the Owner’s Consultant.

D. PERSONAL PROTECTION

1. General: The Contractor shall be solely responsible for the safety, efficiency, and adequacy of his work, workers, equipment, and methods, and for any damages which may result from their improper actions, practices, construction, maintenance, or operations. The Contractor shall erect and properly maintain at all times, as required by the condition and progress of the Work, proper safeguards for the protection of the workmen and the public, and shall post appropriate warning signs around the site.
2. Competent Person: The Contractor shall designate a responsible member of his organization on the work site, whose duty shall be the detection, recognition, and prevention of accidents and potential accidents. The designated individual shall assume and fulfill the duties of the Competent Person, as defined in 8 CCR 1529. In the absence of notice to the contrary, provided in writing to the Owner’s Consultant, this person shall be the Supervisor of the Asbestos Abatement Contractor.
3. Toxic Exposure Responsibility: The Contractor shall assume all responsibility for any toxic effects to workers of the air supplied to respirators. The Contractor shall assume all responsibility for any toxic effects to personnel or property caused by airborne particulates, mists, vapors, or any wetting agent(s) and for the disposal of said agent(s) and any residual toxic damaging residues.
4. Worker Discipline: The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work crew any person not skilled in the Work assigned, nor anyone who has not received notice and instructions in the dangers of asbestos exposure, and in the reduction of the dangers associated with its removal. They shall also receive training in the proper use of respirators, safety procedures, equipment, clothing, and work procedure. The Contractor shall remove any employee from the project not adhering to any standard or requirement set forth herein.
5. Work Crew Size: The Contractor shall be responsible for setting the size of his work crews. During removal operations, a minimum of two (2) workers shall be in the work area. Under no circumstances should workers be allowed to work without the supervision of a foreman while within the work area. No workers shall be allowed alone in the work area.
6. Respiratory Protection: Prior to commencement of work, all workers shall be instructed and shall be knowledgeable in the use of respiratory equipment. All respiratory protection shall be provided to workers in conjunction with a respiratory protection program which shall meet the requirements of OSHA 29 CFR 1910.1001

and OSHA 29 CFR 1926.1101. This includes qualitative or quantitative fit testing. The following additional requirements shall apply:

- a. The Contractor shall provide workers with personally issued and marked respiratory equipment certified by the National Institute for Occupational Safety and Health (NIOSH) for use in atmospheres containing asbestos fibers. Respiratory protection shall be worn by all persons potentially exposed to asbestos from the initiation of the asbestos abatement project until all areas have been given clearance. Clearance shall be obtained by visual inspection and air monitoring.
 - b. Where respirators with disposable filters are employed, the Contractor shall provide sufficient filters for replacement as necessary by the worker, or as required by the applicable regulation.
 - c. The Contractor shall supply all individuals with adequate respiratory protection, which is set at a minimum to be that which is in compliance with OSHA requirements. In accordance with 29 CFR 1926.1101, the Contractor shall have a Competent Person conduct exposure assessments and periodic monitoring to establish the minimum appropriate respiratory protection to be used and the effectiveness of the chosen respiratory protection. In the absence of data acceptable to the Owner's Consultant as satisfying the requirements for a Negative Exposure Assessment [29 CFR 1926.1101 (f)(2)(iii)], the Contractor shall conduct Initial Exposure Assessments, as defined in 29 CFR 1926.1101(f)(2). In addition, the Contractor shall require and enforce the use of the following activity-related requirements:
 - 1) Work involving the use of solvents or volatile organic compounds shall be conducted with the use of air purifying respirators equipped with HEPA and Organic Vapor cartridges.
 - 2) Any question as to respiratory protection requirements for any activity unnamed or not otherwise described herein shall, by default, require the maximum protection or, alternately, may be directed by the Owner's Consultant.
 - 3) Proper respiratory equipment shall be used throughout the project, including removal of final layers of plastic after final air clearance is attained.
 - d. The Contractor shall post in the Equipment Room and the Clean Room, all decontamination and safety procedures to be followed for ingress and egress from the work area.
7. Protective Clothing: The Contractor shall provide workers with sufficient sets of hooded, disposable, full-body coveralls recommended for use in asbestos operations equivalent to DuPont "TYVEK-Type 14". Such full body protective clothing shall include, but not be limited to:
- a. Foot coverings including safety shoes or boots, or disposable foot coverings. Rubber boots are recommended.
 - b. Head coverings (hard-hats).
 - c. Clothing should be hooded, full-body coverall type.
 - d. Durable water-proof gloves (plastic, latex, or rubber) selected for chemical compatibility of the glove material and the materials to be handled. Cloth or

leather gloves may be worn underneath for comfort but shall not be worn alone.

8. Additional Clothing Requirements: The Contractor shall observe the following additional work clothing requirements:
 - a. Street clothes shall not be worn under protective clothing, nor into the regulated work area.
 - b. Any non-decontaminated protective clothing shall remain within the contaminated areas and shall be disposed of as asbestos- contaminated waste upon completion.
 - c. Provide authorized visitors with disposable sets of protective full- body clothing including footwear.
 - d. Provide eye protection and hard hats as required for job conditions or by applicable safety regulations. Where negative pressure respirators are worn, they shall be full faced, unless the Contractor also provides protective eye wear.
 - e. All clothing shall be sealable by design or by securing with tape at the workers' ankles and wrists. Short pants or short sleeves will not be allowed.
9. Personal Exposure Monitoring: It shall be the Contractor's responsibility to conduct required personal exposure monitoring. Such exposure monitoring shall be in full compliance with the requirements of 8 CCR 1529 and 8 CCR 5144. The Contractor shall monitor the airborne asbestos exposures of not less than 10% of the work crew, or a minimum of two (2) workers, whichever is greater. Workers shall be monitored in "worst case scenario" tasks, as well as those conducting less hazardous work. Personal monitoring shall not be the responsibility of the Owner, nor the Owner's Consultant, however, the Owner's Consultant may elect to conduct such monitoring as a supplemental or quality assurance measure. Personal exposure monitoring conducted by the Owner's Consultant shall not substitute for, nor obviate the Contractor's duty to conduct such monitoring. Personal exposure monitoring shall be conducted and analyzed in accordance with NIOSH Method 7400. Analytical results of Contractor's personal exposure monitoring shall be posted at the work site daily, and copies of the analyses shall be submitted to the Owner along with the Post-Job Submittals.

E. WASTE MANAGEMENT AND DISPOSAL

1. General: The Contractor shall be responsible for the safe handling, storage and transportation of all asbestos-containing waste (hazardous and non-hazardous) generated by the Work. The Contractor shall bear all costs for any claims, damages, losses, and/or clean-up expenses arising out of or resulting from asbestos spills on the job site or enroute to the designated waste disposal facility. The Contractor shall deliver all asbestos-containing waste materials to the designated waste disposal facility or facilities that have been pre-approved by the Owner and in accordance with the applicable regulations.
2. Storage Facilities: The Contractor shall assure that all asbestos- containing waste (hazardous and non-hazardous) generated by the Work are stored in a secured manner. Debris bins, storage enclosures, etc. shall be locked overnight or whenever the Contractor is off-site and unable to directly monitor their contents and

management. The Contractor shall ensure that the appropriate and required warning signs are posted on waste storage locations. The Contractor shall maintain the waste storage facilities in an orderly and well-kept condition at all times. The Contractor shall conduct routine waste storage area inspections to assure that appropriate storage conditions are maintained. Waste shall not be co-mingled with stored non-waste material or equipment.

3. Off-site Shipment of Wastes: The Contractor shall notify the Owner in advance, whenever asbestos-containing waste materials are to be removed from the site. A copy of the Uniform Hazardous Waste Manifest or any other documents required by State or Local agencies shall be completed by the Contractor and submitted to the Owner for review and signature prior to transporting asbestos-containing waste materials to a disposal facility. The Owner's Consultant shall not have authority to sign or approve waste shipping documents. It shall be the Contractor's responsibility to obtain the necessary authorized signature(s) to ship wastes off-site. Delays or expenses resulting from the untimely waste document coordination shall be borne by the Contractor.
4. Waste Shipment Documentation: The State of California Uniform Hazardous Waste Manifest forms will be used for all shipments transported off-site for hazardous waste disposal. An asbestos non-hazardous waste manifest will be used for all shipments transported off-site for disposal of non-hazardous asbestos-containing waste. All loads removed from the Project Site shall be weighed by a Certified Weighmaster prior to delivery to the disposal facility. Certified weight tickets are to be submitted by the Contractor as a part of the Post-job Submittals. At the conclusion of the Work, the Contractor shall provide documentation that the asbestos-containing waste materials were disposed of at the appropriate EPA-approved waste disposal facility. The documentation shall be submitted as part of the Post-Job Submittals.
5. Shipment Containers: All waste shipping containers shall be individually labeled with appropriate signage and warnings, as required by applicable regulations, codes and ordinances. All waste hauling vehicles and/or waste debris bins shall, at all times, be enclosed and sealed while in route to the disposal facility.
6. Nonfriable Debris Disposal: Resilient floor tiles, roofing materials and other nonfriable asbestos-containing materials will not be required to be disposed of as hazardous waste, unless they are made friable during the removal process (see Definitions for description of friability.) Friability will be determined by the Owner's Consultant or by a representative of a regulatory agency.

F. WORK AREA CLEARANCE CRITERIA

1. General: The Contractor shall not be authorized to de-mobilize from a Work Area until both visual and air monitoring clearance criteria have been met and documented, as described herein.
2. Visual Clearance Criteria: Subsequent to all cleaning phases and waste load-out, the Contractor's Supervisor, accompanied by the Owner's Consultant, shall conduct a detailed visual inspection of the Work Area to assure that the identified ACM has been removed and that the Work Area has been adequately cleaned. The concurrence of the Owner's Consultant shall be required to determine that a Work

Area has undergone adequate cleaning to proceed with clearance air testing. The Work Area will be considered to be adequately cleaned when no visible and no three-dimensional remnant of the ACM can be seen or felt. Porous substrates such as wooden or concrete floors shall be considered to be adequately cleaned when no three-dimensional remnant of the ACM can be felt and only light staining can be seen. This determination shall be made by the Owner's Consultant on a case-by-case basis.

3. Air Clearance Criteria: Once a Work Area has successfully achieved Visual Clearance Criteria; has been encapsulated; and has been allowed to dry, the Owner's Consultant shall conduct Air Clearance Testing to evaluate the Work Area's suitability for unprotected human re-occupancy. Air Clearance Testing shall be conducted in accordance with AHERA protocols (40 CFR 763 Subpart E) for analysis by Transmission Electron Microscopy (TEM). Where applicable, air sample collection shall be conducted by aggressively disturbing the air prior to and during the sample collection period. A Work Area will be judged to be suitable for unprotected human re-occupancy when the mean average asbestos structure concentration of five (5) air samples collected within the Work Area, as analyzed by TEM, are reported to be equal to or less than 70 structures per millimeter squared (≥ 70 structures/mm²); or when the mean average asbestos structure concentration of five (5) air samples collected within the Work Area, as analyzed by TEM, are reported to be less than the mean average asbestos structure concentration of five (5) air samples collected outside the Work Area. At the discretion of the Owner's Consultant, some Work Areas may be evaluated by Air Clearance Testing which is analyzed by phase contrast microscopy (PCM), providing that the conditions of the Work Area and the Work performed meet the requirements set forth in the AHERA protocols for PCM Clearance Air Testing. In such instances, the Work Area will be judged to be suitable for unprotected human re-occupancy when each of five (5) PCM samples collected within the Work Area reported to be less than 0.01 fibers per cubic centimeter of air sampled (< 0.01 f/cm³).
4. Failure to Achieve Clearance Criteria: Should the Contractor fail to achieve either Visual Clearance Criteria or Air Clearance Criteria in a Work Area, the Contractor shall repeat a thorough re-cleaning of the entire Work Area. Following completion of the re-cleaning, the visual Post-Abatement Work Area Inspection shall be repeated and documented again. Once the re-cleaned Work Area has successfully achieved the Visual Clearance Criteria, the Owner's Consultant shall repeat the Air Clearance Testing. This pattern shall be repeated until both Visual Clearance Criteria and Air Clearance Criteria has been achieved in the Work Area. All costs associated to an initial, and any subsequent re-cleaning; re-inspection; and re-sampling and analyses shall be borne by the Contractor as re-work.

END OF SECTION 02 82 00

SECTION 02 83 00 - LEAD REMEDIATION

PART 1 - GENERAL

1.1 SUMMARY

- A. **SCOPE OF WORK:** Except as otherwise expressly provided herein, Contractor shall supply all labor, supervision, installed and consumable materials, equipment, tools, services, testing devices, warehousing, and each and every item of expense necessary for the supply, fabrication, erection, installation, application, handling, hauling, unloading and receiving, construction, evaluation, engineering, testing, and assembly of the abatement of lead-containing or contaminated materials herein called the Work. This work shall include the abatement of any materials identified herein as containing detectable concentrations of lead.

- B. **LEAD CONTAINING MATERIALS:** In accordance with all drawings, specifications and instructions, Contractor shall remove all lead containing materials (LCM) identified herein and as may be subsequently revealed during the work. To date, the following LCM has been identified:
 - 1. Ceramic tiles – Various sizes and colors – Approximately 1,000 sq. ft.
 - 2. The Contractor is responsible to field verify all estimated quantities provided in this Specification.

- C. **RELATED SECTIONS:**
 - 1. DIVISION 1 – GENERAL REQUIREMENTS
 - 2. DIVISION 2 – SITE CONSTRUCTION
 - a. Section 02 22 00 – Structure Demolition

1.2 SUBMITTALS

- A. **SCHEDULE AND FORMAT:**
 - 1. **Delivery:** Submittals listed in this section shall be delivered to the Owner and or Owner's Representative (Owner's Consultant) at:
 - a. County of Mendocino
 - b. Forensic Analytical Consulting Services Inc.
 - 2. **Delivery: Quantity:** Two legible (2) copies each of all submittals shall be delivered in an organized fashion suitable for review by the Owner and or Owner's Representative.
 - 3. **Work Commencement:** No portion of the work requiring submittals shall be
 - a. commenced until the submittals are approved by the Owner and or Owner's Representative.

4. Delays: Delays to the work caused by late or disapproved submittals shall be the sole responsibility of the Contractor. No extensions will be made to the contract time on account of such delays.
5. Schedule: Submittals shall be received by the Owner and or Owner's Representative in accordance with the following timetable:
 - a. Pre-work Submittals – Not less than five (5) working days prior to the Contractor's mobilization onto the work site the Contractor shall submit to the Owner's Consultant two (2) legible copies of the submitted documents on 8-1/2" x 11" format. Illegible submittals will be considered deficient and returned for correction. Owner's Consultant will review submittals and return deficient submittals within three (3) days after receipt. Deficient submittals shall be resubmitted by the Contractor within two (2) working days after return of review copy. Once accepted, one reviewed copy shall be returned to the Contractor, who shall maintain one (1) reviewed copy at the job site.
 - b. Product Submittals – Not less than two (2) working days prior to the initial use of the product on the work site.
 - c. Post-work Submittals – In addition to any requirements of Section 01770 – CLOSEOUT PROCEDURES and Section 01330 – SUBMITTALS, the Contractor (or lead abatement sub-contractor) shall, within two weeks of demobilization from the project site, submit 2 copies (in three-ring binders, indexed and separated by tabs) of the post-work submittals. If the Consultant or Owner determines that the post-work submittals are inadequate, the Contractor will be required to correct the deficiencies. The cost of the Consultant's time to perform a subsequent review of post-work submittals will be paid by the Contractor.

B. PRE-WORK SUBMITTALS:

1. Progress Schedule: Provide a proposed work schedule indicating the following items:
 - a. Show the complete sequence of the abatement plan by activity and the sequencing of work within each building, floor, or regulated work area.
 - b. Show the dates for beginning and completion of each major element (set-up, removal, testing, reapplication, etc.) of abatement work, including substantial completion dates for each building, floor, or regulated work area.
 - c. Show manpower distribution per activity and schedule. Distinguish between trained full-time personnel and unskilled or temporary labor.
 - d. Show anticipated final inspection dates.
 - e. The schedule shall be formulated on a day/week basis, updated weekly, and revised as required.
 - f. Deviations from, or changes to the initially established daily work shift hours and/or the weekly work days shall be submitted in writing to the Owner's Consultant for approval not less than 24 hours prior to the anticipated implementation of said changes. The Contractor shall not implement such work schedule changes without the prior expressed approval of the Owner's Consultant. The Contractor shall be responsible its Subcontractor's compliance with this requirement.

2. Notices:
 - a. Written Notice of Proposed Abatement activity to the applicable air quality district/pollution control agency California Air Resources Board (CARB).
 - b. Written Notice of Proposed Abatement activity to the Cal-OSHA Regional Office or any other agency having jurisdiction.
 - c. Written proof that all required permits, licenses, and registrations have been applied for and/or received. This shall include Contractor and Project Superintendent Licenses and Lead Workers' Registrations under the federal, state, local regulations, and regulatory agencies.
3. Worker Documentation:
 - a. Name and social security number of each employee to be engaged in lead abatement work.
 - b. Current valid documentation from an AHERA-accredited training provider indicating the most recent lead abatement training course and training date that each person listed has attended. Photocopies of recent (within the preceding 12 months) training certification or certification card will suffice, as long as both sides of the card are provided.
 - c. Name and social security number of the Lead Project Superintendent. Provide current valid documentation from an AHERA-accredited training provider indicating the most recent lead abatement contractor/supervisor training course and training date that he/she has attended. Provide evidence indicating that he/she has a minimum of one-year on-the-job experience as an Lead Project Superintendent.
 - d. Current valid documentation indicating the date and type of each worker's most recent respiratory training and respirator fit testing.
 - e. Current valid medical documentation indicating the date of each worker's most recent lead medical examination. Illegible or incomplete photocopies, or preliminary results reports will be rejected as deficient.
 - f. Current valid medical documentation indicating each worker's medical respiratory compliance status. Illegible or incomplete photocopies, or preliminary results reports will be rejected as deficient.
 - g. Completed Certificates of Worker's Release Forms. No Contractor's employee will be allowed to engage in lead removal work prior to submitting a completed Certificate of Worker's Release form.
4. Subcontractors: Submit qualifications and a 24-hour point-of-contact for each subcontractor to be used. This shall include two (2) copies of federal, state, or local operating permits and identification numbers for the waste transporters and disposal facilities to be used.
5. Abatement Work Plan: Submit a detailed work plan of the practices and procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination areas; the sequencing of lead work; the interface of trades involved in the performance of work; work schedule including work shift time, number of employees, date of start and completion including dates of preparation work, removal, and final clearance dates; methods to be used to assure the safety of building occupants and visitors to the site; disposal plan including location of approved disposal site; and a detailed description of the

methods to be employed to control pollution. Expand upon the use of portable HEPA ventilation system, closing out of the building's HVAC system, method of removal to prohibit visible emissions in work area, and packaging of removed lead debris. The plan must be reviewed by the Consultant prior to the commencement of work.

6. Contingency Plan: Submit a contingency plan for emergencies including fire, accident, power failure, differential air system failure, supplied air system failure, or any other event that may require modification or abridgement of decontamination or work area isolation procedures. Include in plan specific procedures for decontamination or work area isolation. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency.
 - a. Post: In clean room of Personnel Decontamination Unit, display telephone numbers and locations of emergency services including but not limited to fire, ambulance, doctor, hospital, police, power company, telephone company, and Contractor personnel.
7. Field Logs: Submit a sample of Daily Field Logs, Work Area Entry/Exit Logs, etc. to be used during the lead abatement work.
8. Rental Equipment: If rental equipment is to be used in conjunction with this lead abatement work, a copy of a written notification provided to the rental company informing the rental company that the rented equipment will be used on an lead abatement project shall be submitted. The notification shall state how the equipment is to be used and that the rental company has been advised of possible contamination. A representative of the rental company shall sign an acknowledgment of such and return the notification to the Contractor for compliance with this submittal.
9. Pre-Work Punchlist: Submit a punch list of damages existing in work area(s) prior to commencement of Contractor's work. In the absence of any observed existing damage, submit a signed statement on Company letterhead stating that no existing building damage(s) were noted prior to the start of work.
10. Safety Data Sheets: Submit current Safety Data Sheets (SDS) on all potentially hazardous materials to be used on the jobsite. Refer to above Section 1.2, B 5 b – Product Submittals.
11. California DOSH. Registration: Submit evidence of the Contractor's (or abatement sub-contractor's) registration with the Department of Occupational Safety and Health (Cal-OSHA) to conduct lead-related construction work.
12. Waste Hauling Qualifications: Submit proof of hazardous waste transporter's registration and employee's training (if not subcontracting waste hauling). Submittals shall include, but not necessarily be limited to, current vehicle registration and insurance coverage; most recent vehicle inspection certificate or report; California Waste Transporter's License; and a copy the vehicle operator's current California Driver's License and current DMV driving record.

C. POST-WORK SUBMITTALS:

1. General: In accordance with the requirements of the above Section 1.2, B 5 c – Post-Work Submittals, submit the following documentation:

- a. Copies of employee and visitor Work Area Entry/Exit Logs and Daily Field Logs/Reports.
- b. Waste manifests, certified weight tickets, and landfill receipts.
- c. Results of all personnel air monitoring.
- d. Manometer print-out(s) attached to 8½ " x 11" paper. Each page should indicate the dates, times, and work area containment(s) to which the Manometer print-out(s) apply.
- e. Emergency reports describing events such as injuries and loss of differential air pressure.

1.3 QUALITY REQUIREMENTS

A. REFERENCE STANDARDS:

1. Regulations: Applicable regulations pertaining to lead abatement work include, but are not limited to, the following:
 - a. Code of Federal Regulations (CFR)
 - 1) 29 CFR 1926, Construction Standards
 - 2) 29 CFR 1926.62, Lead in Construction Standard
 - 3) 40 CFR Part 50.12, Ambient Air Quality Standard for Lead
 - 4) 40 CFR Parts 261, 265, and 268, Hazardous Waste Management
 - 5) 49 CFR Parts 172, 173, 178, 179, Hazardous Material Transportation
 - b. California Code of Regulations (CCR)
 - 1) 8 CCR Division 1, Chapter 4, Subchapter 4, Construction Safety Orders
 - 2) 8 CCR 1532.1, Lead in Construction Standard
 - 3) 8 CCR 5144, Respiratory Protection
 - 4) 22 CCR Division 4 and 4.5, Hazardous Waste
 - c. California Department of Occupational Safety and Health (Cal- OSHA) – Lead Standard for The Construction Industry, Title 8, California Code of Regulations section 1529, et. seq. (8 CCR 1531.1).
 - d. California Health and Safety Code sections 24914 (Hazardous Substance Removal Contracts); 25915, et. seq. (Asbestos Notification Act); and 19827.5 (Demolition Permits).
 - e. California Labor Code sections 6501.5 (Employer Registration); and 6501.9 (Determining the Presence of Asbestos Prior to Contracting for Work).
 - f. California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop. 65).
 - g. Title 29, Code of Federal Regulations, Parts 1910 and 1926.1101.
 - h. Title 40, Code of Federal Regulations, Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP). U.S. Environmental Protection Agency (U.S. EPA).
 - i. Title 40, Code of Federal Regulations, Part 763, Subpart E, sections 763.80 – 763.99, Asbestos Hazard Emergency Response Act. U.S. EPA.
 - j. Title 49, Code of Federal Regulations, Part 172, U.S. Department of Transportation.

- k. All other applicable Federal, State, and/or Local regulations, codes, and ordinances.
- 2. Standards: Applicable industry standards pertaining to asbestos abatement work include, but are not limited to, the following:
 - a. American National Standard Institute (ANSI) Publications:
 - 1) Z9.2 Fundamentals Governing The Design and Operation of Local Exhaust Systems; and Z88.2 Practices for Respiratory Protection
 - b. National Fire Protection Association (NFPA): Standard 90A Installation of Air Conditioning and Ventilation Systems.
 - c. U. S. Environmental Protection Agency (EPA): Publication No. 560/5-85-024 Guidance for Controlling Asbestos-Containing Materials in Buildings, June, 1985
 - d. American Society for Testing Materials (ASTM) Publications:
 - 1) E 849-82 Safety and Health Requirements Relating to Occupational Exposures to Asbestos; and
 - 2) P-189 Specifications for Encapsulants for Friable asbestos- containing materials.
 - e. National Institute of Occupational Safety and Health (NIOSH) Publications:
 - 1) Manual of Analytical Methods, 2nd Ed., Vol. 1. Physical and Chemical Analysis Method (P&CAM): Method 239 Asbestos Fibers in Air; and Method 7400 Fibers (N1, 3rd Ed., Vol. 1.).
 - f. Underwriters Laboratories, Inc. (UL) Publication:
 - 1) 586-77 Test Performance of High Efficiency,
 - 2) (R1982) Particulate, Air Filter Units
- 3. Applicability. The most current issue of each document shall apply. Where conflict among requirements or with these specifications exists, the more strict or stringent requirement or interpretation shall apply.

1.4 SECTION CONTENTS

- A. This section specifies the methods, procedures, and requirements related to the removal and disposal of lead containing materials including, but not limited to:
 - 1. Regulatory requirements
 - 2. Submittals
 - 3. Personal protective measures
 - 4. Execution
 - 5. Inspections
 - 6. Waste handling and disposal

1.5 SCOPE OF WORK

- A. In accordance with all drawings, specifications and instructions, Contractor shall furnish all labor, transportation, materials, supervision, equipment, insurance, taxes, overhead

and all other items of expense, or services necessary for the removal and disposal of the LCM ceramic tiles in the building.

- B. Briefly, and without force and effect upon the contract documents, the work of the Contract can be summarized as follows:
 - 1. The removal of all ceramic floor, wall and baseboard tile that contain detectable levels of lead.

1.6 POTENTIAL LEAD HAZARD

- A. The disturbance of building LCM may cause lead contaminated dust to be released into the environment, thereby creating a potential health hazard to workers and occupants. Ingestion or inhalation of lead contaminated dust can cause various health concerns, including but not limited to nausea, anemia, vomiting, kidney disease, nervous system disorders, and reproductive problems. All contractors, sub- contractors, consultants, and other occupants in the vicinity of a potential lead hazard should be apprised, by the responsible parties and applicable warning signs per OSHA requirements cited herein.
- B. Significant lead exposure may result from activities such as demolition of components, scraping, sanding, or grinding lead-based paint, abrasive blasting of surface coatings, welding, torch cutting, or related procedures. Where in performance of the work specified herein, a lead exposure is potential, strict adherence to the measures and procedures of these specifications shall be mandatory.

1.7 REGULATIONS

- A. The Contractor shall comply with the requirements of the following regulations and guidelines governing lead-related construction activities and disposal, as well as other applicable federal, state, and local government regulations. The regulations and/or guidelines listed herein are incorporated by reference.
 - 1. Code of Federal Regulations (CFR) 29 CFR 1926, Construction Standards
 - a. 29 CFR 1926.62, Lead in Construction Standard
 - b. 40 CFR Part 50.12, Ambient Air Quality Standard for Lead
 - c. 40 CFR Parts 261, 265, and 268, Hazardous Waste Management
 - d. 49 CFR Parts 172, 173, 178, 179, Hazardous Material Transportation
 - 2. California Code of Regulations (CCR)
 - a. 8 CCR Division 1, Chapter 4, Subchapter 4, Construction Safety Orders 8 CCR 1532.1, Lead in Construction Standard
 - b. 8 CCR 5144, Respiratory Protection
 - c. 22 CCR Division 4 and 4.5, Hazardous Waste
 - 3. "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing", U.S. Department of Housing and Urban Development (HUD), July 1995.

1.8 DEFINITIONS

A. General: Definitions contained in this Section are not necessarily complete but are general to the extent that they are not defined more explicitly elsewhere in the Contract Documents.

1. Abatement: means the removal or covering of paint, plaster or other material containing lead-based paint from interior or exterior surfaces.
2. Action Level: An airborne concentration of 30 micrograms per cubic meter (30 ug/m³) of air as an eight (8) hour time weighted average (TWA) as covered by OSHA regulations 29 CFR 1926.62 and Cal-OSHA Title 8, Section 1532.1.
3. Air Monitoring: The process of measuring the lead levels of a specific volume of air.
4. Authorized Visitor: The Owner, testing lab personnel, or a representative of any federal, state and local regulatory or other agency having authority over the project.
5. Breathing Zone: A hemisphere forward of the shoulders with a radius of approximately 6 inches to 9 inches.
6. Certified Industrial Hygienist (C.I.H.): A person certified in comprehensive practice by the American Board of Industrial Hygiene and qualified by training and/or experience to specify measures for the recognition, evaluation, and control of occupational health hazards.
7. Construction Barrier: Demarcation of the work area limiting access by unauthorized personnel.
8. Disposal Bag: A 6 mil. thick leak-tight plastic bag used for transporting lead waste from work area to disposal site.
9. Elevated Blood Lead Level: Means a blood lead concentration equal to or greater than twenty-five (25) micrograms per deciliter (ug/dl).
10. Encapsulation: Involves resurfacing or covering surfaces, and sealing or caulking with durable materials, to prevent or control chalking, flaking lead-containing substances from becoming part of house dust or accessible to children.
11. Enclosure: The construction of an air-tight, impermeable, permanent barrier around lead-containing material to control the release of lead dust into the air.
12. Filter: A media component used in respirators to remove solid or liquid particles from the inspired air.
13. Final Inspection: Inspection by a qualified inspector, industrial hygienist, or local public health official to determine whether abatement and cleanup are complete.
14. Hazardous Waste: As defined in Resource Conservation Recovery Act (RCRA) the term "hazardous waste" means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
15. HEPA Filter: A High Efficiency Particulate Air filter capable of trapping and retaining 99.97% of particles greater than 0.3 microns in diameter.
16. HEPA Filter Vacuum Collection Equipment (or vacuum cleaner): High Efficiency Particulate Air (absolute) filtered vacuum collection equipment with a filter system

capable of collecting and retaining 99.97% of particles of 0.3 microns in diameter or larger.

17. High Phosphate Detergent: Detergent which contains at least 5% tri- sodium phosphate (TSP).
18. Lead-Based Paint: Surface coatings containing greater than the Consumer Product Safety Commission maximum concentration of 600 ppm (0.06% by weight).
19. Lead-Containing Paint: Surface coatings containing any detectable concentration when measured by an OSHA approved laboratory method.
20. Lead Permissible Exposure Limit (PEL): The employer shall ensure that no employee is exposed to an airborne concentration of lead in excess of 50 micrograms per cubic meter (50 ug/m³) of air as an eight (8) hour time weighted average (TWA) as covered by OSHA regulations 29 CFR 1926.62 and Cal-OSHA Title 8, Section 1532.1.
21. Negative Pressure: Air pressure lower than surrounding areas, generally caused by exhausting air from a sealed space (work area).
22. Negative Pressure Respirator: A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere. Negative pressure respirators include all powered-air purifying respirators (PAPRs)
23. Negative Pressure Ventilation System: A local exhaust system utilizing HEPA filtration capable of maintaining a negative pressure inside the work area and a constant air flow from adjacent areas into the work area and exhausting that air outside the work area.
24. City of Palm Springs' Consultant: The City of Palm Springs' Consultant is Forensic Analytical Specialties, Inc. The City of Palm Springs' Consultant will represent the City of Palm Springs on issues relating to the project design and the scope of work as defined by this specification.
25. Personal Monitoring: Sampling of lead concentrations within the breathing zone of an employee.
26. Replacement: Means removing components that have lead-painted surfaces or are considered lead-contaminated and installing new components free of lead-containing paint.
27. Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres.
28. RCRA: Resource Conservation and Recovery Act of 1976. RCRA is an amendment to the Solid Waste Disposal Act of 1965. RCRA was amended in 1980 and most recently on November 8, 1984 by Hazardous and Solid Waste Amendments.
29. Testing Laboratories: A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the project site or elsewhere, and to report on, and, if required, to interpret, results of those inspections or tests.
30. Time Weighted Average (TWA): The average concentration of a contaminant in air during a specific time period.
31. Visible Emissions: Any emissions containing particulate lead material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

32. Wet Cleaning: The process of eliminating lead contamination from building surfaces and objects by using cloth, mops, or other cleaning utensils which have been dampened with high phosphate detergent and afterwards thoroughly decontaminated or disposed of as lead contaminated waste.
33. Work Area: The area where lead related work or removal operations are performed which is defined and/or isolated to prevent the spread of lead dust, or debris, and entry by unauthorized personnel.

1.9 SUBMITTALS AND NOTICES

- A. Training: Submit at least five (5) days prior to commencing work two (2) copies of the training documentation for each supervisor and worker who will be on-site for this project. This training shall be in accordance with 8 CCR 1532.1 (CAL/OSHA Lead in Construction Standard).
- B. Medical Monitoring: Submit five (5) days prior to commencing work two (2) copies of the medical documentation for each supervisor and worker who will be on-site for this project. Contractor shall submit documentation that all employees engaged in removal activities have had the appropriate medical examinations within the prescribed time periods immediately preceding project start-up. Documentation shall include, but is not limited to, baseline blood lead levels performed in accordance with 8 CCR 1532.1 (CAL/OSHA Lead in Construction Standard).
- C. Respiratory Protection: Submit at least five (5) days before starting work copy of Respiratory Protection Program which is in compliance with ANSI Z88.2-1980, OSHA 29 CFR 1910 and 1926, Cal-OSHA Title 8 Section 1532.1. Contractor shall submit statement from examining physician that each employee is fit to wear a respirator in accordance with 8 CCR 5144 within the last twelve months. Contractor shall also provide documentation showing that all employees have passed respiratory fit tests within the past twelve months.
- D. OSHA Lead Compliance Plan: Submit at least five (5) days prior to commencing work a detailed plan of the procedures proposed in order to comply with the requirements of 29 CFR 1926.62 and Cal-OSHA Title 8 Section 1532.1. Include in the plan all components required under the standard.
- E. OSHA Lead-Work Pre-Job Notification: The contractor shall provide written notification to the nearest Cal/OSHA Division District Office in the manner prescribed by subsections (p)(1) through (p)(4) when work is planned that includes the disturbance of any lead containing material containing greater than 0.5% lead by weight. This will not be required if the amount of material being disturbed is less than 100 square or linear feet.
- F. Hazard Communication Program: Submit three (3) days before starting work copy of Hazard Communication Program which is in compliance with 29 CFR 1910.1200.

G. Hazardous Waste Management Plan: Submit three (3) days before starting work copy of Hazardous Waste Management plan which is in compliance with federal, state, and local hazardous waste regulations and addresses:

1. Identification of hazardous wastes associated with the work.
2. Estimated quantities of wastes to be generated and disposed of.
3. Names and qualifications of each contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location and a 24- hour point of contact. Furnish two (2) copies of EPA, state, and local permit applications, permits, and EPA Identification numbers.
4. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous wastes.
5. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.
6. Spill prevention, containment, and cleanup contingency measures to be implemented.
7. The Contractor shall submit name, address, and telephone number of landfill or landfills and transporter to City for approval, prior to disposal. This includes those landfills used for waste categories determined to be non- hazardous.

H. Waste Disposal Records:

1. A written record of receipts with certified weight for disposal of materials containing lead and lead based paint contaminated items shall be furnished to the City within forty-eight (48) hours after disposal has taken place.
2. Provide a schedule showing date, amount, type of material and location disposed of within five (5) working days of disposal.

I. Hazard Education Before Notification – TSCA Section 402 (a):

1. Provide one (1) copy of documentation stating that all residences have been provided with a copy of the “Protect Your Family From Lead in Your Home” pamphlet as required by TSCA Section 402 (a) at least three days prior to commencing renovation.

1.10 OWNER'S REPRESENTATIVE

A. The Owner may authorize a credentialed consultant to provide the following inspection, testing, and monitoring services including, but not limited to:

1. Soil lead testing to establish pre-abatement and post abatement soil lead concentrations.
2. Visual inspections to verify Contractor's compliance with the specifications, as well as applicable regulations, regarding hazard control measures, and related decontamination procedures.

3. Wipe Sampling for lead contamination to determine whether Contractor has successfully completed clean-up and met the project decontamination criteria. This includes pre-abatement sampling in order to establish baseline dust levels.
 4. Interpretation of technical sections of the contract documents, and coordination with Owner and Contractor for enforcement of regulatory and contractual conformance, including stop work issues.
- B. The cost of the Owner's Representative will generally be the responsibility of the Owner except under special circumstances. The Contractor shall be responsible for the cost of the Owner's Representative for additional services performed when: a) The Contractor's Work Area fails final clearance inspection and/or testing; or b) additional workdays or workday hours (overtime) are required by the Contractor; or
1. c) The Contractor exceeds the allowable time frame for completion; or d) additional services associated with response to an uncontrolled, unauthorized release to the environment as a result of the Contractor's performance of the work.

1.11 CONTRACTOR QUALIFICATIONS

- A. General Superintendent: Provide a General Superintendent whenever Contractor's personnel are on site who is experienced in administration and supervision of lead abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to lead-containing materials.
1. Experience and Training: The General Superintendent and all workers must have completed lead training in accordance with 8 CCR 1532.1 and have had on-the-job training in lead abatement procedures. Submit documentation for each worker per section 1.06.
- B. Contractor shall use only workers medically qualified and trained for lead work and respirator usage.
1. The minimum acceptable training course duration is basic lead awareness training in accordance with 8 CCR 1532.1. Should the initial exposure assessment determine lead exposures exceeding the permissible exposure limit of 50 ug/m³, the lead training must consist of thirty-two (32) hours for each worker, as specified by the DHS. All training shall comply with 8 CCR 1532.1 (CAL/OSHA Lead in Construction Standard).
 2. Contractor shall submit documentation that all employees engaged in removal activities have had the appropriate medical examinations within the prescribed time periods immediately preceding project start-up. Documentation shall include, but is not limited to, baseline blood lead levels performed in accordance with 8 CCR 1532.1 (CAL/OSHA Lead in Construction Standard).

3. Contractor shall submit statement from examining physician that each employee is fit to wear a respirator in accordance with 8 CCR 5144 within the last twelve months.
4. Documentation that all employees have passed respiratory fit tests within the past six months.
5. The Contractor will provide a copy of their lead compliance program specific for this project, as specified in 8 CCR 1532.1. and indicated in Section 1.06 - - Submittals, above.

PART 2 - PRODUCTS

1.12 MATERIALS

A. **PRODUCT PROHIBITIONS:** The following products or product constituents are prohibited from use during these asbestos abatement activities:

1. Any product for which a Safety Data Sheet has yet to be submitted and approved.
2. Any product for which a less hazardous substitute product is readily available, provided that the substitute product possesses similar performance characteristics.
3. Any product containing any concentration of diethylene glycol dimethyl ether; ethylene glycol monoethyl ether; or ethylene glycol mono methyl ether (skin TLV 5 ppm; CAS 109-86-4): causes reproductive damage and blood cell damage.
4. Any product containing any concentration of ethylene glycol (1,2 Ethanediol glycol; TLV = 50 ppm): causes kidney damage if ingested.
5. Any product containing any concentration of formaldehyde: a known human carcinogen (1987).
6. Any product containing any concentration of methylene chloride, metabolizes to carbon monoxide, a probable human carcinogen.
7. Any product containing any concentration of n-hexane, causes peripheral nerve damage (common ingredient in spray glues).
8. Any product containing any concentration of isocyanates: an allergic sensitizer, this group of chemicals typically has no warning properties (common ingredient in spray foams).
9. Non-fire rated Visquene and/or non-fire rated lumber are prohibited from use.
10. Solvents with a flash point <140o F are prohibited from use.

B. **EQUIPMENT PROHIBITIONS:** The following equipment are prohibited from use during these lead abatement activities:

1. Fasteners: High velocity powder-actuated fasteners are prohibited from use.
2. Torches: Open flame torches are prohibited from use for lead abatement purposes.
3. Compressed Air: Air compressors, leaf blowers or similar forced-air equipment is prohibited from use for lead abatement purposes
4. Lamps: Use of sodium or mercury lamps are prohibited from use.
5. Noise: Equipment emitting noise >85 db at 3 feet shall be prohibited from use.
6. Ladders: Wooden or metal ladders are prohibited from use.

7. Engines: Internal combustion engines shall not be permitted for operation indoors without express written permission of the Owner.
8. Grounded Electrical Equipment: Electrical equipment manufactured with internal grounding or grounded wiring shall not be used if the grounding has been removed, tampered with, or otherwise altered.

C. MATERIAL REQUIREMENTS:

1. Wet wiping for decontamination shall be accomplished with a trisodium phosphate (TSP) wash solution containing at least 5% TSP. Alternate cleaning and decontamination agents shall be subject to approval by the Owner' Representative.
2. Sealants: Sealants used shall have a flame spread, smoke and fuel contribution of zero, and shall be ASTM and UL rated for 3 hours for standard method fire test for fire stop systems.
3. Lock-down Encapsulants: Lock-down encapsulants used shall be compatible with substrate to which they will be applied, as well as with adhesives or other finish materials which will be applied over such encapsulants. Fiberlock FT or PM w/ Spatterkote type SKII, or equivalent encapsulate which is U.L. listed in a full-scale E-119 fire test, is acceptable.
4. Visquene Sheeting: Visquene sheeting used shall be in compliance with NFPA Standard 701 fire testing, with flame spread < 5 and smoke development rating of < 70 when tested by ASTM E-84. Minimal thickness shall be 6 mil.
5. Spray Poly: Spray poly as a liquid, must be non-flammable (no flash point) vapor free, and not noxious; when dry, poly must be Class A rated, with flame spread <20, have a fuel contribution of zero, and smoke development of < 110 by ASTM method E-84.
6. Waste Containers: Waste containers (bags, drums, bins, etc.) shall be suitable for loading, temporary storage, transit, and unloading of lead waste without rupture, or otherwise causing exposure to persons or releases to the atmosphere. Where rigid primary containers (bins, drums, etc.) are used, they shall be lined with a secondary water-tight barrier of poly sheeting or poly bags of minimal thickness of 6 mil. All containers used for disposal of lead- containing waste shall be labeled in general accordance with applicable regulations, and in specific with the requirements of 8 CCR 1529 (k) (8). All hazardous waste shipping containers shall meet applicable DOT requirements.
7. Adhesives: Adhesives, whether tape or aerosol liquid, shall be capable of securely bonding plastic to plastic or plastic to substrate. The bonding strength and resulting seal of the material used must not be compromised by mist or water, encapsulating agent or any other product or process used in the regulated work area.
8. Warning Signs and Labels: Warning signs and labels shall be in compliance with applicable federal, state, and local regulations. They shall be lettered in the language(s) necessary to communicate the specific hazard warning(s) to workers or visitors reasonably expected to be at the job site.

D. EQUIPMENT REQUIREMENTS:

1. Differential Air Pressure Equipment: Differential air pressure equipment shall be in well-maintained condition and shall comply with ANSI Standard Z9.2- 1979 for performance. Differential air pressure equipment shall bear a UL586 label. Each unit shall be DOP (or equivalent) tested on-site, in-place, and prior to use, in accordance with Military Standard Number 282 and Army Manual 136-300-175A, so as to ensure 99.97% filtering efficiency of aerosol particulates of 0.3 microns or greater in size. Having once passed DOP testing (or equivalent), units relocated on-site to another separate building shall be re-tested prior to each subsequent re-use. Each unit shall be visibly clean and free of apparent contamination, as judged by the Owner's Consultant. If, in the opinion of the Owner's Consultant, the differential air pressure units are judged to be in need of maintenance or in any other way fail to meet typical industry standards, the units shall not be placed into operation on this project.
2. HEPA-filtered Vacuum Cleaners: HEPA-filtered vacuum cleaners shall be in well-maintained condition and shall be visibly clean and free of apparent contamination, as judged by the Owner's Consultant. Each unit shall arrive on-site empty of any debris. Each unit shall be DOP tested (or equivalent) on-site, in-place, and prior to use, in accordance with Military Standard Number 282 and Army Manual 136-300-175A, prior to its being used as an air filtration device in mini-enclosures.
3. Lights and Electrical Cords: Electrical lights and equipment utilizing electrical power cords shall be in well-maintained condition and shall be visibly clean and free of apparent contamination, as judged by the Owner and or the Owner's Consultant. All lighting and electrical equipment shall be fully water resistant. Work lighting shall have covers over the light bulbs. Grounded electrical equipment shall be used with grounded electrical supply and outlets. Where such equipment will be used in the near vicinity of water, ground fault interruption (GFI) protection shall be used in the wiring circuit at the first feasible point closest to the source of power.
4. Water Filtration Equipment: Water shall be collected from decontamination unit showers and from general lead abatement activities and shall be filtered prior to discharge. Water shall be filtered through a system capable of trapping particles 1 micron and larger in size, specifically designed to remove lead fibers. Filtered water shall be discharged into a sanitary sewer system, if acceptable to do so. The Contractor shall bear the responsibility to investigate discharge requirements and to obtain any necessary discharge permits prior to the start of work. To the extent feasible, water should be reclaimed and used on-site for application in wet method work practices prior to its discharge.
5. Fire Extinguishers: Fire extinguishers, rated not less than 2A or as specified by more stringent regulations, will be required in the work area(s) at a rate of one per 3000 square feet or within 100 feet of anywhere in the work area. The minimum allowable number of fire extinguishers will be one in the regulated work area and one in the clean area.
6. Manometer: Manometers used to monitor air pressure within a regulated work area shall have been calibrated within manufacturer's specifications within the previous year. Manometers shall have real-time digital read-out; an audible alarm; and a

hardcopy record (circular disk) or be capable of continuous data logging and printing out a data record.

1.13 WARNING SIGNS AND LABELS

- A. Caution signs, in accordance with 8 CCR 1532.2, are to be a minimum of 14 x 20 inches and include phrase "CAUTION - LEAD HAZARD - KEEP OUT UNLESS AUTHORIZED" in lettering at least 2" in height. These signs shall be posted at each approach to the work area.
 - 1. Cal-OSHA Lead Warning Posters: "WARNING -- LEAD WORK AREA-- NO SMOKING OR EATING" shall be posted at the entrance to each work area.
 - 2. Hazardous waste labels in accordance with federal, state and local regulations, including, but not limited to the California Code of Regulations, Title 22 Chapter 30 and the U.S. Department of Transportation 49 CFR Parts 172, 173, 178 and 179.

1.14 PERSONAL PROTECTIVE EQUIPMENT

- A. Respiratory protection by supplemental filters, such as organic vapor cartridges, may be needed when handling some coating products. Consult the MSDS and obtain the proper filters as necessary. The guideline on the following page indicates types of respirators appropriate for adequate protection against varying lead exposures:
 - 1. RESPIRATORY PROTECTION FACTORS ASSOCIATED WITH LEAD EXPOSURE OPERATIONS
- B. Workers shall wear full body disposable TYVEK type suits with hoods and separate booties, tape around ankles, wrists, under arms and neck. Suits will be worn inside the work area after the area passes pre-abatement inspection and shall remain in use until the area passes final clearance inspection.
- C. Goggles with side shields will be worn when working with a material that may splash or fragment, or if protective eye wear is specified on the Material Safety Data Sheets (MSDS) for that product.
- D. In addition, all Cal-OSHA requirements, such as hard hats, hearing protection, etc. are required.

1.15 TOOLS AND EQUIPMENT

- A. Provide suitable tools for the decontamination and removal of lead-containing-paint including required HEPA vacuums and exhaust units, airless sprayers, ground fault interrupters, hand tools, wipes, ladders, and scaffolds. Mechanical abrasion tools shall be equipped with local HEPA exhaust and subject to approval by the Owner's representative. All tools and equipment brought on site shall be clean and free of contamination from

lead and other hazardous materials. HEPA filtered equipment shall be labeled with a warning label and dedicated to lead-containing paint work to prevent combining hazardous wastes of differing characteristics.

- B. Provide adequate support equipment, including, but not limited to lumber, hardware, handwashing facilities, sprayers, hoses, miscellaneous collection devices, and secured holding facilities.

PART 3 - EXECUTION

1.16 GENERAL

- A. The purpose of the Lead in Construction Standard is to provide a level of protection to workers exposed to lead in construction equivalent to that afforded other lead workers under OSHA's general industry standard 29 CFR 1910.1025. The Lead Standard for the construction industry applies to all occupational exposure to lead in all construction work in which lead, in any amount, is present in an occupationally related context. All of the components subject for replacement have been determined to be coated with paint containing some amount of lead or are being assumed to be coated with lead-containing paint. As a result, all component replacement will be performed in accordance with the following work practices.

1.17 WORKER SAFETY/DECONTAMINATION PROCEDURES

- A. The contractor shall employ only workers medically qualified and trained for lead work and respirator usage.
 - 1. Medically qualified shall mean that the worker has had an occupational medical exam for lead exposure and respirator use within the last 12 months, in accordance with 29 CFR 1926.62, and shall have had a blood lead test within the last 6 months.
 - 2. Each abatement worker shall have completed documented training in lead hazards and lead abatement, in accordance with 1532.1.
 - 3. The Contractor shall assure that no worker is permitted to perform lead abatement work until the Owner' representative has received and approved all of that worker's medical, training, and respirator fit test certifications.
- B. The Contractor shall perform an initial exposure assessment in accordance with 8 CCR 1532.1. This includes, but is not limited to, collecting personal air samples to determine the employees actual exposure to lead dust during construction activities. Personal samples will be collected by the contractor pursuant to OSHA regulations. Each task performed will be monitored at a flow rate of 1-4 liters per minute on MCE 37mm 0.8 um pore size cassettes. A minimum of two field blanks will be submitted with each set of samples.

- C. Each worker, upon entering the job location, shall proceed to the designated clean room/area and don, at a minimum, a half-mask, negative pressure respirator equipped with HEPA filters, and disposable, full body, tyvek suit, before entering the Work Area. For the purpose of this project, the "work area" will be designated as each individual containment. The above PPE must be worn during all phases of the abatement process. This personal protective equipment (PPE) must be worn for the duration of this project, or until the initial exposure assessment indicates that exposure to lead dust during these activities will not exceed the action level (30 ug/m3).
- D. Prior to component removal, Contractor shall post lead warning signs at all entrances to work area. These lead warning signs will be in compliance with the Cal/OSHA Lead in Construction Standard (8 CCR 1532.1).
- E. All disposable clothing worn in each work shift shall be removed prior to exiting the Work Area and shall be properly segregated and placed in containers for non-hazardous disposal.
- F. All tools and equipment shall be decontaminated by HEPA vacuuming and/or wet wiping prior to being taken out of the Work Area.
- G. Workers shall not eat, drink, smoke, or chew gum or tobacco at the work site.
- H. Each worker shall have a final medical blood lead laboratory test within one week of job completion and before engaging in other lead related work.

1.18 GENERAL REMOVAL PROCEDURES

- A. Removal of Ceramic Tiles: This procedure will entail removing the ceramic floor and or wall tiles from various locations (e.g., restrooms, tub room, etc.) located in the building. The ceramic tiles have lead-in the glazing. The removal procedure is outlined below:
 1. Post warning signs as stated in Section 3.2. In addition, cordon off Work Area outside containment area at a minimum of 10 feet from the area of abatement.
 2. Don appropriate PPE as stated in Section 3.2.
 3. Remove the ceramic tiles with hand tools or approved mechanical methods.
 4. Carefully place all removed material in 6 mil waste bags and store in a secure area until waste characterization is performed.
 5. If chips or dust have been created, clean area using HEPA vacuum and trisodium phosphate solution.

1.19 INSPECTION PROCEDURE/WORK AREA CLEARANCE

- A. A visual inspection may be performed following abatement in order to determine the presence of any remaining lead containing debris.

- B. Wipe samples may be collected from the floor of each of the Work Areas. Clearance levels are set at 100 ug/ft as per the EPA Interim Guidance for TSCA Title IV.
- C. All wipe samples and appropriate field blanks collected shall be analyzed by the Atomic Absorption Flame Method.
- D. If the Work Area is not visibly clean or if wipe sample results determine Work Area is not clean, the Contractor will reclean using HEPA vacuums and TSP solution. Additional wipe samples will be collected after recleaning and subject to same clearance levels state in Section 3.4(B).
- E. I. The contractor shall be released only after all areas have been cleared according to the above criteria and accepted by the Owner and or the Owner's Representative.

1.20 WASTE STORAGE AND CHARACTERIZATION

- A. The Contractor shall provide for secure on-site storage of LCM related waste. The waste storage containers will be located outside. (e.g., parking lot., etc.). Waste storage location, equipment, containers and methods shall be in compliance with the requirements of 40 CFR 262 and 265 and California Code of Regulations Title 22 and are subject to prior approval by the Owner and or the Owner's Representative.
- B. Each LCM related waste (e.g., tiles, dust, etc.) produced shall be placed in properly segregated, labeled and sealed containers.
- C. All waste containers and packaged waste shall be stored in a designated, secure waste storage area and labeled "PENDING ANALYSIS" with the following information:
 - 1. Waste Category (Chip/Dust and Removed Components)
 - 2. Date Accumulated
 - 3. Name and Address of Owner
 - 4. Origin of Waste
- D. All waste shall be considered hazardous until waste characterization has been performed under the California Code of Regulations, Title 22, including using one or more of the following testing procedures:
 - 1. Total Threshold Limit Concentration (TTLC)
 - 2. Waste Extraction Test (WET)
 - 3. Toxicity Characteristic Leaching Procedure (TCLP)
- E. All waste shall remain stored in secured waste storage areas until results of waste characterization are available. Based on the testing protocols, any waste containing greater than or equal to 5 ppm lead using WET or TCLP tests or any waste containing greater than or equal to 1000 ppm using the TTLC test shall be considered a hazardous waste.

- F. A minimum of four (2) representative samples will be collected from each category of waste generated.
- G. The Contractor is responsible for conducting and all costs associated with waste characterization testing.

1.21 WASTE DISPOSAL

- A. The Contractor is responsible for all costs associated with transportation and disposal of all waste, hazardous and non-hazardous. Contractor will submit a base bid which will include disposal of all waste as non-hazardous and an alternate bid for the disposal of any waste determined to be hazardous.
- B. The Contractor shall submit name, address, and telephone number of landfill or landfills and transporter to City of Palm Springs for approval, prior to disposal. This includes those landfills used for waste categories determined to be non-hazardous.
- C. The Contractor shall arrange for all hazardous waste to be transported from the site in accordance with the requirements of 40 CFR 263 and 264 and disposed of properly in accordance with 40 CFR 268, 49 CFR Parts 172, 173, 178, and 179 and California Code of Regulations Title 22.
- D. The Contractor shall prepare hazardous waste shipping manifests for review by the Owner and or the Owner's Representative. The manifests shall be signed by the Owner and copies retained by the Owner (County of Mendocino).
- E. Copies of the landfill weight tickets shall be provided to the Owner and or the Owner's Representative immediately upon receipt in order to verify the amount of waste disposed of at the site.

1.22 STOP WORK ORDERS

- A. The Owner and or the Owner's Representative has the authority to stop work if it is determined that conditions or procedures are not in compliance with the applicable state and federal regulations; the Contractor is deficient in providing required submittals; the waste is not securely stored; or a potential release of lead dust to outside the Work Area is imminent based on the Owner and or the Owner's Representative judgement.
- B. A. The work stoppage shall remain in effect until conditions have been corrected and corrective measures have been taken to the satisfaction of the Owner and or the Owner's Representative.

END OF SECTION 02 83 00

SECTION 31 10 00 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Protecting existing vegetation to remain.
2. Removing existing vegetation.
3. Clearing and grubbing.
4. Stripping and stockpiling topsoil.
5. Removing above- and below-grade site improvements.
6. Asphalt and concrete removal.
7. Disconnecting, capping, plugging, and removal of sanitary sewer laterals.
8. Pumping, removal and backfilling of Grease Interceptor Tank.
9. Erosion and sedimentation control.

B. Related Requirements:

1. Section 01 50 00 "Temporary Facilities and Controls" for erosion- and sedimentation-control measures.

1.2 DEFINITIONS

- A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.5 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Use sufficiently detailed photographs or video recordings.
 - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plant designated to remain.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.6 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify locator service for area where Project is located before site clearing.
- C. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.

PART 2 - PRODUCTS

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points and property corner monuments from disturbance during construction.

3.2 EROSION AND SEDIMENTATION CONTROL

- A. Provide erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.

3.3 EXISTING UTILITIES

- A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed.
 - 1. Arrange with utility companies to shut off indicated utilities.
- B. Sanitary Sewer Laterals
 - 1. Sanitary Sewer Laterals shall be removed as shown on Drawings.
 - 2. The existing sewer laterals being abandoned shall be plugged with concrete. This shall apply to the two (2) existing sewer laterals where they are being cut off near the sewer main and at the property line as shown on the Drawings.
 - 3. The contractor shall expose the existing wye fitting a minimum of 36" on either side of the wye along the sewer main. The contractor is to contact Don Brown of the City of Ukiah Water and Sewer Department at (707) 467-5783 to inspect the integrity of the wye. If the wye has good integrity, then the wye can be capped as shown on the detail. If the wye is cracked or damaged, the City of Ukiah Water and Sewer department staff will remove the wye and replace that section of the sewer main at no cost to the contractor. The contractor in either case shall be responsible for backfilling the excavation in accordance with City of Ukiah Standard Drawing No. 220. Contact Don Brown a minimum of 72 hours prior to beginning work so that his inspection of the wye can be scheduled.
- C. Grease Interceptor Tank
 - 1. Grease Interceptor Tank shall be removed as shown on Drawings.
 - 2. Tank shall be pumped, and contents hauled to an approved disposal facility. Contractor shall provide evidence of proper disposal of contents to the Construction Manager.
 - 3. Excavation:
 - a. Concrete tank shall be completely removed, and concrete disposed to an approved off-site location.
 - b. Over excavation of the tank shall be performed under the direction of the Owner or Construction Manager and care shall be taken to limit over excavation to less than 3 feet (Horizontal) from the outside edge of the tank.
 - 4. Backfill & Compaction:

- a. Material used as structural backfill shall be free from organic material and rocks larger than 3” in greatest dimension and shall conform to the following requirements:
 - 1) Plasticity Index: 15 percent or less
 - 2) Liquid Limit: 40 percent or less
 - 3) Fraction Passing No.200 sieve: 50 percent or less
- b. Backfill shall be placed in compacted lifts not exceeding 8” and compacted to 95% relative compaction.
- c. Compaction testing shall be conducted at each vertical foot of fill placement until the fill reaches the required grade.

D. Water Service Disconnect

- 1. Contractor shall contact Willow County Water District (707) 462-2666 five (5) working days prior to the start of work to request water meter and service connection removal.
- 2. Shut off and removal of the service connection will be conducted by Willow County Water District Personnel.

E. Excavate for and remove underground utilities indicated to be removed.

3.4 CLEARING AND GRUBBING

A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.

- 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
- 2. Grind down stumps and remove roots larger than **3 inches** in diameter, obstructions, and debris to a depth of **18 inches** below exposed subgrade.
- 3. Chip removed tree branches and dispose of off-site.

B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

- 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches and compact each layer to a density equal to adjacent original ground.
- 2. Finished surface shall be graded to drain as shown on the Drawings.

3.5 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.

1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.

3.6 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION 31 10 00