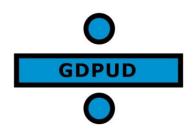
# REPORT TO THE BOARD OF DIRECTORS BOARD MEETING OF AUGUST 10, 2021 AGENDA ITEM NO. XX



AGENDA SECTION: NEW BUSINESS

SUBJECT: AWARD CONSTRUCTION CONTRACT TO JM

ENVIRONMENTAL, INC. IN THE AMOUNT OF \$97,500 FOR THE OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT AND INCREASE THE PROJECT

**BUDGET BY \$8,148 TO A TOTAL OF \$123,148** 

PREPARED BY: Elaine Greif / Asa Utterback, Coastland Civil Engineering

**APPROVED BY:** Darrell Creeks, Operations Manager

## **BACKGROUND**

The Sweet Water Water Treatment Plant has been in operation since <a href="mailto:known-nc-width">month</a> <a href="mailto:known-nc-width">year</a>. As such, the Old Auburn Lake Trails Water Treatment Plant (ALT WTP) has been taken out of commission and the equipment is no longer needed. This Project will remove structures, tanks and components at the Old Auburn Lake Trails Water Treatment Plant that are no longer needed due to construction of the new water treatment plant.

The Old Auburn Lake Trails Water Treatment Plant Demolition Project will involve a removal and disposal of the existing pressure filters, steel storage tank, generator, control building, miscellaneous equipment and above ground piping, and handling and disposal of hazardous materials in accordance with state and local guidelines.

Coastland Civil Engineering is providing project management services for this project under the professional services agreement approved by the Board on February 11, 2020 for various capital projects.

#### DISCUSSION

Coastland prepared plans and specifications for the work to be performed based on the demolition and removal requirements identified by staff. To assess the extent and nature of hazardous materials existing in the facilities to be demolished, Coastland arranged for Entek Consulting Group to perform a hazardous materials

# Old Auburn Lake Trails Water Treatment Plant Demolition Project

Board Meeting of August 10, 2021 Agenda Item No. X.X.

survey, and prepare a hazardous materials report and specifications for dealing with the hazardous materials. Entek identified sources of asbestos and lead paint at the site along with miscellaneous other hazardous material concerns which will need special care in the demolition and disposal processes. The construction plans and specifications are provided as **Attachment 4**.

On June 16, 2021, the District released a request for bids for the project. On July 9, 2021, the District received and publicly opened three (3) bid proposals with an apparent low bid from J.A. Snyder Pacific West, Inc. (Snyder) in the amount of \$74,900. JM Environmental Inc. (JME) was the second lowest bidder with a bid amount of \$97,500. The bid summary sheet as recorded at the public bid opening is attached as **Attachment 1.** The bids from Snyder and JME are provided as **Attachments 2 and 3**, respectively.

Bidder	Bid Amount
J.A. Snyder Pacific West Inc. (Snyder)	\$ 74,900.00
JM Environmental, Inc. (JME) *	\$ 97,500.00
Caggiano General Engineering Inc.	\$ 115,000.00
Engineer's Estimate	\$ 110,000.00

Table 1 – Bid Summary

In the bid verification process, Snyder's bid proposal was found to have notable deviations from the specified requirements. First, Snyder did not conform to the requirement in the specifications for the bidder to have a Hazardous Materials (HAZ) Certification from the California State Contractor's License Board, either held by the prime contractor or the subcontractor which is designated to perform or have responsible charge for the hazardous material handling. Snyder also did not comply with the specified requirements for acknowledgement of the two addendums issues with the bid process. While the non-conformance regarding addendum acknowledgement allows acceptance of the bid at the District's discretion, the District's legal counsel found that the lack of compliance with the HAZ license certification requirement is cause which requires the District to not award the contract to Snyder. Therefore, Snyder's bid is deemed non-responsive, which requires consideration of the next lowest bidder, JME.

JME's bid proposal included all the required forms, and staff verified that they have a valid Contractor's license as required by the Project specifications. JME also meets and exceeds the experience requirements listed in the specifications. As such, JME is deemed to be the lowest responsive, responsible bidder.

<sup>\*</sup> Verified lowest responsive, responsible bidder

Board Meeting of August 10, 2021 Agenda Item No. X.X.

The total price bid by JME is less than the engineer's estimate by \$12,500. While the bid is within the total projected costs to complete the project, staff recommends authorization of an increase of \$8,148 to the approved CIP budget to allow for a ten percent (10%) contingency over the awarded bid amount.

The project is planned to be completed by October 2021. Staff recommends that the General Manager have "change order" authority in an amount not to exceed 10% of the contract amount. This will eliminate the need to return to the Board of Directors for minor changes to the project allowing for a timely completion of the project.

The CIP project budget did not include inspection services during construction and assumed all construction management and contract management would be handled by District staff.

Once the board takes action to award the contract, Staff will send the Contractor a Notice of Award, and the Contractor will execute the agreement and supply the required performance bond.

## **ANALYSIS**

The District can take one of two alternative actions: program award the construction contract to JM Environmental, or reject all bids.

### Alternative 1 – Award Project

The table below shows the current and projected costs associated with awarding the total bid price.

**Projected To** Phase Complete CIP Budget Engineering/Project \$ 15,898 \$ 15,898 Management Construction \$ 0 By District staff Management Construction (Includes \$ 99,102 \$ 107,250 contingency)

\$ 123,148

\$115,000

Table 2 - Project Budget

The project is funded by Fund 43 – Capital Reserve.

Total

Board Meeting of August 10, 2021 Agenda Item No. X.X.

#### Alternative 2 – Reject All Bids

Alternatively, the Board could reject the bids. If the Board rejects the bids, District Staff would need to consider repackaging or deferring the bid to advertise the project again. The schedule would need to be defined later, but staff would probably be able to re-advertise the project later in the Fall of 2021 with construction probably occurring in early 2022.

Bid prices can vary throughout the year based on many factors, including contactor workload, number of interested contractors, and cost of materials. The results of a future rebid are unknown and bids could be higher or lower depending on market conditions at the time of the bid.

## FISCAL IMPACT

The Adopted Capital Improvement Plan budget for this Project is \$115,000 from Fund 43 – Capital Reserve. The proposed plan requires an increase in the amount of \$8,148 to a total project budget of \$123,148.

## **RECOMMENDED ACTION**

Staff recommends the Board of Directors of the Georgetown Divide Public Utility District (GDPUD) adopt the attached Resolution awarding the construction contract to JM Environmental, Inc.; authorizing the general manager to execute a contract with JM Environmental, Inc. in the amount of \$97,500 for the Old Auburn Lake Trails Water Treatment Plant Demolition Project; increasing the project budget by \$8,148 to a total of \$123,148; and authorizing the general manager to approve change orders not to exceed 10% of the contract amount for a total construction authorization amount of \$107,250.00.

### <u>ALTERNATIVES</u>

Alternatively the Board may reject all bids and provide a direction for rebid.

#### **ATTACHMENTS**

- 1. Bid Results Form
- 2. J. A. Snyder Pacific West, Inc. Submitted Bid
- 3. JM Environmental, Inc. Submitted Bid
- 4. Bid Documents (Plans and Specifications)
- 5. Resolution

# ATTACHMENT 1 BID RESULTS FORM

BID SUN	MARY SHEET		9/2/2021 Auc
Project:	Auburn Lake Trails Demolition Project	Due Date and Time:	<del>09/03/2021</del> at 2 p.m. Local time
Facilitator:	Adam Coyan	Location:	GDPUD Main Office

Contractor	Bid Amount
JA Snyder Pacific West inc.	73,900
JM Environmetal inc.	72,727
Bowen Engineering and Environmental	128,000
	-

Note: This is only a summary sheet that provides a listing of those Contractors that summited Bids and their corresponding Bid Amounts.

Prepared by:

(Signature)

Print Name:

Loyan

Witness:

(Signature)

Print Name:

# **ATTACHMENT 2**

# J. A. SNYDER PACIFIC WEST, INC. SUBMITTED BID

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

NAME OF BIDDER: J.A. Snyder Pacific	West, Inc.
STREET ADDRESS: 642 Cold Springs R	oad
CITY, STATE, ZIP: Placerville, CA 9566	7
PHONE NO530-642-4285	FAX NO. 530-642-4286
CONTRACTOR LICENSE TYPE & NO.: C12, C21, C27 and 577737	

The work for which this proposal is submitted is for construction in conformance with the Special Provisions (including the payment of not less than the prevailing wage rates), the project plans, if any, described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the Georgetown Divide Public Utility District specifications.

The Special Provisions for the Work to be done are dated JUNE 2021 and are entitled:

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

Bids are to be submitted for the entire work. The amount of the bid for comparison will be the total of all items.

The Bidder shall set forth, for each unit basis item of work, a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In the case of a discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

- (a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;
- (b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc. or one-tenth, one-hundredth, etc. from the

entered total, the discrepancy will be resolved by mutual resolution between the two parties.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise, if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the item total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the Georgetown Divide Public Utility District, and that discretion will be exercised in the manner deemed by the Georgetown Divide Public Utility District to best protect the public interest in the prompt and economical completion of the work. The decision of the Georgetown Divide Public Utility District respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the bond(s) in the sums required by the State Contract Act, with surety satisfactory to the Georgetown Divide Public Utility District, and the insurance certificates within ten (10) days, not including Saturdays, Sundays, and legal holidays, after the Bidder has received notice from the Georgetown Divide Public Utility District that the contract has been awarded, the Georgetown Divide Public Utility District may, at its option, determine that the Bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this proposal shall operate and the same shall be the property of the Georgetown Divide Public Utility District.

When submitting its bid, the Bidder shall include security in the form of cash; cashier's check made payable to the District; a certified check made payable to the District or a bidder's bond executed by an admitted surety insurer, made payable to the District. The amount of security shall be 10 percent of the amount bid. Should the Bidder be awarded the contract, but fail to execute the contract, its security shall be forfeited to the District.

The Bidder has familiarized itself with the nature and extents of the Contract Documents, the Work, the site, the locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost,

progress or performance of the Work, and has made such independent investigations as Bidder deems necessary.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the plans therein referred to; and the contractor proposes, and agrees if this proposal is accepted, that they will contract with the Georgetown Divide Public Utility District, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the District as therein set forth, and that the contractor will take in full payment therefor the following prices, to wit:

#### 1.3 BID SCHEDULE

Contractor Company Name: \_

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

Item No.	Items	Estimated Quantity	Unit of Measure	Price per Unit	Total
1	Mobilization, Insurance, Bonds	1	LS	\$ 6,000	\$ 6,000
2	Site Demolition	1 ,	LS	\$ 68,900	\$ 68,900
			Total	Bid Amount:	\$ 74,900

Total Amount in Words

J.A. Snyder Pacific West, Inc.

### 1.4 DESIGNATION OF SUBCONTRACTORS

In compliance with Public Contract Code section 4100 et seq. each bidder shall set forth below the(a) name and location of the mill, shop, or office of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement to be performed under these specifications in excess of one-half of 1% of the Contractor's total bid, (b) description of the type of work to be performed by each such subcontractor, and (c) portion of the work (expressed in dollar amount) that will be performed by each such subcontractor.

Subletting or subcontracting of any portion of the work in excess of one-half of 1% of the Contractor's total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the Agency setting forth the facts constituting the emergency or necessity.

Subcontractor (name and location)	Subcontractor License No.	Description of Subcontractor Work	Estimated Portion of Work (in%)
Joe Vicini, Inc. 315 Placerville Drive Placerville, CA 95667	213766	Install a blind flange on an existing pressurized 12" butterfly valve.	2%
Select Environmental 3888 Cincinatti Ave. Rocklin, CA 95765	954236	Remove, transport, and dispose of asbestos and lead containing building materials and contaminated debris.	
	,	• •	
			,

#### 1.5 BID BOND

### KNOW ALL MEN BY THESE PRESENTS, THAT WE, THE UNDERSIGNED

J.A. Synder Pacific West, Inc. , Contractor as Principal; and WESTERN SURETY COMPANY
, as Surety, are hereby held and bound unto Georgetown Divide
Public Utility District, hereinafter called the District, in the sum of \$10% of amount bidwhich
sum is equal to at least ten percent of the total amount of the Bid, payment of which sum,
to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the District a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing, for the construction of the following public works project:

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

NOW, THEREFORE,

- (a) If the Bid is rejected, or in the alternate,
- (b) If the Bid is accepted and the Principal shall sign and deliver a Contract, in the form of the Contract attached hereto and shall execute and deliver Performance and Payment Bonds in the forms attached hereto and shall deliver proof of insurance (all completed in accordance with the Contract Documents), and shall in all other respects perform the agreement created by the acceptance of the Bid;

Then, this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the District may accept such Bid, and said Surety does hereby walve notice of any such extension.

# Western Surety Company

### POWER OF ATTORNEY - CERTIFIED COPY

Bond No65554718
Know All Men By These Presents, that WESTERN SURETY COMPANY, a corporation duly organized and existing under the laws of the State of South Dakota, and having its principal office in Sioux Falls, South Dakota (the "Company"), does by these presents make, constitute and appoint  Heath Sheppard
its true and lawful attorney(s)-in-fact, with full power and authority hereby conferred, to execute, acknowledge and deliver for and on its behalf as Surety, bonds for:
Principal: J.A. Synder Pacific West, Inc.
Obligee: Georgetown Divide Public Utility District
Amount: \$1,000,000.00
and to bind the Company thereby as fully and to the same extent as if such bonds were signed by the Vice President, sealed with the corporate seal of the Company and duly attested by its Secretary, hereby ratifying and confirming all that the said attorney(s)-in-fact may do within the above stated limitations. Said appointment is made under and by authority of the following bylaw of Western Surety Company which remains in full force and effect.
"Section 7. All bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile."
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
In Wings Whereof, Western Surety Company has caused these presents to be signed by its Vice President, Paul T. Bruflat, and its corporate seal to be allow this7th day ofJuly,2021
WESTERN SURETY COMPANY  COUNTY OF MUNICIPAL ASS  WESTERN SURETY COMPANY  Paul T. Zruflat, Vice President
On this 7th day of July , in the year 2021 , before me, a notary public, personally appeared Paul T. Bruflat, who being to me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of WESTERN SURETY COMPANY and acknowledged said instrument to be the voluntary act and deed of said prioration.  M. BENT  NOTARY PUBLIC SEAL SOUTH DAKOTA  Notary Public - South Dakota
My Commission Expires March 2, 2026  I the undersigned officer of Western Surety Company, a stock corporation of the State of South Dakota, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable, and furthermore, that Section 7 of the bylaws of the Company as set forth in the Power of Attorney is now in force.
In testimony whereof, I have hereunto set my hand and seal of Western Surety Company this  July 2021 day of
WESTERN SURETY COMPANY
TITIL IL

 $To \ validate \ bond \ authenticity, \ go \ to \ \underline{www.cnasurety.com} \ > Owner/Obligee \ Services > Validate \ Bond \ Coverage.$ 

IN WITNESS THEREOF, the instrument under their several seals this and corporate seal of each corporate pasigned by its undersigned representative	arty being hereto affixed and those pres	the name sents duly
	J.A. Synder Pacific West, Inc.	
	(Contractor as Principal)  By:	
(Seal)	[Name]   resident [Title]	
SURETY CONTROL OF THE STATE OF	WESTERN SURETY COMPANY (Surety)	·
SEAL SEAL	By: Heath &	EURETY COLLEGE
	Heath Sheppard [Name]	SEAL
	Attorney-In-Fact [Title]	4113

# 1.6 EXPERIENCE QUALIFICATIONS

business name for _ covered in the Bid ex	14 years.  Itends over a period of s a contractor, has ne	Experience in work of 30 years.	ess, under the presen a nature similar to tha rily complete a contrac
			d in the last three years additional experience
<u>Year</u>	<u>Owner</u>	Type of Work	Contract Amount
		×	
2021	SLF Construction	<b>Building Demolition</b>	\$152,550
2021	Level 5 Builders	Building Demolition	\$125,535
2020	DesCor Builders	Building Demolition	\$153,065
2020	Hartin and Hume, Inc.	Building Demolition	\$118,660

The following is a list of plant and equipment owned by the Bidder, which is definitely available for use on the proposed work as required. (Bidder may provide additional list of plant and equipment available).

Quantity	Name, Type and Capacity Condition		<u>Location</u>	
1	Cat 336 EL Excavator w/thumb (operating weight 21,000lbs-100,000lbs)	Good	Placerville	
1	T870 Compact Track Loader (iT4) (Skid steer will all equipment, Lift Capacity at 50% 5030lb.)	Good	Placerville	
1	Cat 315 F L Excavator (operating weight 21,000lbs-100,000lbs)	Good	Placerville	
	*			
	·			

Executed onJuly 9th, 2021, atPlacerville, California
I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.
BIDDER Out Way
[Authorized signature] J.A. Snyder Pacific West, Inc.
[Company/firm name] Jeff A. Snyder
[Name] President
[Title]

# 1.7 EQUAL EMPLOYMENT CLAUSE

## (40 CFR 60-8.4(b) and EO 11246 & 11375 & 12086)

The Federal Equal Employment Opportunity Law requires that all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause. The required notice follows this section.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The required notice follows this section.
- (4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of

September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States."

# 1.8 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

Name of Company/Entity: J.A. Snyder Pacific West, Inc.			
The prospective participant certifies to the best of its knowledge and belief that it and its principals:			
(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a government entity (Federal, State, or local).			
(b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;			
Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraphs (a) and (b) of this certification; and			
(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Section 1001, a false statement may result in a fine of up to \$ 10,000 or imprisonment for up to five (5) years, or both.			
Jeff A. Snyder, President			
Name and Title of Authorized Representative (Typed/printed)			
Signature of Authorized Representative Date			
Signature of Authorized Representative Date			

[RESERVED FOR EXPLANATION OF INABILITY TO CERTIFY TO SECTION 1.8]

 $\ \square$  I am unable to certify to the above statements. My explanation is below.

Explanation:	
	4
	*
	•
,	
	. 1

## 1.9 NON COLLUSION AFFIDAVIT\*

[TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID]

State of California County of FI Dorado,
<u>Jeff H. Snyder</u> , being first duly sworn, deposes and says that he or
she is <u>President</u> of J.A. Snyder Pacific West, Inc., the
party making the foregoing bid, that the bid is not made in the interest of, or on behalf
of, any undisclosed person, partnership, company, association, organization, or
corporation; that the bid is genuine and not collusive or sham; that the bidder has not
directly or indirectly 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
the effectuate a collusive or sham bid.
By: Jeff Why My
personally known to me OR proved to me on the basis of satisfactory evidence to be the
person(s) whose name(s) is/are subscribed to the within instrument and acknowledged
to me that he/she/they executed the same in his/her/their authorized capacity(ies), and
that by his/her/their signatures(\$) on the instrument the person(\$), or entity upon behalf
of which the person(\$) acted, executed the instrument.
Tolugth 2021
Subscribed and sworn to before me on JUIY 97, 2021  ALYSSA NADINE WALDON Notary Public - California
El Dorado County
Commission # 2264687

\*Note: Public Contracts Code 7106 requires this non-collusion affidavit be submitted with a bid for any public works contract of a public entity.

(Notary Public)

# [RESERVED FOR NOTARY]

#### 1.10 NONDISCRIMINATION CLAUSE

- 1. During the performance of this contract, contractor and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40) or sex. Contractors and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of Division 4 of Title 2 or the California Administrative Code are incorporated into this contract by reference and made a part hereof as if set forth in full. Contractor and its subcontractor shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- 2. This contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perfom1 work under the contract.

THE UNDERSIGNED CERTIFIES THAT THE CONTRACTOR WILL COMPLY WITH THE ABOVE REQUIREMENTS.

CONTRACTOR OR SUBCONTRACTOR NAME:	J.A. Snyder Pacific West, Inc.	
CERTIFIED BY:		•
NAME:	TITLE:	President
SIGNATURE:	My DATI	Ξ:

# Addendum Acknowledgement Form

The receipt of the	TOHOW	ing addend	aa is nereby acknowledged:
Addendum No	11	, dated _	6/24/2021
Addendum No	2	, dated _	7/2/2021

# **ATTACHMENT 3**

# JM ENVIRONMENTAL, INC. SUBMITTED BID

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

NAME OF BIDDER:	JM Environmental,	Inc.	
STREET ADDRESS:	213 Kenroy Ln.#1		
CITY, STATE, ZIP:	Roseville CA 95678	8	
PHONE NO. 916-	726-0304	<sub>FAX NO.</sub> 916-726-0340	
CONTRACTOR LICE 693564:A.	ENSE TYPE & NO.: B.C21.C22.ASB.HA	.7	

The work for which this proposal is submitted is for construction in conformance with the Special Provisions (including the payment of not less than the prevailing wage rates), the project plans, if any, described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the Georgetown Divide Public Utility District specifications.

The Special Provisions for the Work to be done are dated JUNE 2021 and are entitled:

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

Bids are to be submitted for the entire work. The amount of the bid for comparison will be the total of all items.

The Bidder shall set forth, for each unit basis item of work, a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In the case of a discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

- (a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;
- (b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc. or one-tenth, one-hundredth, etc. from the

entered total, the discrepancy will be resolved by mutual resolution between the two parties.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise, if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the item total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the Georgetown Divide Public Utility District, and that discretion will be exercised in the manner deemed by the Georgetown Divide Public Utility District to best protect the public interest in the prompt and economical completion of the work. The decision of the Georgetown Divide Public Utility District respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the bond(s) in the sums required by the State Contract Act, with surety satisfactory to the Georgetown Divide Public Utility District, and the insurance certificates within ten (10) days, not including Saturdays, Sundays, and legal holidays, after the Bidder has received notice from the Georgetown Divide Public Utility District that the contract has been awarded, the Georgetown Divide Public Utility District may, at its option, determine that the Bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this proposal shall operate and the same shall be the property of the Georgetown Divide Public Utility District.

When submitting its bid, the Bidder shall include security in the form of cash; cashier's check made payable to the District; a certified check made payable to the District or a bidder's bond executed by an admitted surety insurer, made payable to the District. The amount of security shall be 10 percent of the amount bid. Should the Bidder be awarded the contract, but fail to execute the contract, its security shall be forfeited to the District.

The Bidder has familiarized itself with the nature and extents of the Contract Documents, the Work, the site, the locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost,

progress or performance of the Work, and has made such independent investigations as Bidder deems necessary.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the plans therein referred to; and the contractor proposes, and agrees if this proposal is accepted, that they will contract with the Georgetown Divide Public Utility District, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the District as therein set forth, and that the contractor will take in full payment therefor the following prices, to wit:

#### 1.3 BID SCHEDULE

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

Item No.	Items	Estimated Quantity	Unit of Measure	Price per Unit	Total
1	Mobilization, Insurance, Bonds	1	LS	\$12,000.00	\$ 12,000.00
2	Site Demolition	1 .	LS	\$85,500.00	\$ 85,500.00
Total Bid Amount:					\$ 97,500.00

Ninety Seven Thousand Five Hundred & 00/100			
	Total Amount in Words		
Contractor Company Name:	JM Environmental, Inc.		

#### 1.4 DESIGNATION OF SUBCONTRACTORS

In compliance with Public Contract Code section 4100 et seq. each bidder shall set forth below the(a) name and location of the mill, shop, or office of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement to be performed under these specifications in excess of one-half of 1% of the Contractor's total bid, (b) description of the type of work to be performed by each such subcontractor, and (c) portion of the work (expressed in dollar amount) that will be performed by each such subcontractor.

Subletting or subcontracting of any portion of the work in excess of one-half of I% of the Contractor's total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the Agency setting forth the facts constituting the emergency or necessity.

Subcontractor (name and location)	Subcontractor License No.	Description of Subcontractor Work	Estimated Portion of Work (in%)
Sterling P. Holloway III, Inc.	382173	Heavy Equipment	15%
			,
		•	
		<u> </u>	*

#### 1.5 BID BOND

## KNOW ALL MEN BY THESE PRESENTS, THAT WE, THE UNDERSIGNED

JM Environmental, Inc.	, Contractor as Principal; and _	Contractors Bonding and Insurance
		d bound unto <b>Georgetown Divide</b> the sum of \$_ <u>Amount Bid</u> which If the Bid, payment of which sum,
to be made, we hereby administrators, successors,		ourselves, our heirs, executors,
to the District a certain Bid	•	hereas the Principal has submitted nade a part hereof, to enter into a blic works project:

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

NOW, THEREFORE,

- (a) If the Bid is rejected, or in the alternate,
- (b) If the Bid is accepted and the Principal shall sign and deliver a Contract, in the form of the Contract attached hereto and shall execute and deliver Performance and Payment Bonds in the forms attached hereto and shall deliver proof of insurance (all completed in accordance with the Contract Documents), and shall in all other respects perform the agreement created by the acceptance of the Bid;

Then, this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the District may accept such Bid, and said Surety does hereby waive notice of any such extension.

instrument under their several sea and corporate seal of each corpo	the above-bounded parties have executed this als this 7th day of July 2021, the name prate party being hereto affixed and those presents duly entative, pursuant to authority of its governing body.
	JM Environmental, Inc. (Contractor as Principal)
	By: Doma Moole
(Seal)	Tonja Moore [Name]
	Vice President [Title]
	Contractors Bonding and Insurance Company (Surety)
(Seal)	By: Shauna Conroy
	[Name]
	Attorney-in-Fact [Title]

## 1.6 EXPERIENCE QUALIFICATIONS

# **ACKNOWLEDGMENT**

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

validity of that document.			
State of California County of Placer	)		
On July 7, 2021	before me, <sub>.</sub>		, Notary Public me and title of the officer)
personally appeared Shauna	Conroy		
subscribed to the within instrume	ent and acknow (ies), and that b	ledged to me t y his/her/their	the person(s) whose name(s) is/are hat he/she/they executed the same in signature(s) on the instrument the ed, executed the instrument.
I certify under PENALTY OF PE paragraph is true and correct.	RJURY under t	ne laws of the	State of California that the foregoing
WITNESS my hand and official s	seal.	_ (Seal)	SETH CONROY Notary Public - California Placer County Commission # 2339048 My Comm. Expires Dec 4, 2024

# **POWER OF ATTORNEY**

## RLI Insurance Company Contractors Bonding and Insurance Company

9025 N. Lindbergh Dr. Peoria, IL 61615 Phone: 800-645-2402

## Know All Men by These Presents:

That this Power of Attorney is not valid or in effect unless attached to the bond which it authorizes executed, but may be detached by the approving officer if desired.

That RLI Insurance Company and/or Contractors Bonding and Instogether, the "Company") do hereby make, constitute and appoint:	urance Company, each an Illinois corporation, (separately and
in the City of Roseville, State of California full power and authority hereby conferred, to sign, execute, acknowledge bonds and undertakings in an amount not to exceed (\$25,000,000.00) for any single obligation.	
The acknowledgment and execution of such bond by the said Attorney in F executed and acknowledged by the regularly elected officers of the Compar	
RLI Insurance Company and/or Contractors Bonding and Insurance following is a true and exact copy of a Resolution adopted by the Board of	
"All bonds, policies, undertakings, Powers of Attorney or other obligation the Company by the President, Secretary, any Assistant Secretary, Treasure of Directors may authorize. The President, any Vice President, Secretary attorneys in Fact or Agents who shall have authority to issue bonds, policies are is not necessary for the validity of any bonds, policies, undertakings, signature of any such officer and the corporate seal may be printed by face	rer, or any Vice President, or by such other officers as the Board retary, any Assistant Secretary, or the Treasurer may appoint cies or undertakings in the name of the Company. The corporate Powers of Attorney or other obligations of the corporation. The
IN WITNESS WHEREOF, the <b>RLI Insurance Company</b> and/or <b>Cont</b> caused these presents to be executed by its respective Vice President, 2020	
SEAL SEAL	RLI Insurance Company Contractors Bonding and Insurance Company  By: Barton W. Davis  Vice President
State of Illinois County of Peoria  SS	CERTIFICATE
On this <u>8th</u> day of <u>April</u> , <u>2020</u> , before me, a Notary Public, personally appeared <u>Barton W. Davis</u> , who being by me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of the RLI Insurance Company and/or Contractors Bonding and Insurance Company and acknowledged said instrument to be the voluntary act and deed of said corporation.	I, the undersigned officer of RLI Insurance Company and/or Contractors Bonding and Insurance Company, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable; and furthermore, that the Resolution of the Company as set forth in the Power of Attorney, is now in force. In testimony whereof, I have hereunto set my hand and the seal of the RLI Insurance Company and/or Contractors Bonding and Insurance Company this
By: Acqueine M. Bockler Notary Public	RLI Insurance Company Contractors Bonding and Insurance Company
OFFICIAL SEAL JACQUEINE M BOCKLER NOTARY PUBLIC, STATE OF ILLINOIS	By: Dfick Corporate Secretary

business name for _		Experience in work of	ess, under the present a nature similar to that
	s a contractor, has nev		rily complete a contract
N/A			
			d in the last three years additional experience
<u>Year</u>	<u>Owner</u>	Type of Work	Contract Amount
2021	John F. Kennedy	Asbestos Abatement & Selective Demolition	\$851,938.00
2021	Washington USD/ Bryte Elementary	Asbestos/ Lead Abatement	\$710,000.00
2019	Capitol Tower Apartmen Sacramento Commons	ts/Asbestos/Lead Abatem & Demolition of Two Story Apartment Comp	\$2 238 000
2018	California State Universit Sacramento	ty Asbestos/Lead Abaten	nent \$1,147,000

The following is a list of plant and equipment owned by the Bidder, which is definitely available for use on the proposed work as required. (Bidder may provide additional list of plant and equipment available).

Quantity	Name, Type and Capacity	<u>Condition</u>	Location	
8	50 Yard Dump Trucks	Excellent	Equipment Yard - Ro	oseville
50	Negative Air Machines	Excellent	Equipment Yard - Ro	oseville
50	Hepa Vacuums	Excellent	Equipment Yard - Ro	oseville
	-			

*	
Executed onJuly 7th_, 2021, atRoseville, CA	
i e	
I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.	
BIDDER	
Joine mode	
[Authorized signature]	•
JM Environmental, Inc.	
[Company/firm name]	
Tonja Moore	
[Name]	
Vice President	
[Title]	

#### 1.7 EQUAL EMPLOYMENT CLAUSE

#### (40 CFR 60-8.4(b) and EO 11246 & 11375 & 12086)

The Federal Equal Employment Opportunity Law requires that all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause. The required notice follows this section.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The required notice follows this section.
- (4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of

September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States."

### 1.8 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

Name	of Company/Entity:JM Environmental, Inc					
	The prospective participant certifies to the best of its knowledge and belief that it and its principals:					
(a)	Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a government entity (Federal, State, or local).					
(b)	Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;					
(c)	Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraphs (a) and (b) of this certification; and					
(d)	Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Section 1001, a false statement may result in a fine of up to \$ 10,000 or imprisonment for up to five (5) years, or both.					
Ţc	Tonja Moore, Vice President					
Name and Title of Authorized Representative (Typed/printed)						
Signa	Signature of Authorized Representative Date					
⊔la	m unable to certify to the above statements. My explanation is below.					

[RESERVED FOR EXPLANATION OF INABILITY TO CERTIFY TO SECTION 1.8]

Explanation:			
N/A			
	3.		
		,	
		,	
	The latest and the la		
	*	1	

#### 1.9 NON COLLUSION AFFIDAVIT\*

[TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID]

State of California County of Placer,
Tonja Moore , being first duly sworn, deposes and says that he or
she is Vice President of JM Environmental, Inc. , the
party making the foregoing bid, that the bid is not made in the interest of, or on behalf
of, any undisclosed person, partnership, company, association, organization, or
corporation; that the bid is genuine and not collusive or sham; that the bidder has not
directly or indirectly 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
the effectuate a collusive or sham bid.
personally known to me OR proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signatures(s) on the instrument the person(s), or entity upon behalf of which the person(s) acted, executed the instrument.  Subscribed and sworn to before me on
(Notary Public)
*Note: Public Contracts Code 7106 requires this non-collusion affidavit be submitted with a bid for any public works contract of a public entity.

#### **ACKNOWLEDGMENT**

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

valuaty of that document.
State of California County of
On July 7, 2021 before me, Seth Conroy, Notary Public (insert name and title of the officer)
personally appeared
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.  SETH CONROY Notary Public - California Placer County Commission # 2339048 My Comm. Expires Dec 4, 2024

#### [RESERVED FOR NOTARY]

#### 1.10 NONDISCRIMINATION CLAUSE

- 1. During the performance of this contract, contractor and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40) or sex. Contractors and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of Division 4 of Title 2 or the California Administrative Code are incorporated into this contract by reference and made a part hereof as if set forth in full. Contractor and its subcontractor shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- 2. This contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perfom1 work under the contract.

THE UNDERSIGNED CERTIFIES THAT THE CONTRACTOR WILL COMPLY WITH THE ABOVE REQUIREMENTS.

CONTRACTOR OR SUBCONTRACTOR NAME: JM Envi	ronmental, Inc.
CERTIFIED BY:	
NAME: Tonja Moore	<sub>TITLE:</sub> Vice President
SIGNATURE: Dom Mooce	<sub>DATE:</sub> 7/7/21



# GEORGETOWN DIVIDE Public Utility District

GEORGETOWN, CALIFORNIA 95634-4240

FAX (530) 333-9442

gd-pud.org

#### ADDENDUM NO. <u>1</u> Issued June 24, <u>2021</u>

SUBJECT: Georgetown Divide Public Utility District Office
Old Auburn Lake Trails Water Treatment Plant Demolition Project
Addendum #1 – Pre-bid Meeting Minutes and Sign In Sheet

TO: All Building Exchanges and Plan Holders:

This addendum shall hereby be made a part of the contract documents to the same extend as though it was originally included. The addendum consists of this cover and all the following pages and attachments.

The Contract Documents are hereby clarified, corrected and changed as indicated below.

Addendum Item	Part/Section	Description of Change	
1. Pre-Bid Meeting Minutes	Varies	See attached for pre-bid meeting minutes and questions and answers to date (3 pages)	
2. Pre-Bid Meeting Sign-In Sheet	N/A	See attached for pre-bid meeting sign-in sheet (2 pages)	
3. Licensing and Certification requirements	Section 1.1 Invitation to Bid	Add the following to the end of the paragraph on Page 1-2 regarding contractor licensing requirements:  Hazardous materials certifications (HAZ and ASB) may be held by a subcontractor or the prime contractor.  Contractor who holds the certifications is required to perform or have responsible charge for all work related to handling of the relevant hazardous materials.	



# GEORGETOWN DIVIDE Public Utility District

GEORGETOWN, CALIFORNIA 95634-4240

FAX (530) 333-9442

gd-pud.org

A copy of this Addendum with the signed acknowledgement below must be attached to your bid proposal or your bid may be considered non-responsive.

If you have any questions or concerns regarding this Addendum please contact Elaine Greif at (530) 537-3854 or <a href="mailto:greif@coastlandcivil.com">greif@coastlandcivil.com</a>.

Thank You,	
Approved by:	Prepared by:
	Asa Ellertain
Darrell Creeks	Asa Utterback
GDPUD	Coastland Civil Engineering
Operations Manager	Senior Engineer
Contractor's Acknowledgement	of Addendum
Addendum No. 1	Signed: Domonode
	Printed Name: Towa Moore



# GEORGETOWN DIVIDE Public Utility District

GEORGETOWN, CALIFORNIA 95634-4240

to an Incal non tack

FAX (530) 333-9442

gd-pud.org

# ADDENDUM NO. 2 Issued July 2, 2021

SUBJECT: Georgetown Divide Public Utility District Office
Old Auburn Lake Trails Water Treatment Plant Demolition Project
Addendum #2

TO: All Building Exchanges and Plan Holders:

This addendum shall hereby be made a part of the contract documents to the same extend as though it was originally included. The addendum consists of this cover and all the following pages and attachments.

The Contract Documents are hereby clarified, corrected and changed as indicated below.

Addendum	Part/Section	Description of Change
Item		
1. Licensing and Certification requirements	Section 1.1 Invitation to Bid and Section 2.21 Licensing Requirements for Contractors	The requirement for the prime contractor to hold a Class A license is being deleted with clarification. Replace the paragraph on Page 1-2 regarding contractor licensing requirements and the paragraph in Section 2.21 with the following:  The Contractor shall hold such licenses as may be required by the laws of the State of California for the performance of the work specified in the Contract Documents, and shall have the following classification or type of license for the work issued by the California State Contractors' License Board: Class C-21 - Building Moving/Demolition Contractor and a Hazardous Substance Removal Certification (HAZ) and a Asbestos Certification (ASB). Hazardous materials certifications (HAZ and ASB) may be held by the prime contractor or by a subcontractor. Contractor who holds the certifications is required to perform or have responsible charge for all work related to handling of the relevant hazardous materials. Work performed on active water systems shall be performed by a contractor with a Class A General Engineering or C-34 Pipeline or C-36 Plumbing Contractor's license.



# GEORGETOWN DIVIDE lic Utility I

PHONE (530) 333-4356

GEORGETOWN, CALIFORNIA 95634-4240

FAX (530) 333-9442

gd-pud.org

A copy of this Addendum with the signed acknowledgement below must be attached to your bid proposal or your bid may be considered non-responsive.

If you have any questions or concerns regarding this Addendum please contact Elaine Greif at (530) 537-3854 or greif@coastlandcivil.com.

Thank You,

Approved by:

Darrell Creeks

**GDPUD** 

**Operations Manager** 

Prepared by:

Asa Utterback

Coastland Civil Engineering

Senior Engineer

Contractor's Acknowledgement of Addendum

Addendum No. 2

Signed:

Printed Name:

#### **ATTACHMENT 4**

### **BID DOCUMENTS (PLANS AND SPECIFICATIONS)**

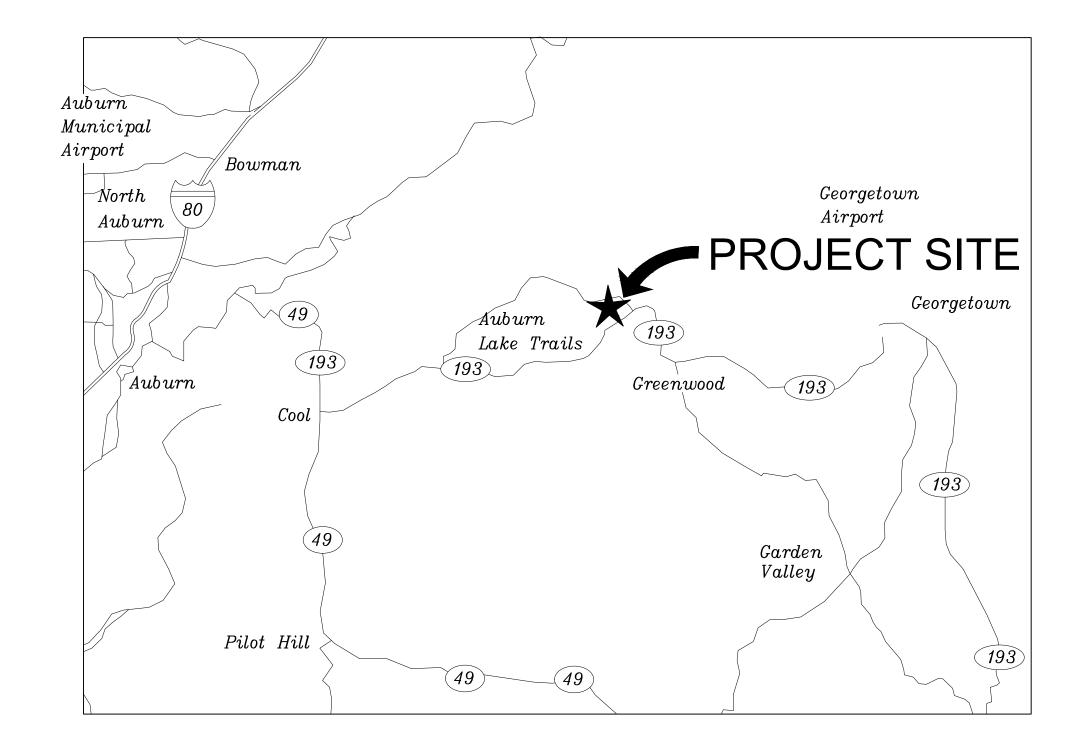
# GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

# **BID SET JUNE 2021**



3650 SWEETWATER TRAIL, COOL, CA.

SUMMARY OF WORK: OLD WATER TREATMENT PLANT DEMOLITION



LOCATION MAP

APPROVED FOR CONSTRUCTION: JEFF NELSON INTERIM GENERAL MANAGER, GDPUD







JUNE 2021

Underground Service Alert

DRAWING DATE 6/09/2021 SHEET NUMBER OF

LEGEND & SYMBOLS

BUTTERFLY VALVE HOSE BIBB W/HOSE THREAD

HOSE RACK

EXISTING AC PAVEMENT

EXISTING GRAVEL

----- LIMITS OF WORK

**EXISTING STRUCTURE** 

\_ 326 — EXISTING GROUND CONTOUR

==== EXISTING PIPE NOT IN USE

EXISTING PIPE IN USE FENCE - PROPERTY LINE

<u>BBREVIATI</u>	<u>ONS</u>	L LB LF	LEFT, LENGTH POUNDS LINEAR FEET
AS BW BWR	AIR SCOUR  BACKWASH WATER  BACKWASH WATER RETURN	M MANF MATL MAX	METER MANUFACTURER MATERIAL MAXIMUM
BWS BWW CA CD	BACKWASH WATER SOLIDS BACKWASH WASTE  COMPRESSED AIR CHEMICAL DRAIN	(N) N N/A NTS	NEW NORTH NOT APPLICABLE NOT TO SCALE
D DW EX	DRAIN DOMESTIC WATER GENERATOR EXHAUST	OC OG OH	ON CENTER ORIGINAL GROUND OVERHEAD
FE FRW FO FTW FTWR FW	FINAL EFFLUENT FIRE HYDRANT WATER FUEL OIL FILTER TO WASTE FILTER TO WASTE RETURN FILTERED WATER	P P/L R RET R/W, ROW	PROPOSED PROPERTY LINE  RADIUS RETAINING WALL RIGHT-OF-WAY
HW IRR	HOT WATER IRRIGATION WATER	RT S SEC, SECT SF	RIGHT SOUTH SECTION SQUARE FEET
OF PG PW	OVERFLOW  PROPANE GAS PLANT WATER	SHT SQ IN TYP	SHEET SQUARE INCH TYPICAL
RL RW	REFRIGERANT LIQUID RAW WATER	UG UNK USA	UNDERGROUND UNKNOWN UNDERGROUND SERVICE ALERT
SAM SD SS	SAMPLE STORM DRAIN SANITARY SEWER	V W/	VERTICAL WITH
TW UF	TEPID WATER UNDERFLOW	W	WATER

### **GENERAL NOTES**

**ABBREVIATIONS** 

BFV

BO BOC

CU

CU FT

CU IN

DEMO

DIA, Ø

(E), EX

FΡ

GVL

HYD

CU YD, CY

BLDG

AGGREGATE BASE

BUTTERFLY VALVE

BLOW OFF VALVE

DROP INLET, DUCTILE IRON

DUCTILE IRON PIPE

EDGE OF PAVEMENT

BACK OF CURB

CUBIC FOOT

CUBIC INCH

CUBIC YARD

DEMOLISH

DIAMETER

EXISTING

GRAVEL

INVERT

**IRRIGATION** 

JOINT POLE JOINT

HOSE BIBB HYDRANT

FIRE HYDRANT

INSIDE DIAMETER

INVERT ELEVATION

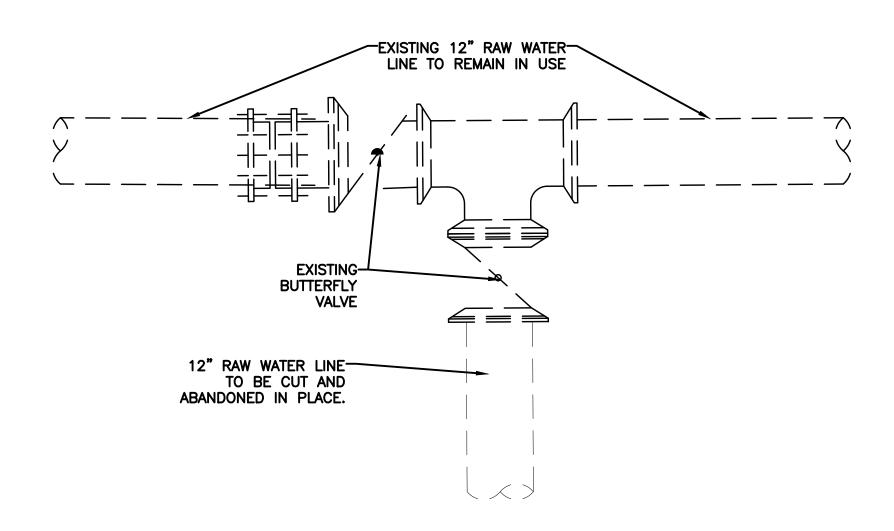
BLIND FLANGE

BUILDING

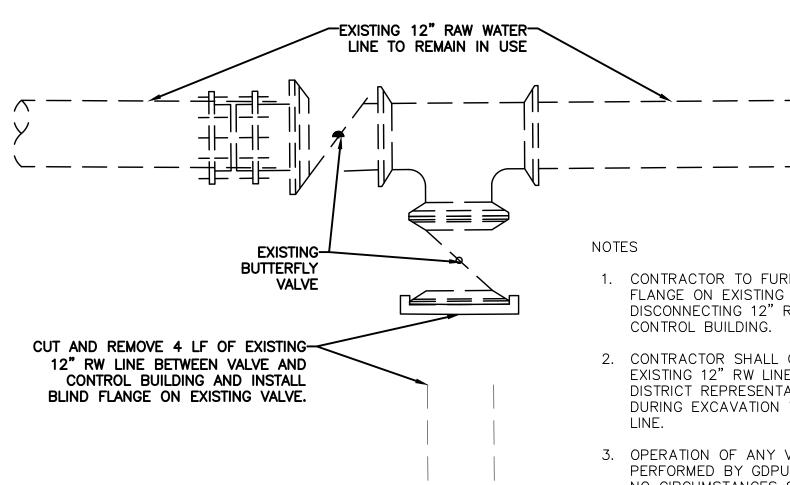
CUBIC

ASPHALT CONCRETE

- 1. ALL WORK SHALL BE ACCOMPLISHED TO THE SATISFACTION OF THE GENERAL MANAGER OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT OR HIS AUTHORIZED REPRESENTATIVE.
- 2. ALL REFERENCE TO GDPUD SHALL MEAN THE GENERAL MANAGER OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT OR HIS AUTHORIZED REPRESENTATIVE.
- 3. THE TYPES, SIZES, LOCATIONS, AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES, AS SHOWN ON THESE IMPROVEMENT PLANS, WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, SIZES, LOCATIONS, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT & COASTLAND CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES OR THE EXISTENCE OF ADDITIONAL BURIED OBJECTS OR UTILITIES NOT SHOWN ON THESE DRAWINGS WHICH MAY BE ENCOUNTERED. THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION THE TYPES, LOCATIONS, SIZES AND/OR DEPTH OF EXISTING UTILITIES WITHIN THE WORK AREA. ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL EXISTING CONDITIONS DISCOVERED BY THE CONTRACTOR SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING UTILITIES AND FOR THE PROTECTION OR DAMAGE TO THEM.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS SET BY OWNER. ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT NO ADDITIONAL EXPENSE TO OWNER.
- 5. ALL CONSTRUCTION SHALL BE INSPECTED AND APPROVED BY THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT OR ITS AUTHORIZED REPRESENTATIVE.
- 6. OPERATION OF ANY VALVES SHALL BE PERFORMED BY GDPUD PERSONNEL ONLY. UNDER NO CIRCUMSTANCES SHALL ANYONE OTHER THAN A REPRESENTATIVE OF GDPUD OPEN OR CLOSE ANY VALVE IN A GDPUD SYSTEM. SHUT DOWNS FOR THE PURPOSE OF COMPLETING THIS WORK ARE NOT PERMITTED UNLESS OTHERWISE AUTHORIZED BY THE DISTRICT.
- 7. CONTRACTOR SHALL CONDUCT HIS WORK IN SUCH A MANNER AS TO NOT INTERFERE OR BLOCK EXISTING DRAINAGE. MANNER OF MAINTAINING DRAINAGE SHALL BE SUBJECT TO APPROVAL OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT.
- 8. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE ENGINEER AND THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
- 9. CONTRACTOR SHALL PLAN HIS WORK AND PROVIDE AND MAINTAIN AT HIS EXPENSE A MEANS OF INGRESS AND EGRESS FOR ALL PROPERTY OWNERS ALONG ANY SECTION OF THE PROJECT. HE SHALL PROVIDE ALL ADJACENT PROPERTY OWNERS A SATISFACTORY MEANS OF ACCESS TO A PUBLIC STREET AND ALLOW TRAFFIC TO AND FROM ALL PROPERTY WITHIN OR NEAR LIMITS OF PROJECT.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING CONSTRUCTION. AT LEAST ONE WATER TRUCK SHALL BE ON SITE AT ALL TIMES ADDITIONAL EQUIPMENT MAY BE REQUIRED AS DETERMINED BY THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT.
- 11. CONTRACTOR SHALL DEVELOP AND OBTAIN APPROVAL FROM COUNTY OF EL DORADO A "ASBESTOS HAZARD MITIGATION PLAN". CONTRACTOR SHALL IMPLEMENT MEASURES IDENTIFIED IN PLAN, AND MAKE AMENDMENTS TO THE PLAN BASED ON ASBESTOS-CONTAINING MATERIAL DISCOVERED DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH ALL RECOMMENDATIONS PROVIDED IN THE HAZARD MATERIALS SURVEY FINAL REPORT PREPARED BY ENTEK CONSULTING GROUP (MAY 21, 2021) AND THE PROJECT SPECIFICATIONS.
- 12. ALL EXISTING MANHOLES, WATER VALVE AND METER BOXES, AND THE LIKE IN AREAS OF CONSTRUCTION SHALL BE PROTECTED IN PLACE.
- 13. DEMOLITION SHALL CONFORM TO THE PROJECT SPECIFICATIONS. ALL MATERIALS SHALL BE DISPOSED OF OFF-SITE AND IN A LAWFUL MANNER.
- 14. CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY THROUGH FRIDAY EXCEPT ON HOLIDAYS, 7:00 A.M. TO 7:00 P.M. (OR SUNSET, WHICHEVER IS EARLIER), UNLESS OTHERWISE SPECIFIED. ALL HEAVY EQUIPMENT AND ANY INTERNAL COMBUSTION ENGINES SHALL BE FITTED WITH ADEQUATE MUFFLERS.
- 15. IF UNUSUAL AMOUNTS OF BONE, SHELL, ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION, ALL WORK SHALL BE STOPPED WITHIN THE IMMEDIATE VICINITY, GDPUD NOTIFIED, AND A QUALIFIED ARCHAEOLOGIST CONSULTED FOR AN ON-SITE EVALUATION. IF THE BONE APPEARS TO BE HUMAN, THE EL DORADO COUNTY CORONER AND THE NATIVE AMERICAN HERITAGE COMMISSION (PHONE 916-322-7791) MUST BE CONTACTED.
- 16. THE CONTRACTOR SHALL REPAIR OR REPLACE ALL PAVEMENT, SIDEWALK, CURB & GUTTER, UTILITIES, VEGETATION, ROADS, FENCES ETC. DAMAGED BY THE CONTRACTOR'S EQUIPMENT TO LIKE OR BETTER CONDITION AT NO ADDED COST TO THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT.
- 17. UPON JOB COMPLETION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE INFORMATION TO GDPUD REGARDING ANY CHANGES MADE DURING CONSTRUCTION.
- 18. THE EXISTING WATER TREATMENT PLANT (WTP) SHALL REMAIN OPERATIONAL AT ALL TIMES.
- 19. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, COUNTY, AND LOCAL LAWS AND ORDINANCES AND REGULATION OF THE DEPARTMENT OF INDUSTRIAL RELATIONS. OSHA, CAL OSHA, NPDES, AND INDUSTRIAL ACCIDENT COMMISSION RELATING TO THE SAFETY AND CHARACTER OF THE WORK, EQUIPMENT, AND LABOR PERSONNEL.
- 20. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS AND UTILITIES WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL IMPROVEMENTS OR UTILITIES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.



### **EXISTING CONDITION**



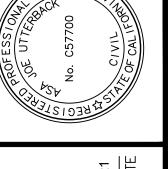
PROPOSED CONDITION

1. CONTRACTOR TO FURNISH AND INSTALL BLIND FLANGE ON EXISTING 12" BFV AFTER DISCONNECTING 12" RW SERVICE TO EXISTING

- 2. CONTRACTOR SHALL COORDINATE ALL WORK ON EXISTING 12" RW LINE WITH THE DISTRICT. A DISTRICT REPRESENTATIVE SHALL BE PRESENT DURING EXCAVATION WITHIN 5-FT OF THE RW
- 3. OPERATION OF ANY VALVES SHALL BE PERFORMED BY GDPUD PERSONNEL ONLY. UNDER NO CIRCUMSTANCES SHALL ANYONE OTHER THAN A REPRESENTATIVE OF GDPUD OPEN OR CLOSE ANY VALVE IN A GDPUD SYSTEM. SHUT DOWNS FOR THE PURPOSE OF COMPLETING THIS WORK ARE NOT PERMITTED UNLESS OTHERWISE AUTHORIZED BY THE DISTRICT.



BID SET JUNE 2021



ngineering, Ш C

oastland

TIONS, ETAIL Ш S М  $\overline{\mathbf{B}}$ A GE Ш 三三三 Щ

(1)

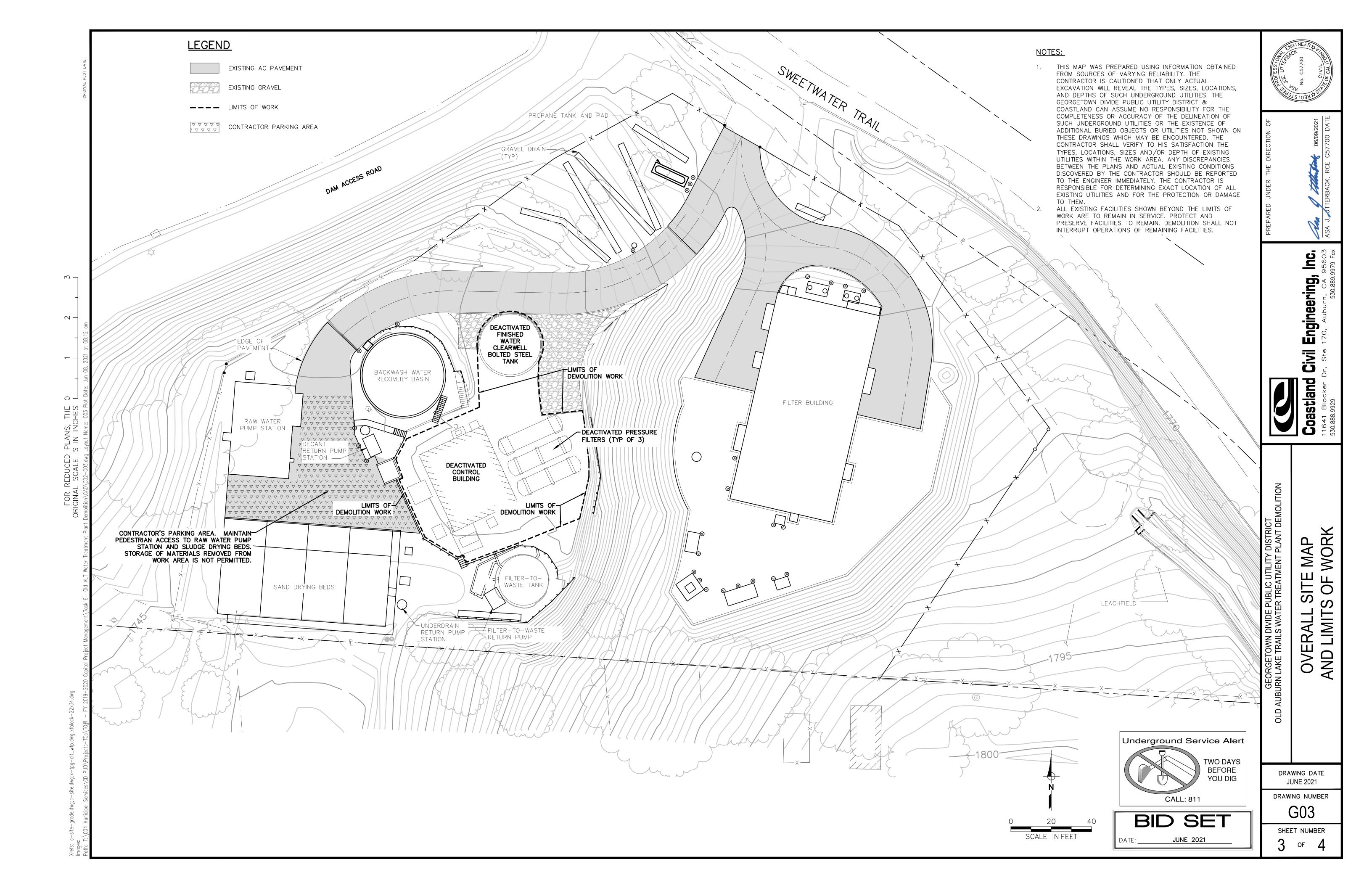
/ DISTRICT PLANT DEMOL

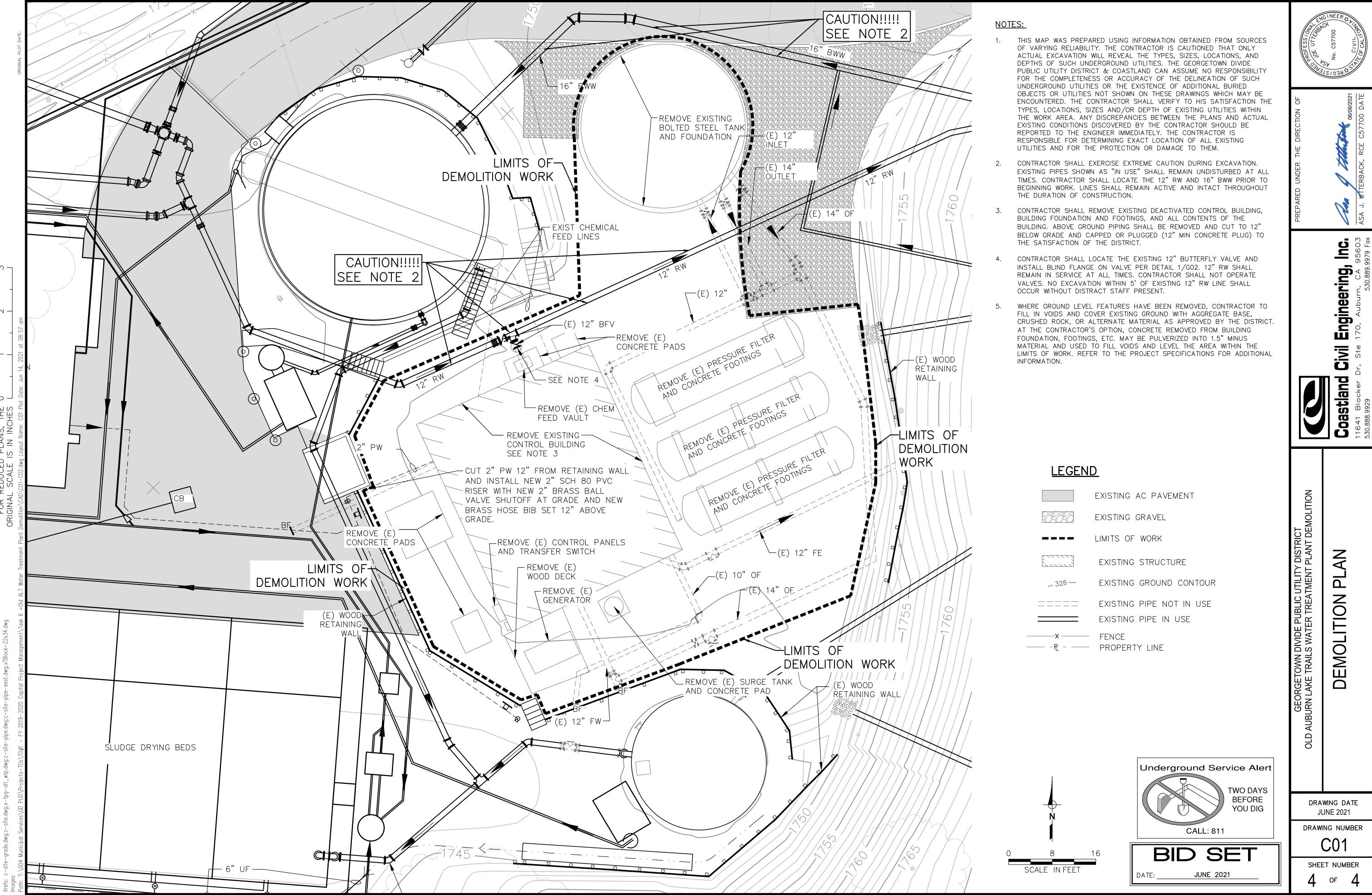
UTILITY TMENT F

DRAWING DATE JUNE 2021

DRAWING NUMBER G02

SHEET NUMBER OF





#### **CONTRACT DOCUMENTS**

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

**Georgetown Divide** 

**Public Utility District** 

**Bid Documents** 

**JUNE 2021** 

# GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT CONSTRUCTION CONTRACT DOCUMENTS TABLE OF CONTENTS

1	Bidding R	equirements	1-1
	1.1	Invitation To Bid	
	1.2	Bid	1-3
	1.3	Bid Schedule	1-5
	1.4	Designation Of Subcontractors	1-6
	1.5	Bid Bond	1-7
	1.6	Experience Qualifications	
	1.7	Equal Employment Clause	1-12
	1.8	Certification Regarding Debarment, Suspension, and Other	
		Responsibility Matters	. 1-14
	1.9	Non Collusion Affidavit	
	1.10	Nondiscrimination Clause	
2	Instruction	ns to Bidders	2-1
	2.1	Introduction	2-1
	2.2	Specifications	2-1
	2.3	Local Conditions	2-1
	2.4	Form of Bid and Signature	2-2
	2.5	Submission of Bids	
	2.6	Preparation of the Bid	2-3
	2.7	Bid Guarantee	2-4
	2.8	List of Subcontractors; Subcontracting Limits	2-4
	2.9	Interpretation of Contract Documents	
	2.10	Modification of Bids	2-5
	2.11	Withdrawals of Bids	2-5
	2.12	Discrepancies	2-6
	2.13	Servicing and Maintenance	
	2.14	Disqualification of Bidders	2-6
	2.15	Award of Contract	2-6
	2.16	Contract Bonds	2-7
	2.17	Execution of Contract	2-7
	2.18	Return of Bid Guarantees	2-8
	2.19	Power of Attorney	2-8
	2.20	Time of Completion	2-8
	2.21	Licensing Requirements for Contractors	
	2.22	Prevailing Wages	
	2.23	Bid Protest	
	2.24	Ineligible Contractors and Subcontractors	2-10

3	Contract F	orms	3-1
	3.1	Contract	3-1
	3.2	Faithful Performance Bond	3-5
	3.4	Payment Bond	3-7
	3.5	Contractor's Certification of Worker's Compensation	.3-9
	3.6	Notice of Award	3-10
	3.7	Acceptance of Award	3-11
	3.8	Notice to Proceed	
4	Abbreviation	ons and Definitions	4-1
	4.1	Abbreviations	4-1
	4.2	Definitions	4-2
5	General C	onditions	5-1
	5.1	Intent Of Contract Documents	
	5.2	CONTRACTOR'S UNDERSTANDING	5-1
	5.3	CHANGES IN THE WORK	5-1
	5.4	Contractor Claims for Extra Costs and Time	
		Extensions	5-4
	5.5	Special Litigation Provisions	5-7
	5.6	Large Claim Resolution	5-8
	5.7	Guarantee	
	5.8	Authority Of The Engineer	5-10
	5.9	Drawings	5-10
	5.10	Construction Staking And Surveys	5-12
	5.11	Permits And Regulations	5-12
	5.12	Conformity With Contract Documents	5-12
	5.13	Coordination And Interpretation Of Contract	
		Documents	5-13
	5.14	Subcontracts	5-13
	5.15	Cooperation Of Contractors	5-14
	5.16	Superintendence	5-14
	5.17	Inspection Of Work	5-15
	5.18	Tests	5-16
	5.19	Removal of Rejected and Unauthorized Work and	
		Materials	5-17
	5.20	Deductions For Uncorrected Work	5-17
	5.21	Equipment And Plants	5-17
	5.22	Character Of Worker	5-18
	5.23	Separate Contracts	5-18
	5.24	Materials	
	5.25	Storage Of Materials; Storage Areas	
	5.26	Trade Names And Alternatives	
	5.27	Certificates of Compliance.	
	5.28	Assignment	

5.29	Use of Completed Portions, Right To Operate	
	Unsatisfactory Equipment Or Facilities	5-20
5.30	Lands for Work, Right-of-Way Construction Roads,	
	Temporary Utility Services	5-21
5.31	Progress Schedule	
5.32	Commencement and Progress of the Work and Time	
	of Completion/Construction Sequence	5-22
5.33	Suspension of Work	
5.34	Termination for Default - Damages for Delay –	
	Timely Extension	5-24
5.35	Rights of Agency Upon Termination	5-25
5.36	Failure to Complete the Work in the Time Agreed:	
	Liquidated Damages	5-26
5.37	Clean-Up	
5.38	Compliance with Laws; Permits; Taxes	
5.39	Prevailing Wage, and Travel and Subsistence Pay	
5.40	Labor Discrimination	
5.41	Eight-Hour Day Limitation	
5.42	Employment of Apprentices	5-29
5.43	Water Pollution	5-29
5.44	Patents	5-30
5.45	Public Convenience	5-30
5.46	Underground Utilities	5-31
5.47	Safety and Trenching	
5.48	Protection of Person and Property	
5.49	Responsibility For Repair of Facilities	5-35
5.50	Agency's Repair	
5.51	Contractor's License Notice	5-35
5.52	Insurance	
5.53	Indemnity and Litigation Cost	
5.54	Protection of Work	
5.55	Accidents	
5.56	No Personal Liability	5-42
5.57	Measurement of Quantities	
5.58	Scope of Payment	
5.59	Progress Estimate	
5.60	Progress Payments	-
5.61	Final Acceptance and Date of Completion	
5.62	Final Payment	
5.63	Final Release	
5.64	Right to Withhold Payments	
5.65	Waiver of Interest	
5.66	Satisfaction of Claims and Liens	
5.67	Assignment	
5.68	Availability of Information	

	5.69	Hazardous Materials	5-48
	5.70	Integration	5-48
	5.71	Waiver	
	5.72	Remedies Not Exclusive	
	5.73	Severability	
	5.74	Governing Law and Venue	
	5.75	Notices	
•		ovisions	
6-1 GE	ENERA		
		General Description of Work	
		Preconstruction Meeting	
		Work Schedule	
		Contractor's Office, Equipment, and Storage Facilities	
		Pre-Construction Photographs	
		Safety and Health	
		Hazardous Materials	
		Workmanship	
		Cleanup	
		Contractor's Utilities	
		Shop Drawings, Product Data, and Samples	
		Environmental Measures	
		Measurement and Payment	6-7
6-2 EX		G FACILITIES	
		Existing Facilities	
		Modifications to Existing Facilities	
	6-2.03	Removal of Miscellaneous Items	6-8
		Measurement and Payment	6-8
6-3 SI		MOLITION	
		J 1	6-8
	6-3.02	Submittals	6-9
		Existing Pressure Filters	6-9
		Existing Control Building	
	6-3.05	Existing Piping	6-9
	6-3.06	Existing Bolted Steel Tank	6-10
		Existing Generator	
		Finished Grade	
		Measurement and Payment	6-11
6-4 M	OBILIZ/		
		Mobilization	
	6-4.02	Measurement and Payment	6-11

#### 1 - BIDDING REQUIREMENTS

#### 1.1 Invitation to Bid

NOTICE IS HEREBY GIVEN that the Georgetown Divide Public Utility District ("District") will be accepting bids for the demolition of specified elements of the Old Auburn Lake Trails Water Treatment Plans in Northwestern El Dorado County, near the community of Georgetown, approximately 40 miles east of Sacramento. The project site is located at 3650 Sweetwater Trail; Cool, CA. Bids are due no later than **Friday**, **July 9**, **2021 at 2:00 PM** (Local Time), or such later date as may be set by addendum, and then will be publicly opened and read for the construction of the following project:

## OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

Bids may be mailed to the District Office or hand delivered at 6425 Main Street, P.O. Box 4240, Georgetown, CA 95634. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." When using the mail or other delivery system, the Bidder is totally responsible for the mail or other delivery system delivering the Bid at the Place and prior to the time indicated in the Advertisement for Bid.

The project is located in northwestern El Dorado County at the District's Auburn Lake Trails Water Treatment Plant (3650 Sweetwater Trail; Cool, CA).

The proposed work consists of demolition of the old ALT Water Treatment Plant, removal of existing pressure filters, generator and generator pads, bolted steel tank, building demolition, and removal of miscellaneous concrete pads, pipes, and other items from the site. The work also consists of leveling the site and placing a 3" layer of gravel or crushed rock, site cleanup, and compliance with all applicable federal, state, county, local, AWWA, and CalOSHA, standards and regulations.

The project shall be complete and operable by the District within 30 working days from issuance of the Notice to Proceed.

The Contract Documents, including the Project Specifications, may be examined and obtained online at the link on the District website: <a href="www.gd-pud.org/#bids\_& proposals">www.gd-pud.org/#bids\_& proposals</a>. In order to be included on the plan holders list, receive notification of addenda, and to be eligible to submit a bid; interested parties must download the Contract Documents through the link on the District website.

The Bidder's attention is directed to the Instructions to Bidders for complete instructions regarding submission of bid.

Each Bid must be submitted on the prescribed forms and accompanied by cash, a cashier's check, certified check or bid bond executed on the prescribed form payable to the District in an amount not less than ten percent (10%) of the amount bid.

A mandatory pre-bid meeting will be held at the project site on Wednesday, June 23, 2021 at 10:00 a.m.

Any questions addressing the interpretation or clarification of the Contract Bid Forms or the Bid Documents must be submitted in writing by email not later than seven (7) calendar days before the date bids will be opened. Questions regarding the bidding documents shall be **submitted in writing** to:

Elaine Greif 530-537-3854 greif@coastlandcivil.com

The successful bidder will be required to furnish a Payment Bond and Faithful Performance Bond each in the full amount of the Contract price, and insurance with certificates and endorsements of insurance, as provided in the Contract Documents. The required bonds must be provided by a surety insurer who is duly admitted by the Insurance Commissioner of the State of California.

The successful bidder must possess the following classification or type of contractor's license issued by the State Contractor's License Board: <u>Class A, General Engineering Contractor and Class C-21 - Building Moving/Demolition Contractor and a Hazardous Substance Removal Certification (HAZ) and a Asbestos Certification (ASB).</u>

The attention of bidders is directed to the requirements and conditions of employment to be observed and prevailing wage rate to be paid under Contract. Copies of the prevailing rate of per diem wages are on file at the District's office and will be made available to any interested party on request.

The District reserves the right to reject all bids. Any bid not conforming to the intent and purpose of the Contract Documents may be rejected. The District may extend the time to award the Contract for a period of time which shall not extend beyond 60 days from the bid opening date.

The following forms must be executed and submitted to complete the bid process:

- a) Bid
- b) Bid Schedule
- c) Designation of Subcontractors
- d) Bid Bond
- e) Experience Qualifications
- f) Certification regarding Debarment, Suspension, and other Responsibility
  Matters
- g) Non-collusion Affidavit
- h) Nondiscrimination Clause
- i) Addendum Acknowledgement

Dated this	day of	, 2021	GEORGETOWN PUBLIC UTILITY DISTRICT  By:
			(NAME)
			(TITLE)

#### 1.2 BID

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

NAME OF BIDDER:		
STREET ADDRESS:		
CITY, STATE, ZIP:		
PHONE NO.	FAX NO	
CONTRACTOR LICENSE TYPE & NO.:		

The work for which this proposal is submitted is for construction in conformance with the Special Provisions (including the payment of not less than the prevailing wage rates), the project plans, if any, described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the Georgetown Divide Public Utility District specifications.

The Special Provisions for the Work to be done are dated **JUNE 2021** and are entitled:

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

Bids are to be submitted for the entire work. The amount of the bid for comparison will be the total of all items.

The Bidder shall set forth, for each unit basis item of work, a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In the case of a discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

- (a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;
- (b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc. or one-tenth, one-hundredth, etc. from the

entered total, the discrepancy will be resolved by mutual resolution between the two parties.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise, if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the item total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the Georgetown Divide Public Utility District, and that discretion will be exercised in the manner deemed by the Georgetown Divide Public Utility District to best protect the public interest in the prompt and economical completion of the work. The decision of the Georgetown Divide Public Utility District respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the bond(s) in the sums required by the State Contract Act, with surety satisfactory to the Georgetown Divide Public Utility District, and the insurance certificates within ten (10) days, not including Saturdays, Sundays, and legal holidays, after the Bidder has received notice from the Georgetown Divide Public Utility District that the contract has been awarded, the Georgetown Divide Public Utility District may, at its option, determine that the Bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this proposal shall operate and the same shall be the property of the Georgetown Divide Public Utility District.

When submitting its bid, the Bidder shall include security in the form of cash; cashier's check made payable to the District; a certified check made payable to the District or a bidder's bond executed by an admitted surety insurer, made payable to the District. The amount of security shall be 10 percent of the amount bid. Should the Bidder be awarded the contract, but fail to execute the contract, its security shall be forfeited to the District.

The Bidder has familiarized itself with the nature and extents of the Contract Documents, the Work, the site, the locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost,

progress or performance of the Work, and has made such independent investigations as Bidder deems necessary.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the plans therein referred to; and the contractor proposes, and agrees if this proposal is accepted, that they will contract with the Georgetown Divide Public Utility District, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the District as therein set forth, and that the contractor will take in full payment therefor the following prices, to wit:

#### 1.3 BID SCHEDULE

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

Item No.	Items	Estimated Quantity	Unit of Measure	Price per Unit	Total
1	Mobilization, Insurance, Bonds	1	LS	\$	\$
2	Site Demolition	1	LS	\$	\$
Total Bid Amount:					\$

	Total Amount in Words	
Contractor Company Name: _		

#### 1.4 DESIGNATION OF SUBCONTRACTORS

In compliance with Public Contract Code section 4100 et seq. each bidder shall set forth below the(a) name and location of the mill, shop, or office of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement to be performed under these specifications in excess of one-half of 1% of the Contractor's total bid, (b) description of the type of work to be performed by each such subcontractor, and (c) portion of the work (expressed in dollar amount) that will be performed by each such subcontractor.

Subletting or subcontracting of any portion of the work in excess of one-half of I% of the Contractor's total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding reduced to writing as a public record of the Agency setting forth the facts constituting the emergency or necessity.

	Subcontractor (name and location)	Subcontractor License No.	Description of Subcontractor Work	Estimated Portion of Work (in%)
_				
_				
_				
_				

#### 1.5 BID BOND

KNOW ALL WEN BY THESE PRESENTS, THAT WE, THE UNDERSIGNED
, Contractor as Principal; and
, as Surety, are hereby held and bound unto <b>Georgetown Divide Public Utility District</b> , hereinafter called the District, in the sum of \$which sum is equal to at least ten percent of the total amount of the Bid, payment of which sum,
to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

IZNOW ALL MEN BY THESE DESCENTS THAT WE THE HADEDSIONED

The condition of the above obligation is such that whereas the Principal has submitted to the District a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing, for the construction of the following public works project:

## OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

NOW, THEREFORE,

- (a) If the Bid is rejected, or in the alternate,
- (b) If the Bid is accepted and the Principal shall sign and deliver a Contract, in the form of the Contract attached hereto and shall execute and deliver Performance and Payment Bonds in the forms attached hereto and shall deliver proof of insurance (all completed in accordance with the Contract Documents), and shall in all other respects perform the agreement created by the acceptance of the Bid;

Then, this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the District may accept such Bid, and said Surety does hereby waive notice of any such extension.

instrument under their several se	OF, the above-bounded parties have executed the eals this day of 2021, the native party being berete effixed and these presents as	me
	orate party being hereto affixed and those presents of sentative, pursuant to authority of its governing body.	luly
	(Contractor as Principal)	
	By:	
(Seal)	[Name]	
	[Tide]	
	(Surety)	
(Seal)		
	By:	
	[Name]	
	[Title]	

#### 1.6 EXPERIENCE QUALIFICATIONS

		_	iness, under the present
business name for covered in the Bid ex		-	of a nature similar to that
	a contractor, has n		torily complete a contract
			ted in the last three years de additional experience  Contract Amount
<u>1 eai</u>	<u>Owner</u>	Type of Work	Contract Amount
			. <del></del>
			<del></del>

The following is a list of plant and equipment owned by the Bidder, which is definitely available for use on the proposed work as required. (Bidder may provide additional list of plant and equipment available).

<u>Quantity</u>	Name, Type and Capacity	<u>Condition</u>	<u>Location</u>
<del></del>		<del></del> -	

Executed on	, 2021, at	
I declare under penalty the foregoing is true and corre	/ of perjury under the laws o ect.	f the State of California that
BIDDER		
[Authorized signature]		
[Company/firm name]		
[Name]		
[Title]		

#### 1.7 EQUAL EMPLOYMENT CLAUSE

#### (40 CFR 60-8.4(b) and EO 11246 & 11375 & 12086)

The Federal Equal Employment Opportunity Law requires that all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause. The required notice follows this section.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The required notice follows this section.
- (4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of

September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States."

## 1.8 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

Name	e of Company/Entity:							
The p	prospective participant certifies to the best pals:	of its knowledge and belief that it and its						
(a)	Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by a government entity (Federal, State, or local).							
(b)	Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;							
(c)	Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraphs (a) and (b) of this certification; and							
(d)	Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Section 1001, a false statement may result in a fine of up to \$ 10,000 or imprisonment for up to five (5) years, or both.							
Name	e and Title of Authorized Representative (	Typed/printed)						
Signa	ture of Authorized Representative	Date						
	m unable to certify to the above statement							

# 1.9 NON COLLUSION AFFIDAVIT\*

# [TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID]

State of California Co	ounty of				
	, being first duly swor	n, deposes and says that he or			
she is	of	, the			
she is					
Ву:					
personally known to me OR person(s) whose name(s) is to me that he/she/they exect that by his/her/their signature of which the person(s) acted	R proved to me on the basis of s/are subscribed to the within cuted the same in his/her/their res(s) on the instrument the p	f satisfactory evidence to be the instrument and acknowledged authorized capacity(ies), and erson(s), or entity upon behalf			
(Notary Public	<u> </u>				

\*Note: Public Contracts Code 7106 requires this non-collusion affidavit be submitted with a bid for any public works contract of a public entity.

# [RESERVED FOR NOTARY]

#### 1.10 NONDISCRIMINATION CLAUSE

- 1. During the performance of this contract, contractor and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40) or sex. Contractors and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of Division 4 of Title 2 or the California Administrative Code are incorporated into this contract by reference and made a part hereof as if set forth in full. Contractor and its subcontractor shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- 2. This contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perfom1 work under the contract.

THE UNDERSIGNED CERTIFIES THAT THE CONTRACTOR WILL COMPLY WITH THE ABOVE REQUIREMENTS.

CONTRACTOR OR SUBCONTRACTOR NAME:		
CERTIFIED BY:		
NAME:	TITLE:	
SIGNATURE:	DATE:	

#### 2 INSTRUCTIONS TO BIDDERS

# 2.1 INTRODUCTION

Each bid shall be in accordance with these Instructions to Bidders and other applicable provisions of the Contract Documents. The Invitation to Bid will specify whether Contract Documents are available on a purchase or deposit basis. Where payment for such sets is specified, no refund will be made.

# 2.2 SPECIFICATIONS

Additional copies of specifications may be obtained at the District office for the cost of reproduction.

# 2.3 LOCAL CONDITIONS

- **2.3.1** The quantities of work or material stated in the unit price items of the Bid Schedule are given only as a basis for the comparison of Bids, and the District does not represent or warrant that the actual amount of work or material will correspond therewith, but reserves the right to increase or decrease the quantity of any unit price item of the work as may be deemed necessary or expedient by the Engineer.
- 2.3.2 The Bidder shall examine carefully the site of the work contemplated and the Contract Documents. The submission of a Bid shall be conclusive evidence 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 the materials to be furnished, and as to the requirements of the Contract Documents. Bidders shall thoroughly examine and be familiar with the Project Specifications. The failure of any bidder to receive or examine any form, instrument, addendum or other document, or to visit the site and acquaint himself with conditions there existing shall in no way relieve the Bidder from any obligation with respect to its proposal or to the Contract.

The Specifications for the work show conditions as they are supposed or believed by the District or their representatives to exist; but it is neither intended nor to be inferred that the conditions as shown thereon constitute a representation by the District or their representatives that such conditions are actually existent, nor shall the District or their representatives be liable for any loss sustained by the Contractor as a result of any inference or extrapolation drawn by the Bidder between conditions as described in the specifications and the actual conditions revealed during the progress of work, or otherwise.

The Bidder's attention is directed to the possible existence of obstructions and public or private improvements which may be within the limits of the work or adjacent thereto.

- **2.3.3** Where the District or their representatives have made investigations of surface and subsurface conditions in areas where work is to be performed under the Contract, or in other areas, some of which may constitute possible local material sources, such investigations were made only for the purpose of study and design.
- **2.3.4** It is expressly understood and agreed by bidder or Contractor that neither the District nor their representative assumes any responsibility whatsoever with respect to the sufficiency or accuracy of the investigations thus made, the records thereof, or of the interpretation set forth therein or made by the District in their use thereof and there is no representation, warranty or guarantee, either express or implied, that the conditions indicated by such investigations or records thereof are correct or representative of those existing throughout such areas or any part thereof, or that unanticipated developments may not occur or that materials other than, or in proportions different from, those indicated may not be encountered.
- **2.3.5** The availability or use of information described in these Instructions to Bidders and other bid documents shall not be construed in any way as a waiver of the provisions of the Instructions of Bidders and a Bidder or Contractor is cautioned to make such an investigation and examination as it deems necessary to satisfy itself as to conditions to be encountered in the performance of the work and, with respect to possible local material sources, the quality and quantity of material available from such property and the type and extent of processing that may be required in order to produce material conforming to the requirements of the Specifications.
- **2.3.6** No information derived from such inspection of records of investigations or compilations thereof made by the Engineer, will in any way relieve the bidder or Contractor from any risk or from properly fulfilling the terms of the Contract.
- **2.3.7** Information derived from inspection of topographic maps, or from Plans showing location of utilities and structures will not in any way relieve the Contractor from any risk, or from properly examining the site and making such additional investigations as it may elect, or from properly fulfilling all the terms of the Contract.

# 2.4 FORM OF BID AND SIGNATURE

Bids shall be submitted only on the forms attached hereto or copies thereof and shall be enclosed in a sealed envelope and marked and addressed as hereinafter directed. The Bidder shall state in figures the unit prices or the specific sums as the case may be, for which he proposes to supply the labor, materials, supplies tools or equipment, and perform the work required by the Contract Documents.

If the Bid is made by an individual, it shall be signed by its full name and its address shall be given; if it is made by a partnership, it shall be signed with the partnership name by a member of the partnership, who shall also sign his own name, and the name and address of each member of such partnership shall be given; and, if it is made by a corporation the name of the corporation shall be given and it shall be signed by its duly authorized officer or officers, the name(s) and title(s) of all signing

officers of the corporation shall be given, and the address of the corporation and the state in which incorporated shall be stated.

Bids will be considered only from persons licensed as required under applicable provisions of the Contractors License Law (California Business and Professions Code section 7000, et seq.) and rules and regulations adopted pursuant thereto; and each bidder shall insert its type of contractor's license, license number, and other requested information in the place provided in the bid. No oral, telephonic, e-mail, facsimile or telegraphic Bid or modification of a Bid will be considered.

#### 2.5 SUBMISSION OF BIDS

**2.5.1** All Bids must be submitted not later than the time prescribed, at the place and in the manner set forth in the Invitation to Bid. The District shall not consider any Bid received after the time fixed or received at any place other than the place stated in the Invitation to Bid. Bids must be made on the prescribed Bid forms. A complete Bid requires submission of fully completed and executed: Bid, Designation of Subcontractors (if applicable), Bid Bond (or other bid guarantee), Experience Qualifications and Non-collusion Declaration.

Each Bid must be submitted in a sealed envelope, so marked as to indicate its contents without being opened, and addressed in conformance with the instructions in the Invitation to Bid. The bidder is wholly responsible to see that its Bid is submitted at the time and place named for the opening of bids.

- **2.5.2** Bids shall acknowledge receipt of all addenda (identified by addendum number) issued during the bidding period. Failure to acknowledge an addendum or clarification may result in the Bid being rejected as not responsive.
- **2.5.3** Bids shall be open at the time and place specified in the Invitation to Bid, unless changed by addendum. All Bids will be opened and read publicly. Bidders, their representatives, and other interested parties, are invited to be present at the opening.

# 2.6 PREPARATION OF THE BID

- **2.6.1** Blank spaces in the Bid shall be properly completed. The phraseology of the Bid must not be changed and no additions shall be made to the items mentioned therein. Unauthorized conditions, limitations or provisions attached to a Bid may render it nonresponsive and may cause its rejection. If erasures, interlineations or other changes appear on the form, each erasure, interlineation or change must be initialed by the person signing the Bid. Alternative Bids will not be considered unless specifically provided for in the Bid Schedule. Where performance and/or labor and material bonds are required, the Bidder shall name in his Bid the surety or sureties that have agreed to furnish the bonds.
- **2.6.2** Section 5.38 of the Contract General Conditions provides that the successful Contractor shall pay all federal, state and local taxes, including manufacturers' taxes, sales taxes, use taxes, processing taxes, and payroll, wage,

insurance, social security, and unemployment taxes on wages, salaries or any remuneration paid to Contractor's employees. A bidder's bid prices shall be deemed to include all applicable taxes, and there shall be no separate bid item or billing for taxes.

#### 2.7 BID GUARANTEE

- **2.7.1** All Bids shall be accompanied by a Bid Bond, as defined, made payable to the District. The Bid Bond must be enclosed in the same envelope with the Bid. The amount of the Bid Bond shall be not less than 10 percent of the total amount of the Bid.
- **2.7.2** If a bond is utilized, the Attorney-in-Fact (resident agent) who executes the Bid Bond on behalf of the surety company must attach a copy of his Power of Attorney as evidence of his authority. A notary shall acknowledge the power as of the date of execution of the surety bond which it covers. A bond will be accepted only if it is made out on either the Bid Bond form enclosed in these documents or on a form which substantially conforms to it.

# 2.8 LIST OF SUBCONTRACTORS; SUBCONTRACTING LIMITS

- **2.8.1** Each Bidder shall set forth in its Bid on the form provided the following information in accordance with the provisions of California Public Contract Code section 4100, et seq.: (a) The name and the location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement, and of each subcontractor who, under subcontract to the Contractor, is to specifically fabricate and install or provide a portion of the work or improvement according to the Contract Documents, in any amount in excess of 1/2 of 1 percent of the Contractor's total Bid; and (b) The portion of the work that will be done by each such subcontractor. Only one subcontractor shall be listed for each such portion of the work as defined in the Bid. If the Bidder fails to specify a subcontractor for any portion of the work to be performed under the Contract, the Bidder agrees to perform that portion of the work itself.
- 2.8.2 The Contractor shall perform with its own organization work amounting to not less than 50 percent of the original total contract price, except that any designated "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the original total contract price before computing the amount of work required to be performed by the Contractor with its own organization. When items of work in the Bid schedule are preceded by the letter (S), such items shall be deemed designated "Specialty Items." Where an entire item is subcontracted, the value of work subcontracted will be based on the contract item bid price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the contract item bid price, determined from information submitted by the Contractor, subject to approval by the Engineer.

# 2.9 INTERPRETATION OF CONTRACT DOCUMENTS

- **2.9.1** Any explanation desired by the bidders regarding the meaning or interpretation of any of the Contract Documents must be requested in writing, with sufficient allowance of time for receipt of reply before the time set for opening of Bids. Any such explanations or interpretations will be made only in the form of addenda to the documents and will be furnished to all bidders who shall submit all addenda with their Bids. Neither the Engineer nor any representative of the District is authorized to give oral explanations or interpretations of Contract Documents, and a submission of a Bid constitutes agreement by the bidder that he has placed no reliance on any such oral explanation or interpretation. However, the Engineer may, upon inquiry by bidder, orally direct the bidder's attention to specific provisions of the Contract Documents which cover the subject of the inquiry.
- **2.9.2** The Bidder shall review the Plans and Specifications prior to submission of his bid and shall report any errors and omissions noted by the Bidder to the District prior to such submission.

# 2.10 MODIFICATION OF BIDS

A Bidder may modify its Bid by written communication provided such communication is received by the District prior to the closing time for receipt of Bids. The written communication should not reveal the Bid price but should state the addition or subtraction or other modification so that the final prices or terms will not be known by the District until the sealed bid is opened.

# 2.11 WITHDRAWAL AND RETURN OF BIDS

Bids may be withdrawn without prejudice by written, e-mail, facsimile or telegraphic requests received from the Bidder prior to the time for opening of Bids, and Bids so withdrawn will be returned to bidders unopened. No Bid may be withdrawn after the hour affixed for opening Bids without rendering the accompanying Bid Bond subject to retention as liquidated damages in like manner as in the case of failure to execute the Contract after award, as provided in the Contract Documents. Negligence on the part of the Bidder preparing its Bid shall not constitute a right to withdraw the Bid subsequent to the opening of Bids. Any Bid received after the bid submission deadline shall be returned to the bidder unopened.

# 2.12 DISCREPANCIES

In the case of discrepancy between unit prices and totals, unit prices will prevail. In case of discrepancy between words and figures, words will prevail.

# 2.13 SERVICING AND MAINTENANCE

Each Bidder must, if requested, furnish evidence that there is an efficient service organization which regularly carries a stock of repair parts for the proposed equipment

GDPUD 2-5
OLD AUBURN LAKE TRAILS
WATER TREATMENT PLANT DEMOLITION PROJECT

to be furnished and installed in the work and that the organization is conveniently located for prompt service.

# 2.14 DISQUALIFICATION OF BIDDERS

- **2.14.1** More than one Bid from an individual, firm, partnership or corporation under the same or different names will not be considered. Reasonable grounds for believing that any individual, firm, partnership or corporation is interested in more than one Bid for the work contemplated may cause the rejection of all Bids in which the individual, firm, partnership or corporation is interested. If there is reason for believing that collusion exists among the bidders, any or all Bids may be rejected. Bids in which the price is obviously unbalanced may be rejected.
- **2.14.2** All bidders are put on notice that any collusive agreement fixing the prices to be bid so as to control or affect the awarding of this Contract is in violation of the competitive bidding requirements applicable to the District and may render void any contract let under such circumstances.

#### 2.15 AWARD OF CONTRACT

- **2.15.1** The District reserves the right to accept or reject any and all Bids during the time for awarding the Contract, and to waive any informality or irregularity in any Bid. No Bid can be withdrawn during the time for awarding the Contract. The time for awarding the Contract is provided in section 2.17.
- **2.15.2** Before a Bid is considered for award, the District may, in addition to the Experience Qualifications form, require a Bidder to submit a statement of facts and detail as to his business, technical organization and financial resources and equipment available and to be used in performing the work. Additionally, the District may require evidence that the Bidder has performed other work of comparable magnitude and type.

The District expressly reserves the right to reject any Bid if it determines that the business and technical organization, equipment, financial and other resources or other experience of the Bidder (including the Bidder's subcontractors) is not sufficiently qualified for the work bid upon and, therefore, justifies such rejection.

**2.15.3** The award of the Contract, if it is awarded, will be to the lowest responsible responsive Bidder whose Bid complies with the requirements of the Contract Documents.

The award of Contract will be made by the Board of Directors. The Contractor shall execute the Contract within ten (10) work days after receipt of the Contract from the District.

# 2.16 CONTRACT BONDS

**2.16.1** The successful Bidder shall furnish both a Performance Bond and a Payment Bond in the type, form and amount specified in the forms included with the

GDPUD 2-6
OLD AUBURN LAKE TRAILS
WATER TREATMENT PLANT DEMOLITION PROJECT

Contract Documents. These bonds shall be furnished on such forms or on substantially similar forms acceptable to the District. The Payment Bond shall comply with California Civil Code sections 3247 and 3248 and applicable provisions of the California Bond and Undertaking Law (California Code of Civil Procedure section 995.010 et seq.). The bonds shall be obtained from a responsible corporate surety (or sureties) acceptable to the District, who is (or are) duly admitted by the Insurance Commissioner of the State of California to act as surety upon bonds and undertakings. The surety (or sureties) shall furnish reports as to its financial condition from time to time as requested by the District. The premiums for the bonds shall be paid by the successful Bidder.

- **2.16.2** If any surety becomes unacceptable to the District, is deemed insolvent, is no longer an admitted surety in California, or fails to furnish reports as to its financial condition as requested by the District, the Contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of the District and of persons supplying labor or materials in the prosecution of the work contemplated by this Contract.
- **2.16.3** In the event of any conflict between the terms of the Contract and the terms of the bonds, the terms of the Contract shall control and the bonds shall be deemed to be amended thereby. Without limiting the foregoing, the District shall be entitled to exercise all rights granted to it by the Contract in the event of default, without control thereof by the surety, provided that the District gives the surety notice of such default at the time or before the exercise of any such right by the District, and, regardless of the terms of the bonds, the exercise of any such right by the District shall in no manner affect the liability of the surety under the bonds.

#### 2.17 EXECUTION OF CONTRACT

The successful Bidder will be notified in writing by the District of the award of the Contract within thirty (60) days after opening of Bids, unless the time period is extended as provided in the Invitation to Bid. Accompanying the District's notice of award will be the Contract, which the District may require to be executed in duplicate or triplicate. Within fifteen (15) days following receipt of such notice of award, the successful bidder will be required to execute and return the original contract(s), together with the performance and payment bonds, and the required certificates and proof of insurance documents (see sections 2.4 and 5.52), to the District. Failure to do so shall be just cause for annulment of the award and for forfeiture of the Bid Bond, which shall be retained as liquidated damages. It is agreed that the Bid Bond sum is a fair estimate of the amount of damages that the District will sustain by reason of such failure.

The District will promptly determine whether such Contract, bonds and insurance are as required by the Contract Documents, and upon such determination will forward a fully executed copy of the Contract and a Notice to Proceed with the work to the successful bidder. Signature by both parties constitutes execution of the Contract. In the event of failure of the lowest responsible responsive Bidder to sign and return the Contract with acceptable bonds and insurance as prescribed herein, the District may award the Contract to the next lowest responsible responsive Bidder, and, in the event

that Bidder fails to sign and return the Contract with acceptable bonds and insurance, the District may award the Contract to the then next lowest responsible responsive Bidder, etc.

The District will provide up to (3) sets of specifications to the successful bidder at no cost for use in constructing the project. Additional sets may be obtained from the District at an additional cost.

# 2.18 RETURN OF BID GUARANTEES.

All Bid Bonds will be held until the Contract has been finally executed, after which all Bid Bonds, other than any Bid Bonds which have been forfeited, will be returned to the respective bidders whose Bids they accompanied, but in no event shall non-forfeited bonds be held by the District beyond 60 days from the date that the District awards the Contract.

# 2.19 POWER OF ATTORNEY

The Attorney-in-Fact (resident agent) who executes the Performance Bond and Payment Bond on behalf of the surety company must attach a copy of his Power of Attorney as evidence of his authority. A notary public shall acknowledge the power as of the date of the execution of the bond which it covers.

#### 2.20 TIME OF COMPLETION.

The time of completion of the work to be performed under this Contract is the essence of the Contract. Delays and extensions of time may be allowed in accordance with the provisions of the General Conditions. The time allowed for the completion of the work is stated in the Contract.

# 2.21 LICENSING REQUIREMENTS FOR CONTRACTORS

The Contractor shall hold such licenses as may be required by the laws of the State of California for the performance of the work specified in the Contract Documents, and shall have the following classification or type of license for the work issued by the California State Contractors' License Board: Class A, General Engineering Contractor and Class C-21 - Building Moving/Demolition Contractor and a Hazardous Substance Removal Certification (HAZ) and a Asbestos Certification (ASB).

# 2.22 PREVAILING WAGES

In accordance with the provisions of Section 1770 of the Labor Code of the State of California, the Director of the Department of Industrial Relations has determined the general prevailing rate of per diem wages applicable to the Work to be done.

Copies of the prevailing rate of per diem wages are on file at the District's office, and will be made available to any interested party on request. The Contractor shall post

GDPUD 2-8
OLD AUBURN LAKE TRAILS
WATER TREATMENT PLANT DEMOLITION PROJECT

at each job site a copy of the determination of the Director of Industrial Relations of the prevailing rate of per diem wages.

The District requires that the Contractor and all his / her Subcontractors pay their employees on this Work a salary or wage at least equal to the prevailing salary or wage for Work of similar character in the locality in which the Work is performed. The Contractor shall, as a penalty, forfeit to the District the amount specified by law for each calendar day or portion thereof, for each employee paid less than the prevailing salary or wage for any of the Work done under the contract by him / her or any subcontractor under him / her.

The State Labor Code states that for violations of Public Works laws relating to payment of prevailing wages, the District will be required to withhold from any progress payments owed to the Contractor any amounts that have been forfeited as penalties, or as wages owed to employees, who have not paid the prevailing wage for Work performed.

# 2.23 BID PROTEST

Any bid protest must be submitted in writing to the District before 5:00 p.m. of the seventh day following the bid award.

- **2.23.1** The bid protest shall be in the form of a letter or memo and it shall include the following: a complete statement of the basis or bases for the protest, including any supporting documents; a reference to the specific portion(s) of the Contract Documents which forms the basis for the protest; and, the name, address and telephone number of the person representing the protesting bidder.
- **2.23.2** The bidder filing the protest shall concurrently transmit a copy of the protest document and any attached documentation to all other bidders with a direct financial interest who may be adversely affected by the outcome of the protest, including all other bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.
- **2.23.3** The District will issue a prompt decision on the protest. If the District determines that a protest is frivolous, the party originating the protest may be determined to be irresponsible and that party may be determined to be ineligible for future contract awards.
- **2.23.4** The procedure and time limits set forth in this section are mandatory and are the bidder's sole and exclusive remedy in the event of a bid protest. Failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code claim, lawsuit or other legal proceeding.
  - 2.23.5 For purposes of this section, a "bid protest" means any protest, objection,

complaint or challenge to, concerning or against (a) a rejection of a bidder for any reason, (b) a contract award to the apparent low bidder, (c) another bidder's bid, or (d) the legality or enforceability of the bid documents.

# 2.24 INELIGIBLE CONTRACTORS AND SUBCONTRACTORS

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

#### 3 - CONTRACT FORMS

# 3.1 Contract

This Conti	ract is made by and	between Ge	orgetown	Divide	Public	: Utility [	Distri	ct
("District") and		,	("Contract	or"),	doing b	ousiness	as	а
	, who agree	e as follows:	•	·				

**3.1.1** The Contractor agrees to furnish all materials, supplies, tools, equipment labor, and other services necessary to perform all the work required to construct and complete in a good and workmanlike manner, and in strict accordance with the Contract Documents, those certain improvements entitled:

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

- **3.1.2** All Contract Documents, and each and every provision thereof, relating to this Contract are hereby made a part of and incorporated by reference into this Contract. Any work called for in one Contract Document and not mentioned in others is to be performed and executed as if mentioned in all Contract Documents.
  - 3.1.2.1 The following are the applicable Contract Documents:
    - a) Section 1, Bidding Requirements
    - b) Section 2, Instructions to Bidders
    - c) Section 3, Contract Forms
    - d) Section 4, Definitions
    - e) Section 5. General Conditions
    - f) Section 6, Special Provisions
    - g) All Addenda, Change Orders, or other written modifications of the Contract Documents agreed to by the parties
- 3.1.2.2 In addition to the forms submitted during the bidding process, the following forms must be executed and submitted to complete the Contract award process.
  - a) Contract (to be executed following Board approval of bid award)
  - b) Attachment to Contract
  - c) Agreement
  - d) Faithful Performance Bond
  - e) Payment Bond
  - f) Contractor's Certificate Regarding Worker's Compensation
  - g) Acceptance of Notice of Award
  - h) Acceptance of Notice to Proceed
- 3.1.3 In consideration of the mutual covenants and agreements of the parties herein

contained and to be performed, the District agrees to pay the Contractor for the performance of the Contract, subject to additions and deductions provided therein, the following prices, and the Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials, labor, supplies, tools and equipment, and for doing all the work contemplated and embraced in this Contract, and for all risks of every description connected with the work and for all expenses incurred by or in consequence of the suspension or discontinuance of the work, and for well and faithfully completing the work and the whole thereof in the manner and according to the Contract Documents and the requirements of the Engineer under them, namely:

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

Item No.	Items	Estimated Quantity	Unit of Measure	Price per Unit	Total
1	Mobilization, Insurance, Bonds	1	LS		\$
2	Site Demolition	1	LS	\$	\$
	\$				

Total Contract Amount	\$
-----------------------	----

- **3.1.4** The District shall make payments on the account of the Contract as specified in the General Conditions of the Contract.
- **3.1.5** The Contractor shall commence the work required by the contract documents within fifteen (15) calendar days after the date of the Notice to Proceed, and will diligently prosecute the work to completion. Contractor shall complete the work in accordance with the following schedule:

<u>Project shall be complete and operable by the District within 30 working days from issuance of the Notice to Proceed.</u>

**3.1.6** The Contractor acknowledges that it has examined the prevailing rate of per diem wages as established and published by the California Director of Industrial Relations, copies of which are available for inspection at the office of the District. The Contractor agrees to pay workers not less than the applicable prevailing rate of per diem wages, as the same may be amended from time to time. The Contractor shall post at each jobsite a copy of the determination of the Director of Industrial Relations of the prevailing rate of per diem wages.

IN WITNESS WHEREOF, the day of	parties execute this Contract as follows this , 2021.							
Georgetown Divide Public Utility Dis	strict							
By: Secretary, Board of Directors								
Contractor								
Signature of Contractor	State of California Contractor's License Number & Classification							
Name of Contractor								
Title of Signatory	Type of Organization (circle): Partnership, Individual or Corporation							
Attest:								
Signature	State of Corporation							
Name of Person Attesting Signature of	Contractor							

#### 3.2 Faithful Performance Bond

	KNOW A	LL MEN	N BY TH	ESE PRE	ESENTS	, tha	it, Wh	HERE	AS, the	George	town
Divide	Public	Utility	District,	herein	designa	ated	as	the	"District"	, has,	on
		, 20	, a\	varded to							
hereina	after desi	gnated a	as the "C	ontractor'	', a cont	ract	for th	e con	struction	of the	OLD
AUBUI	RN LAKE	TRAIL	S WATER	RTREAT	MENT P	LAN	T DEI	MOLIT	TION PR	OJECT	•
1	NOW, TH	IEREFO	RE, WE,	the Cont	ractor, a	nd					
as Su	rety, are	held	and firml Do	y bound llars (\$				•	•		
			awful moi de, we bir	ney of the	United	State	s, for	the pa	ayment c	of which	sum
succes	sors, join	tly and s	everally,	firmly by	these pre	esen	ts.				

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden Contractor, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to abide by, and well and truly keep and faithfully perform the covenants, conditions, and agreements in the said contract and any alterations made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning and shall indemnify and save harmless, the District, its officers and agents as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and virtue and Principal and Surety; in the event suit is brought on this bond, will pay to the District such reasonable attorney's fees as shall be fixed by the court.

As a condition precedent to the satisfactory completion of the said contract, the above obligation in said amount shall hold good for a period of one (1) year after the completion and acceptance of the said work, during which time if the above bounded Contractor, his or its heirs, executors, administrators, successors or assigns shall fail to make full, complete, and satisfactory repair and replacements or totally protect the District from loss or damage made evident during said period of one year from the date of acceptance of said work, and resulting from or caused by defective materials or faulty workmanship in the prosecution of the work done, the above obligation in the said sum shall remain in full force and effect. However, anything in this paragraph to the contrary notwithstanding, the obligation of the Surety hereunder shall continue so long as any obligation of the Contractor remains.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall, in any way, affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the work

or to the specifications. Said Sur 2845 of the Civil Code of the State	ety hereby waives the provisions of Sections 2819 and e of California.
instrument under their seals this and corporate seal of each corporate	the above bounden parties have executed this day of, 2021, the name rate party being hereto affixed and these presents duly entative, pursuant to authority of its governing body.
(SEAL)	Contractor
	Signature for Contractor
	Title of Signatory
(SEAL)	Surety
	Signature for Surety
	Title of Signatory

# 3.4 Payment Bond

k	(NOW A	LL MEN	BY THE	SE PRESE	ENTS, TI	HAT WE	HERE/	AS, the	George	etown
Divide	Public	Utility	District,	hereinafte	er desi	gnated	as	"District	" has	on
		, 2	2021, aw	arded to						,
hereina	fter desi	gnated a	as "Contr	actor", a c	contract	for the	const	ruction o	of the	OLD
<b>AUBUR</b>	N LAKE	TRAILS	WATER	TREATM	ENT PLA	ANT DEI	MOLI7	TION PR	OJEC	Т.

WHEREAS, said Contractor is required to furnish a bond in connection with said contract, providing that if said Contractor, or any of his or its subcontractors, shall fail to pay for any materials, provisions, or other supplies used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, the Surety of this bond will pay the same to the extent hereinafter set forth:

	NC	DW,	THER	REFORE,	WE	the	undersigned	Contractor	as	Principal	and
							_, as Surety, a	re held and fi	irmly	bound unt	o the
Distri	ct,	in	the	penal	sum	of				Do	ollars
(\$			), \	which is th	ne equ	ıivaleı	nt of 100% of a	contract amo	unt, la	awful mon	ey of
the U	Inite	d St	ates, fo	or the pa	yment	of w	hich sum will	and truly to	be r	nade, we	bind
ourse	lves	s, ou	r heirs	, executo	rs, ad	minis	trators, and si	uccessors, jo	ointly	and seve	rally,
firmly	by '	these	e prese	nts.				-			-

THE CONDITION OF THIS OBLIGATION IS SUCH, that if said Contractor, his or its heirs, executors or administrators, successors or assigns, shall fail to pay for any materials, provisions, or other supplies used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind or for amount due under the Unemployment Insurance Act with respect to such labor, or of the Revenue and Taxation Code of the State of California with respect to such work or labor, as required by the provisions of Chapter III, Division V, Title I, of the Government Code of the State of California, and provided that the persons, companies, or corporations so furnishing said materials, provisions, or other supplies, appliances, or power used, in, upon, for, or about the performance of the work contracted to be executed or performed, or any person who performs work or labor upon same, or any person who supplies both work and materials thereto, shall have complied with the provisions of said Government Code, then said Surety will pay the same in or to an amount not exceeding the amount herein above set forth, and also will pay in case suit is brought upon this bond, such reasonable attorney's fee to the District as shall be fixed by the court.

This bond shall insure to the benefit of any and all persons, companies, and corporations entitled to file claims under said Government Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition of the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any

way affect its obligations of this bond, and it does hereby waive notice of any change, extension of time, alteration, or addition to the terms of the contract or to the work or to the specifications. Said Surety hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

instrument under their sea		day of
	he name and corporate seal of each corpo resents duly signed by its undersigned repre ning body.	
(SEAL)	Contractor as Principal	
	Signature for Principal	
	Title of Signatory	
(SEAL)	Surety	
	Signature for Surety	
	Title of Signatory	

# 3.5 CONTRACTOR'S CERTIFICATE OF WORKER'S COMPENSATION

To: Georgetown Divide Public Utility District 6425 Main Street
P.O. Box 4240
Georgetown, CA 95634

THE UNDERSIGNED STATES AND DECLARES THAT:

We are aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and we will comply with such provisions before commencing the performance of the work of this contract.

CONTRACTOR

(Company Name)
(State of Incorporation, if Corp.)
(Authorized Signature)
(Name)
(Title)
Address:
Phone Number:

# To: **OLD AUBURN LAKE TRAILS** WATER TREATMENT PLANT DEMOLITION PROJECT Georgetown Divide Public Utility District has considered the Bid Proposal submitted by you for the above described project dated . . You are hereby notified that your Bid Proposal has been accepted for items in the amount of \$\_\_\_\_\_. You are required by the Information for Bidders to execute the Agreement and furnish the required Faithful Performance Bond, Payment Bond and certificates of insurance within fifteen (15) calendar days from the date of this Notice to you. If you fail to execute said Agreement and to furnish said bonds within fifteen (15) days from the date of this Notice, said District will be entitled to consider all your rights arising out of the District's acceptance of your Bid as abandoned. The District will be entitled to such other rights as may be granted by law. You are required to return an acknowledged copy of this NOTICE OF AWARD to the District. Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_. District

Title:

3.6 Notice of Award

# 3.7 ACCEPTANCE OF NOTICE OF AWARD

	Receipt	OŤ	the	above	NOTICE	OF	AWARD	IS	nereby	acknowledge	ed by
this th	e			da <u>v</u>	y of				, 20	·	
Ву:											
Title:											

# 3.8 NOTICE TO PROCEED

To:	Date:	HIDHIDALL AKE TRAILO			
		UBURN LAKE TRAILS R TREATMENT PLANT			
	· · · · · · · · · · · · · · · · · · ·	LITION PROJECT			
In accordance with the A	greement dated	, 20, you			
are hereby notified to commence work on or before, 2					
		. The date of completion of all			
work is therefore	20				
	Georgetown Divide Pu	blic Utility District			
	Ву:				
•	Title:				
A	ACCEPTANCE OF NOTIC	E			
Receipt of the above		) is hereby acknowledged by this the			
day of					
Ву:	<del></del>				
Title					

# 4 ABBREVIATIONS AND DEFINITIONS

# **4.1 ABBREVIATIONS.** The following abbreviations may be used in the Contract Documents:

AA Aluminum Association

**AASHO** American Association of State Highway Officials **ABMA** American Boiler Manufacturer's Association

ACI The American Concrete Institute
AGA American Gas Association

**AGC** Associated General Contractors

**AGMA** American Gear Manufacturer's Association

Al The Asphalt Institute

AIA American Institute of Architects

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

**ANSI** American National Standards Institute, Inc.

API American Petroleum Institute

**APWA** American Public Works Association

**AREA** American Railway Engineering Association

**ASCE** American Society of Civil Engineers

ASME American Society of Mechanical Engineers
ASTM American Society for Testing and Materials
AWPA American Wood Preservers' Association

**AWS** American Welding Society

**AWWA** American Water Works Association

BGHMA Builders Hardware Manufacturers Association
CCMTC California Concrete Masonry Technical Committee

CDPH California Department of Public HealthCPUC California Public Utilities CommissionCRSI Concrete Reinforcement Steel Institute

DFPA Douglas Fir Plywood Association
EEO Equal Employment Opportunity
EPA Environmental Protection Agency
ETL Electrical Testing Laboratory

FS Federal Specification
GFE Good Faith Effort

**ICBO** International Conference of Building Officials

**IEEE** The Institute of Electrical and Electronics Engineers

**IES** Illuminating Engineering Society

IPCEA Insulated Power Cable Engineers AssociationMBMA Metal Building Manufacturer's AssociationMBDA Minority Business Development Agency

MBE Minority Business Enterprise

GDPUD 4-1 OLD AUBURN LAKE TRAILS MSS Manufacturers Standardization Society of Valve and Fitting Industry

Standards

**NBFU** National Board of Fire Underwriters

NBS National Building Standards
NEC National Electrical Code

**NEMA** National Electrical Manufacturers Association

**NFPA** National Fire Protection Association

**OSHA** Occupational Safety and Health Administration

PCA Portland Cement Association
SBA Small Business Administration

**SMACNA** Sheet Metal and Air Conditioning Contractor's National Association

**SSPC** Steel Structures Painting Council

**SSPWC** Standard Specifications for Public Works Construction

**UBC** Uniform Building Code

**UHPHS** United States Public Health Service

UL Underwriter's LaboratoryUMC Uniform Mechanical CodeUPC Uniform Plumbing Code

**USAS** The United States of America Standard Institute

USBR United States Bureau of ReclamationUSDA United States Department of Agriculture

WBE Women's Business Enterprise

WCLIB West Coast Lumber Inspection Bureau

WIC Woodwork Institute of California

# 4.2 DEFINITIONS

As used in the Contract Documents, these words and phrases shall be defined as follows:

- **4.2.1 Acceptance** means the formal written acceptance by the District of the entire Contract which has been completed in all respects, in accordance with the Specifications and any approved modifications.
- **4.2.2 District** means Georgetown Divide Public Utilities District, also sometimes referred to as Owner.
- **4.2.3 As Approved** shall be understood to be followed by the words "by the Engineer," unless otherwise qualified.
- **4.2.4** As Shown and As Indicated shall be understood to be followed by the words "on the Plans."
- **4.2.5 Bid** means the offer of the bidder for the work when made out and submitted on the prescribed bid form, properly completed, signed and guaranteed.

- **4.2.6 Bid Bond** means the cash, cashier's check, certified check, or bidder's bond accompanying the bid submitted by the bidder, as a guarantee that the bidder will enter into a Contract with the District for the performance of work herein described.
- **4.2.7 Bidder** means any individual, firm, partnership or corporation submitting a bid for the work contemplated, and acting directly or through a duly authorized representative.
  - **4.2.8 Board of Directors** or **Board** means the Board of Directors of the District.
- **4.2.9 Contract** means the written agreement covering the performance of the work and the furnishing of labor, materials, tools and equipment in the construction of the work. The Contract shall include all Contract Documents and supplemental agreements amending or extending the work contemplated which may be required to complete the work in a substantial and acceptable manner. Supplemental agreements are written agreements covering alterations, amendments or extensions to the Contract, and include Addenda and Contract Change Orders.
- **4.2.10 Contract Documents** means any or all of the documents listed in Section 3.1 of the Contract.
- **4.2.11 Contractor** means the person or persons, firm, partnership or corporation or other entity that has entered into the Contract with the District to perform the work.
  - **4.2.12 County** means County of El Dorado, California.
- **4.2.13 Date of the Contract** means the date on which the Contract is signed by the District's authorized representative.
- **4.2.14 Datum** means the figures given in the Specifications or upon the Drawings after the word "Elevation" or an abbreviation of it.
  - **4.2.15 Days** mean calendar days unless otherwise designated.
- **4.2.16 Engineer** means the engineer or architect retained by the District, or the person designated by the District as its engineering representative during the course of construction, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.
  - 4.2.17 He shall include "she" and "it" and his shall include "her" and "its."
- **4.2.18 Or Equal** shall be understood to indicate that the "equal" product be the same or better than the product named, in function, performance, reliability, quality, and general configuration. Determination of equality in reference to the project design requirements will be made by the Engineer.
- **4.2.19 Plans** or **Drawings** refers to the official plans, drawings, profiles, cross sections, elevations, details, and other working drawings and supplementary drawings, or reproductions thereof, signed by the Engineer, which show the location, character, dimensions, and details of the work to be performed, and identified at Section 2.3. Plans may either be bound in the same book as the balance of the Contract Documents or

bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding.

- 4.2.20 Project means the OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT.
- **4.2.21 Specifications** means the terms, provisions, and requirements contained herein and identified at section 2.3, and is synonymous with "Technical Specifications." Where standard specifications, such as those of "ASTM", "AASHO", etc. have been referred to, the applicable portions of such standard specifications shall become a part of these Contract Documents.
  - 4.2.22 State means State of California.
- **4.2.23 State Standard Specifications** mean the edition in effect as of the Date of Execution of the Contract of the Standard Specifications issued by the State of California Business and Transportation Agency, Department of Transportation, unless a specific edition is referenced.
- **4.2.24 Subcontractor** means only those persons, firms or entities having a direct contract with the Contractor, and it includes one who furnishes material worked to a special design according to the Plans or Specifications of this work, but does not include one who merely furnishes material not so worked and would be considered a supplier only.
- **4.2.25 Time Limits** mean all time limits stated in the Contract Documents, and all time limits are of the essence of the Contract.
- **4.2.26 Work** means all the work specified, indicated, shown or contemplated in the Contract Documents to construct the improvements, including all alterations, amendments or extensions thereto made by Contract Change Order or other written orders of the Engineer.
- **4.2.27** The words **DIRECTED**, **REQUIRED**, **PERMITTED**, **ORDERED**, **DESIGNATED**, **PRESCRIBED**, or words of like import shall mean that the direction, requirement, permission, order, designation or prescription of the Engineer is intended, and similarly the words APPROVED, ACCEPTABLE, SATISFACTORY, or words of like import, shall mean approved or acceptable to, or satisfactory to the Engineer, unless otherwise expressly stated.

#### **5 GENERAL PROVISIONS**

# **5.1 INTENT OF CONTRACT DOCUMENTS**

- **5.1.1** The intent of the Contract Documents is to prescribe the details for the construction and completion of the work which the Contractor undertakes to perform in accordance with the terms of the Contract. Where the Specifications and Plans describe portions of the work in general terms, but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used. Unless otherwise specified, the Contractor shall furnish all labor, materials, tools, equipment and incidentals and do all the work involved in performing the Contract in a satisfactory and workmanlike manner.
- **5.1.2** The technical specifications are presented in sections for convenience. However, this presentation does not necessarily delineate trades or limits of responsibility. All sections of the Specifications and Plans are interdependent and applicable to the project as a whole.
- **5.1.3** The Contract Documents are complementary, and what is called for in any one shall be as binding as if called for in all.

# 5.2 CONTRACTOR'S UNDERSTANDING

It is understood and agreed that the Contractor has, by careful examination, satisfied itself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this Contract. No verbal agreement or conversation with any officer, agent or employee of the District, either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.

#### 5.3 CHANGES IN THE WORK

- **5.3.1 General.** The Engineer may, at any time, by written order make changes in the work as deemed necessary by the District.
- **5.3.2 Minor Changes.** The Engineer shall have the authority to order minor changes in the work not involving any increase or decrease in the Contractor's cost of, or time required for, performance of the Contract. Such minor changes shall be effected by written order of the Engineer, and the Contractor shall carry out such written orders promptly. If the Contractor disagrees with the Engineer's determination that the minor change does not involve any increase or decrease in the Contractor's cost of, or time required for, performance of the Contract, then the Contractor may file and pursue a claim pursuant to section 5.4. The written claim must be submitted to the Engineer within 15 days after the date of the Engineer's written order.

- **5.3.3 Change Orders.** If any change in the work ordered by the Engineer causes an increase or decrease in the Contractor's cost of, or time required for, performance of the Contract, an adjustment and modification of the Contract will be made in the form of a Change Order which will set forth (a) the changes, additions and/or deductions in the work to be done, (b) the increase or decrease in compensation due the Contractor, if any, or the method by which the increase or decrease, if any, will be calculated, and (c) the adjustment in the time of completion of the work, if applicable. A Change Order may be issued to the' Contractor at any time.
- **5.3.4 Change Order-Cost Adjustment.** The compensation to be paid for any work addressed in a Change Order shall be determined in one or more of the following ways as shown in the Change Order:
  - **5.3.4.1** By unit prices;
  - **5.3.4.2** By an agreed-upon lump sum; or
  - **5.3.4.3** By the cost plus basis determined pursuant to section 5.3.9.
- **5.3.5 Cost Records.** Contractor shall keep full and complete records of the cost of any work addressed in a Change Order in the form and manner prescribed by the Engineer and shall permit the Engineer to have access to such records as may be necessary to assist in the determination of the compensation payable for such work.
- **5.3.6 Cost Reduction for Deductive Change Order.** With respect to a Change Order involving the deletion or reduction of work, the Engineer shall determine the appropriate reduction in the Contract price based on the lump sum and/or per unit prices in the bid schedule for the items of work deleted or reduced by the Change Order. The Contractor shall not be entitled to claim damages for anticipated profits on any portion of the work that may be deleted.
- **5.3.7 Proposed Change Order.** Upon receipt of a Change Order signed by the Engineer, the Contractor shall forthwith proceed with the ordered work, unless otherwise directed by the Engineer. If the Contractor agrees with the terms and conditions of the Change Order, then it shall sign the Change Order.
- **5.3.8 Contractor Protest Against Change Order.** Should the Contractor disagree with any terms or conditions set forth in a proposed Change Order, it shall submit a written protest to the Engineer within 15 days after the receipt of the proposed Change Order. The protest shall state the points of disagreement, addressing, if applicable, the quantities and cost involved and the adjustment of time for completion.
- **5.3.8.1** If a written protest is not timely submitted by the Contractor, then the proposed Change Order, including all cost and time adjustment provisions, if any, that was submitted to the Contractor shall be deemed final and acceptable to the Contractor even if not signed by the Contractor. Any payment under an unprotested

Change Order's cost adjustment provisions shall constitute full compensation for all work included in or required by the Change Order.

- **5.3.8.2** If the Contractor timely protests a proposed Change Order, it shall nevertheless proceed with the ordered work pending resolution of the protest.
- **5.3.8.3** If the Contractor timely protests a proposed Change Order, the Engineer shall render in writing its determination of the protest. If the Contractor disputes the determination, then the Contractor may file and pursue a claim pursuant to section 5.4. The written claim must be submitted to the Engineer within 15 days after the date of the Engineer's written determination on the protest. If the Contractor does not timely file a claim, then the proposed Change Order (as may have been revised by the Engineer's determination on the protest), including all cost and time adjustment provisions, if any, shall be deemed final and acceptable to the Contractor even if not signed by the Contractor. Any payment under such a Change Order's cost adjustment provisions shall constitute full compensation for all work included in or required by the Change Order.
- **5.3.9 Cost Plus Basis of Payment on Change Orders.** The following shall constitute the cost plus basis of payment:
- **5.3.9.1 Direct Labor Cost.** Charges for all of the labor furnished and used by the Contractor shall be made for manual classifications up to and including general foreman. It will not include charges for assistant superintendents, superintendents, office personnel, timekeepers and maintenance mechanics. The time charged to work shall be subject to the daily approval of the Engineer and evidence of such daily approval shall be submitted with the billing. Labor rates used to calculate the costs shall be those basic wages including current employer contributions for fringe benefits and federal and state surcharges and including applicable subsistence and travel allowances, all as actually paid to workers under collective bargaining agreements or as a regular practice of the employer. No time or charges will be allowed except when the workers are actually engaged in the proper, efficient and diligent performance or completion of the work as authorized. Overtime shall not be worked without prior approval of the Engineer.
- **5.3.9.2 Equipment Cost**. Charges for the rental and operation of the equipment furnished and used by the Contractor shall be made for all prime construction and automotive equipment. It shall not include charges for listed equipment or major tools with a new cost of \$500 or less. Equipment time charges shall be subject to the daily approval of the Engineer and evidence of such daily approval shall be submitted with the billing. The equipment rental and operation rates used shall be those agreed upon by the Engineer and the Contractor prior to commencement of the work and shall include an approved allowance for depreciation. Time and charges shall be allowed only when equipment is actually being used for the proper and efficient performance or completion of the work as authorized.

- **5.3.9.3 Material Costs**. Charges for the cost of materials furnished by the Contractor shall be made, provided such furnishing was specifically authorized in the work order and the actual use verified by the Engineer. Charges shall be net cost to the Contractor delivered at the job, including all applicable sales taxes; and a vendor's invoice must accompany the billing along with verification of use of such materials by the Engineer.
- **5.3.9.4 Tools, Supplies, Supervision, Overhead and Profit**. A charge for major tools, supplies, overhead, supervision and profit will be allowed in the amount of 15% of the total direct labor costs, equipment costs, and material costs, as defined above at sections 5.3.9.1 to 5.3.9.3.
- **5.3.9.5 Work by Subcontractor**. When all or any part of work is performed by any of the Contractor's subcontractors, the markup percentage established in section 5.3.9.4 shall be applied to the subcontractor's actual cost of such work (determined as above at sections 5.3.9.1 to 5.3.9.3), to which a markup of5% on the subcontracted portion of the extra work may be added by the Contractor.
- **5.3.10 Effect of Change on Bond Sureties.** The consent of the Contractor's bond sureties shall not be required as to any change or extra work ordered by the District, and the liability of the Contractor's bonds and sureties shall be increased or decreased accordingly without notice to the sureties.
- **5.3.11 Right to Use Other Contractors.** The District reserves the right to contract with any person or firm other than the Contractor for any or all extra work.
- **5.3.12 Increased Quantity of Contract Items.** If the total pay quantity of any item of work required under the Contract to be paid at a unit price exceeds the item as bid by more than 25 percent, then in the absence of an executed contract change order specifying the compensation to be paid, the work in excess of 125 percent of such estimate may, at the District's discretion, be paid for by a cost plus basis of payment as described at section 5.3.9, instead of at the unit price.

# 5.4 CONTRACTOR CLAIMS FOR EXTRA COSTS AND TIME EXTENSIONS

- **5.4.1 General.** The parties intend by this section that differences between them arising under and by virtue of the Contract, be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken.
- **5.4.2 Waiver.** Contractor agrees that it shall not be entitled to any additional time to complete work or the payment of any additional compensation for any claim, cause, act, failure to act, or happening of any event, thing or occurrence, unless it shall have given the Engineer timely and due written notice of the claim pursuant to this section 5.4, provided, however, that compliance with this section shall not be a prerequisite as to matters within the scope of the protest provisions in section 5.3.8. The Contractor

shall not be entitled to any additional compensation for claimed extra work until and unless either a Change Order has been issued pursuant to section 5.3 or a claim has been timely filed and approved pursuant to this section 5.4. If the Contractor fails to file a written claim within the claim deadline of section 5.4.5, then the Contractor agrees that it shall have waived any right or remedy to thereafter pursue the claim against the District in any administrative, arbitration or litigation proceeding.

- **5.4.3 Definition.** A claim for purposes of this section 5.4 means a separate demand by the Contractor for (a) a time extension, (b) payment of money or damages arising from work done by, or on behalf of, the Contractor and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (c) an amount the payment of which is disputed by the District.
- **5.4.4 Informal Claims Resolution.** The parties agree to strive to resolve all disputes amicably and in an informal manner. Any dispute resolved informally shall be documented by the Engineer, and if the dispute resolution involves a change in the contract work, increase or decrease in the compensation due the contractor, and/or adjustment in the time of completion of the work, then the informal dispute resolution shall be confirmed by a Change Order pursuant to section 5.3. Informal discussions and/or negotiations with the Engineer or other District representatives concerning informal resolution of a dispute shall not toll or suspend the claim filing deadlines provided below, unless so provided by the Engineer in writing.
- **5.4.5 Deadlines for Filing of Claim.** Subject to the terms, conditions and deadlines of this section 5.4, the Contractor may file a claim with the Engineer. A claim must be submitted to the Engineer as follows: (a) if a deadline is set forth in the Contract Documents for filing of the particular claim, then the claim must be filed by the specified time; (b) if the claim relates to extra, additional or unforeseen work for which the Contractor intends to demand additional compensation or a time extension, notice shall be given to the Engineer prior to the time that the Contractor commences performance of the work giving rise to the potential claim for additional compensation or time extension, and Contractor shall not proceed with said work until so directed by the Engineer; and (c) for all other claims not included within subsections (a) and (b), the claim must be filed on or before IS days after occurrence of the event giving rise to the claim. In no event shall claims be filed later than the date of final payment.
- **5.4.6 Emergency Work.** In the event of an emergency endangering life or property, the Contractor shall act as provided by section 5.54.7. After completion of the necessary emergency work the Contractor shall present to the Engineer an accounting of labor, materials and equipment in connection therewith. The procedure for any payment that may be due for emergency work will be as specified in section 5.3.
- **5.4.7 Tort Claims.** The provisions of sections 5.4 to 5.6 apply only to contract claims and they do not apply to tort claims, and nothing in these sections is intended nor shall be construed to change the time periods for filing tort claims or actions specified by

Government Code Title I, Division 3.6, Part 3, Chapter 1, Article 1(commencing with section 900) and Chapter 2, Article 1 (commencing with section 910).

- **5.4.8 Required Contents of Claim.** The claim must be in writing and shall set forth in detail the reasons for which the Contractor believes additional compensation or a time extension will or may be due, the nature of the costs involved, and, insofar as possible, the amount of the claim. The claim shall also include the documents necessary to substantiate the claim.
- **5.4.9 Contract Work Pending Claim Resolution.** Unless otherwise directed in writing by the Engineer, pending resolution of a claim under this section 5.4, the Contractor shall continue to diligently prosecute the Contract work in accordance with the Contract Documents and the instructions of the Engineer.
- **5.4.10 Processing of Claims by District**. Generally, except as otherwise specifically provided in the Contract Documents, the Engineer will initially decide all claims of the Contractor and all disputes arising under and by virtue of the Contract. All such decisions of the Engineer shall be final unless disputed by the Contractor in accordance with section 5.4.12 or section 5.6.2, as appropriate. If the Contractor fails to dispute the Engineer's decision on the matter in accordance with section 5.4.12 or section 5.6.2, then Engineer's decision shall be final, conclusive, and binding, and the Contractor shall be deemed to have waived all its rights to further protest, judicial or otherwise. Any claim for a time extension or claim for money or damages of less than \$375,000 (i.e., any claim subject to Public Contract Code section 20104) shall be processed by the District and resolved in accordance with sections 5.4.11 to 5.5. Any claim for money or damages of more than \$375,000 (i.e., any claim not subject to Public Contract Code section 20104) shall be processed by the District and resolved in accordance with section 5.6.

# 5.4.11 District Response to Claim.

**5.4.11.1** For a claim for a time extension or claim for money or damages of less than \$50,000, the Engineer shall respond in writing to any written claim within 45 days of receipt of the claim by the Engineer, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the District may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this section, upon mutual agreement of the Engineer and the Contractor. The Engineer's written response to the claim, as further documented, shall be submitted to the Contractor within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

**5.4.11.2** For claims of over \$50,000 and less than or equal to \$375,000, the Engineer shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any

additional documentation supporting the claim or relating to defenses to the claim the District may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this section, upon mutual agreement of the Engineer and the Contractor. The Engineer's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

- **5.4.12 Meet and Confer.** If the Contractor disputes the Engineer's written response, or the Engineer fails to respond within the time prescribed, the Contractor may so notify the District, in writing, either within 15 days of receipt of the Engineer's response or within 15 days of the Engineer's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the District shall schedule a meet and confer conference within 30 days for settlement of the dispute.
- **5.4.13 Government Code Claim.** Following the meet and confer conference, if the claim or any portion remains in dispute, the Contractor may file a claim as provided in Government Code Title I, Division 3.6, Part 3, Chapter 1, Article 1(commencing with section 900) and Chapter 2, Article 1 (commencing with section 910). For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the Contractor submits a timely written claim pursuant to subsection 5.4.5 until the time that the claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process; provided that if the Contractor fails to demand a meet and confer conference within the applicable 15 day period, then the Contractor shall be deemed not to dispute the Engineer's written response to the claim and any tolling of the running of the period of time within which a Government Code claim must be filed (see Public Contract Code section 20104.2(e) shall cease upon expiration of the applicable 15 day period.

# 5.5 SPECIAL LITIGATION PROVISIONS.

The following procedures shall apply to all civil actions filed to resolve claims subject to Public Contract Code section 20104 (i.e., any claim for a time extension or claim for money or damages of less than \$375,000).

**5.5.1 Mediation.** Within 60 days, but no earlier than 30 days, following the filing of responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

### 5.5.2 Arbitration.

- **5.5.2.1** If the matter remains in dispute, the case shall be submitted to Judicial arbitration pursuant to Code of Civil Procedure Title 3, Part 3, Chapter 2.5 (commencing with section 1141.10), notwithstanding section 1141.11 of that code. The Civil Discovery Act of l986 (Code of Civil Procedure title 3, part 4, chapter 3, article 3 (commencing with section 2016)) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.
- **5.5.2.2** Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.
- **5.5.2.3** In addition to Code of Civil Procedure Title 3, Part 3, Chapter 2.5 (commencing with section 1141.1 0), any party who, after receiving an arbitration award, requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.
- **5.5.3 Witnesses.** The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.
- **5.5.4 Payment of Undisputed Claims.** The District shall not fail to pay money as to any portion of a claim that is undisputed except as otherwise provided in the Contract Documents.
- **5.5.5 Interest.** In any suit filed under this section 5.5, the District shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

# 5.6 LARGE CLAIM RESOLUTION.

For any claim for money or damages of more than \$375,000 (i.e., any claim not subject to California Public Contract Code section 20104), the following requirements apply:

**5.6.1 District Response to Claim.** The Engineer shall respond in writing to the written claim within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim that the District may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this section, upon mutual agreement of the Engineer and the Contractor. The

Engineer's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days after receipt of the further documentation.

- **5.6.2 Meet and Confer.** If the Contractor disputes the Engineer's written response, or the Engineer fails to respond within the time prescribed, the Contractor may so notify the District, in writing, either within 15 days of receipt of the Engineer's response or within 15 days of the Engineer's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the District shall schedule a meet and confer conference within 30 days for settlement of the dispute.
- **5.6.3 Lawsuit on the Claim.** Following the meet and confer conference, if the claim or any portion remains in dispute, the Contractor may, within six (6) months from the date of the last meet and confer conference, file a lawsuit on the claim. If the Contractor fails to demand a meet and confer conference as described in section 5.6.2, the Contractor may, within six (6) months from the date of the Engineer's written response, file a lawsuit on the claim. If the Contractor fails to file a lawsuit within whichever six-month period is applicable, then the District's written response to the claim shall be final, conclusive and binding on the Contractor, and the Contractor agrees that it thereafter shall be barred from filing a lawsuit on the claim.

# **5.7 GUARANTEE**

- **5.7.1** In addition to warranties, representations and guarantees stated elsewhere in the Contract Documents, or implied-in-fact or in-law, the Contractor unconditionally guarantees all materials and workmanship furnished hereunder, and agrees to repair or replace or both at its sole cost and expense, and to the satisfaction of the Engineer and the District, any and all materials which may be defective or improperly installed.
- **5.7.2** The Contractor shall repair or replace to the satisfaction of the Engineer any or all such work that may prove defective in workmanship or materials, ordinary wear and tear excepted, together with any other work which may be damaged or displaced in so doing. Contractor shall leave the site of any such repair or replacement work in satisfactory working order and condition.
- **5.7.3** In the event of failure to comply with the above stated conditions within a reasonable time, the District is authorized to have the defect repaired and made good at the expense of the Contractor who will pay the costs and charges therefor immediately upon demand, including any reasonable management and administrative costs, and engineering, legal and other consultant fees incurred to enforce this section.
- **5.7.4** The signing of the Contract by the Contractor shall constitute execution of the above guarantees. Except as otherwise provided in this Contract, the guarantees and warranties shall remain in effect for one year from the date of recording a notice of completion. This guarantee does not excuse the Contractor from breaches of contract causing defects that occur or are discovered more than one year after the notice of

completion. In addition, the warranty and guaranty period for repaired or replaced work or part shall be one year from the date of acceptance of said repaired or replaced work or part, but not less than the remaining warranty period of the original work.

### **5.8 AUTHORITY OF THE ENGINEER**

- **5.8.1** The Engineer is the representative of the District and has full authority to interpret the Contract Documents, to conduct the construction review and inspection of the Contractor's performance, and to decide questions which arise during the course of the work; and its decisions on these matters shall be final and conclusive. The Engineer has the authority to reject all work and materials that do not conform to the Contract Documents, and has the authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.
- **5.8.2** If at any time the Contractor's work force, tools, plant or equipment appear to the Engineer to be insufficient or inappropriate to secure the required quality of work or the proper rate of progress, the Engineer may order the Contractor to increase their efficiency, improve their character, to augment their number or to substitute other personnel, new tools, plant or equipment, as the case may be, and the Contractor shall comply with such order. Neither the failure of the Engineer to demand such increase of efficiency, number, or improvement, nor the compliance by the Contractor with the demand, shall relieve the Contractor of its obligation to provide quality work at the rate of progress necessary to complete the work within the specified time.
- **5.8.3** The Engineer shall have the authority to make minor changes in the work, not involving extra costs, and not inconsistent with the purposes of the work.
- **5.8.4** Any order given by the Engineer, not otherwise required by the Contract Documents to be in writing shall, on request of the Contractor, be given or confirmed by the Engineer in writing.
- **5.8.5** Whenever work, methods of procedure, or any other matters are made subject to direction or approval, such direction or approval will be given by the Engineer.

# 5.9 DRAWINGS

**5.9.1** Drawings furnished herewith are for bidding purposes. The Engineer will furnish the Contractor, free of charge, up to (3) copies of full size Drawings and Specifications which are reasonably necessary for the execution of the work. The Contractor shall have no claim for excusable delay on account of the failure of the Engineer to deliver such Drawings unless the Engineer shall have failed to deliver the same within two weeks after receipt of written demand therefor from the Contractor. If the Contractor, in the course of the work, finds any discrepancy between the Drawings and the physical condition of the locality, or any errors or omissions in the Drawings, or in the layout as given by points and instructions, it shall be its duty to inform the Engineer in writing, and the Engineer will promptly verify the same. Any work done after

such discovery, until authorized, will be done at the Contractor's risk. All Drawings, Specifications, and copies thereof furnished by the Engineer are the property of the Engineer and shall not be reused on other work and, with the exception of the signed Contract sets, are to be returned to it, on request, at the completion of the work. All models are the property of the District.

- **5.9.2** The Contractor shall maintain at the site of work one record copy of the Drawings, in good order, and available to the Engineer. The Contractor shall mark the Drawings to record all changes and corrections made during construction. The Contractor shall make all corrections and changes on the Drawings as necessary to produce accurate and complete record Drawings showing the "as built" work. Marked Drawings shall be updated at least weekly. The Contractor shall submit to the Engineer a final, complete and accurate set of record Drawings prior to or simultaneously with the Contractor's request for final payment.
- **5.9.3** The Drawings shall be supplemented by such shop drawings prepared by the Contractor as are necessary to adequately control the work. Contractor shall not make any changes in any shop drawings after they have been reviewed by the Engineer.
- **5.9.4** Shop drawings for any structure shall include, but not be limited to: stress sheets, anchor bolt layouts, shop details, and erection plans, which shall be reviewed and approved by the Engineer before any such work is performed.
- **5.9.5** Shop drawings will be required for cribs, cofferdams, falsework, centering and form work and for other temporary work and methods of construction the Contractor proposes to use. Such drawings shall be subject to the review and approval of the Engineer insofar as the details affect the character of the finished work, but details of design will be left to the Contractor who shall be responsible for the successful construction of the work.
- **5.9.6** Contractor agrees that shop drawings processed by the Engineer are not Contract Change Orders, and that the purpose of shop drawings submitted by the Contractor is to demonstrate to the Engineer that the Contractor understands the design concept, and to demonstrate its understanding by indicating which equipment and material it intends to furnish and by detailing the fabrication methods it intends to use.
- **5.9.7** It is expressly understood, however, that favorable review of the Contractor's shop drawings shall not relieve the Contractor of any responsibility for accuracy of dimensions and details, or for mutual agreements of dimensions and details. It is mutually agreed that the Contractor shall be responsible for agreement and conformity of its shop drawings with the Specifications. Contractor further agrees that if deviations, discrepancies or conflicts between shop drawings and Specifications are discovered either prior to or after shop drawings are processed by the Engineer, the Specifications shall control and shall be followed.

- **5.9.8** Unless otherwise stated, the Engineer shall have 30 days from the date of receipt of shop drawings for review.
- **5.9.9** Full compensation for furnishing all shop drawings shall be considered as included in the prices paid for the Contract items of work to which such drawings relate and no additional compensation will be allowed therefor. Any cost related to the Engineer's review of any particular set of shop drawings more than twice, due to incompleteness or unacceptability, shall be borne by the Contractor, and the District reserves the right to withhold such costs from payments due the Contractor.

### 5.10 CONSTRUCTION STAKING AND SURVEYS

The Contractor shall provide construction stakes and benchmarks as it deems necessary to establish lines and grades required for the completion of the site work specified in the Contract Documents. The Contractor shall make all other surveys necessary for the completion of the work. Any marks set by the District or Engineer shall be carefully preserved by the Contractor. The Contractor shall be charged for the cost of replacing or restoring the stakes or marks that are destroyed or damaged by its operation. This charge will be deducted from any monies due or to become due to the Contractor under the Contract.

# **5.11 PERMITS AND REGULATIONS**

- **5.11.1** Permits and licenses, of a temporary nature, necessary for the prosecution of the work shall be secured and paid for by the Contractor. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the District unless otherwise specified.
- **5.11.2** The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as shown on the plans and described in the Specifications. The Contractor shall promptly notify the Engineer in writing of any specification at variance therewith and any necessary changes shall be adjusted as provided in the Contract for changes in the work. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations and without such notice to the Engineer, it shall bear all costs arising therefrom.

# **5.12 CONFORMITY WITH CONTRACT DOCUMENTS**

Work and materials shall conform to the lines, grades, cross sections, dimensions and material requirements, including tolerances, shown on Contract Documents. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Engineer shall be the sole judge as to whether the work or materials deviate from the Specifications and plans, and his decision as to any allowable deviations therefrom shall be final and conclusive.

# 5.13 COORDINATION AND INTERPRETATION OF CONTRACT DOCUMENTS

- **5.13.1** The Contract Documents are complementary and a requirement occurring in one is as binding as though occurring in all.
- **5.13.2** In the event of conflict between the Plans and the Specifications, the Specifications shall govern, except that, where items are shown on the Plans and are not specifically included in the Specifications, the Plans shall govern.
- **5.13.3** Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in the Specifications and Plans, the Contractor shall apply to the Engineer for such further explanations as may be necessary and shall conform to them as part of the Contract. In the event of any doubt or question arising respecting the true meaning of the Specifications and Plans, reference shall be made to the Engineer, whose decision thereon shall be final and conclusive.
- **5.13.4** In the event of any discrepancy between any Plans and the figures written thereon, the figures shall be taken as correct. Detailed drawings shall prevail over general drawings.
- **5.13.5** Any reference made in the Specifications or on the Plans to any specification, standard, method, or publication of any scientific or technical society or other organization shall, in the absence of a specific designation to the contrary, be understood to refer to the Specification, standard, method, or publication in effect as of the date that the work is advertised for Bids.

# **5.14 SUBCONTRACTS**

- **5.14.1** The attention of the Contractor is directed to California Public Contract Code section 4100, et seq., regarding subcontracting and said provisions are by this reference incorporated herein and made a part hereof.
- **5.14.2** Each subcontract shall contain a suitable provision for the suspension or termination thereof should the work be suspended or terminated or should the subcontractor neglect or fail to conform to every provision of the Contract Documents insofar as such provisions are relevant. No subcontractor or supplier will be recognized as such, and all persons engaged in work will be considered as employees of the Contractor, and the Contractor will be held responsible for their work, which shall be subject to the provisions of the Contract Documents. The Contractor shall be fully responsible to the District for the acts or omissions of its subcontractors and of the persons either directly or indirectly employed by them. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the District. If a legal action, including arbitration and litigation, against the District is initiated by a subcontractor or supplier, the Contractor shall reimburse the District for the amount of legal, engineering and all other expenses

incurred by the District in defending itself in said action.

**5.14.3** The District and the Engineer reserve the right to approve all subcontractors. Such approval shall be a consideration to the awarding of the Contract and unless notification to the contrary is given to the Contractor prior to the signing of the Contract, the list of subcontractors that is submitted with its proposal' will be deemed to be acceptable.

# **5.15 COOPERATION OF CONTRACTORS**

- **5.15.1** Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to said limits, the Contractor shall cooperate with all such other contractors or other forces to the end that any delay or hindrance to their work will be avoided. The right is reserved by the District to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces.
- **5.15.2** When two or more contractors are employed on related or adjacent work, each shall conduct its operation 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 persons or property caused to the other by its operations, and for loss caused the other due to its unnecessary delays or failure to finish the work within the time specified for completion.

# **5.16 SUPERINTENDENCE**

- **5.16.1** The Contractor shall designate in writing before starting work an individual as authorized representative who shall have the authority to represent and act for the Contractor. This authorized representative shall be present at the site of the work at all times while work is actually in progress on the Contract. When work is not in progress and during periods when work is suspended, arrangements acceptable to the Engineer shall be made for any emergency work that may be required.
- **5.16.2** The Contractor is solely responsible, at all times, for the superintendence of the work and for its safety and progress.
- **5.16.3** Whenever the Contractor or its authorized representative is not present on any particular part of the work where it may be desired to give direction, orders will be given by the Engineer, which shall be received and obeyed by the superintendent or foreman who may have charge of the particular work in reference to which the orders are given.
- **5.16.4** Any order given by the Engineer, not otherwise required by the Contract Documents to be in writing, will on request of the Contractor, be given or confirmed by the Engineer in writing.

### 5.17 INSPECTION OF WORK

- **5.17.1** Unless otherwise provided, all equipment, materials, and work shall be subject to inspection and testing by the Engineer. The Engineer will observe the progress and quality of the work and determine, in general, if the work is proceeding in accordance with the intent of the Contract Documents. He shall not be required to make comprehensive or continuous inspections to check the quality of the work, and he shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the work. Visits and observations made by the Engineer shall not relieve the Contractor of its obligation to conduct comprehensive inspections of the work and to furnish proper materials, labor, equipment and tools, and perform acceptable work, and to provide adequate safety precautions, in conformance with the intent of the Contract.
- **5.17.2** Whenever the Contractor varies the period during which work is carried on each day, it shall give due notice to the Engineer so that proper inspection may be provided. Any work done in the absence of the Engineer shall be subject to rejection. Proper facilities for safe access for inspection to all parts of the work shall at all times be maintained for the necessary use of the Engineer and other agents of the District, and agents of the Federal, State, or local governments at all reasonable hours for inspection by such agencies to ascertain compliance with laws and regulations.
- **5.17.3** One or more inspectors may be assigned to observe the work and to act in matters of construction under this Contract. It is understood that inspectors shall have the power to issue instructions and make decisions within the limitations of the authority of the Engineer. Such inspection shall not relieve the Contractor of its obligation to conduct comprehensive inspections of the work, to furnish proper materials, labor, equipment and tools, and perform acceptable work, and to provide adequate safety precautions in conformance with the intent of the Contract.
- **5.17.4** The Engineer and his representatives shall at all times have access to the work wherever it is in preparation or progress; and the Contractor shall provide safe and convenient facilities for such access and for inspection. If the Specifications, the Engineer's instructions, laws, ordinances, or any public authority require any material, equipment or work to be specifically tested or approved, the Contractor shall give the Engineer timely notice of its readiness for inspection, and if the inspection is by an authority other than the District, of the time fixed for inspection. Inspections by the Engineer will be made promptly and, where practicable, at the source of supply.
- **5.17.5** Work performed without inspection may be required to be removed and replaced under proper inspection and the entire cost of removal and replacing, including the cost of District-furnished materials used in the work, shall be borne by the Contractor, regardless of whether or not the work exposed is found to be defective. Examination of questioned work, other than that installed without inspection, may be ordered by the Engineer and, if so ordered, the work must be uncovered by Contractor.

If such work is found to be in accordance with the Contract Documents, the District will pay the cost of re-examination and replacement. If such work is found to be not in accordance with the Contract Documents, the Contractor shall pay such cost unless it can show that the defect in the work was caused by another contractor, and in that event the District will pay such costs.

- **5.17.6** The inspection of the work shall not relieve the Contractor of its obligation to fulfill the Contract as herein prescribed, or in any way alter the standard of performance provided by the Contractor; and defective work shall be made good and unusable materials may be rejected, notwithstanding that such work and materials have been previously overlooked by the Engineer and accepted or estimated for payment. If the work or any part thereof shall be found defective, Contractor shall, within ten (I0) calendar days, make good such defect in a manner satisfactory to the Engineer. If the Contractor shall fail or neglect to make ordered repairs of defective work or to remove the condemned materials from the work within ten (I0) calendar days after direction by the Engineer in writing, the District may make the ordered repairs, or remove the condemned materials, and deduct the cost thereof from any monies due the Contractor.
- **5.17.7** The Contractor shall furnish promptly without additional charge all facilities, labor and materials reasonably needed by the Engineer for performing all inspection and tests. Contractor shall be charged with any additional cost of inspection when material and workmanship are not ready at the time specified by the Contractor for its inspection.
- **5.17.8** Where any part of the work is being done under an encroachment permit or building permit, or is subject to Federal, State, County or City codes, laws, ordinances, rules or regulations, representatives of the government agency shall have full access to the work and shall be allowed to make any inspection or tests in accordance with such permits, codes, laws, ordinances, rules, or regulations. If advance notice of the readiness of the work for inspection by the governing agency is required, the Contractor shall furnish such notice to the appropriate agency.
- **5.17.9** The Engineer may inspect the production of material, or the manufacture of products at the source of supply. Plant inspection, however, will not be undertaken until the Engineer is assured of the cooperation and assistance of both the Contractor and the material producer. The Engineer or his authorized representative shall have free entry at all times to such parts of the plant as concerns the manufacture or production of the materials. Adequate facilities shall be furnished free of charge to make the necessary inspection. The District assumes no obligation to inspect materials at the source of supply.

### **5.18 TESTS**

The Contractor shall perform at its expense all tests specified or required by the Specifications. The Engineer will perform such tests as he deems necessary to determine the quality of work or compliance with Contract Documents. The Contractor

shall furnish promptly without additional charge all facilities, labor, and material reasonably required for performing safe and convenient tests as may be required by the Engineer. All tests by the Engineer will be performed in such a manner as will not unnecessarily delay the work. The Contractor shall not be required to reimburse the District for tests performed by the District or Engineer. If samples of materials are submitted which fail to pass the specified tests, the Contractor shall pay for all subsequent tests.

### 5.19 REMOVAL OF REJECTED AND UNAUTHORIZED WORK AND MATERIALS

- **5.19.1** All work or materials which have been rejected shall be remedied, or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed it for such removal, replacement, or remedial work.
- **5.19.2** Any work done beyond the lines and grades shown on the Plans or established by the Engineer or any extra work done without written authority will be considered as unauthorized work and will not be paid for. Upon order of the Engineer, unauthorized work shall be remedied, removed, or replaced at the Contractor's expense.
- **5.19.3** Upon failure of the Contractor to comply with any order of the Engineer made under this Section, the District may cause rejected or unauthorized work to be remedied, removed, or replaced, and may deduct the costs therefor from any monies due or to become due the Contractor.

# 5.20 DEDUCTIONS FOR UNCORRECTED WORK.

If the Engineer deems it inexpedient to correct work damaged or not done in accordance with the Contract Documents, an equitable deduction from the Contract price shall be made therefor; and such sum may be withheld by District from Contractor's payment.

### 5.21 EQUIPMENT AND PLANTS

- **5.21.1** Only equipment and plants suitable to produce the quality of work and materials required will be permitted to operate on the project.
- **5.21.2** Plants will be designed and constructed in accordance with general practice for such equipment and shall be of sufficient capacity to insure the production of sufficient material to carry the work to completion within the time limit.
- **5.21.3** The Contractor shall provide adequate and suitable equipment and plants to meet the above requirements, and when ordered by the Engineer, shall remove unsuitable equipment from the work and discontinue the operation of unsatisfactory plants.

- **5.21.4** The Contractor shall identify each piece of its equipment, other than hand tools, by means of an identifying number plainly stenciled or stamped on the equipment at a conspicuous location, and shall furnish to the Engineer a list giving the description of each piece of equipment and its identifying number. In addition, the make, model number and empty gross weight of each unit of compacting equipment shall be plainly stamped or stenciled in a conspicuous place on the unit. The gross weight shall be either the manufacturer's rated weight or the scale weight.
- **5.21.5** In the case of termination of this Contract before completion from any cause whatever, the Contractor, if notified to do so by the District, shall promptly remove any part or all of its equipment and supplies from the property of the District. If the Contractor fails to do so, the District shall have the right to remove such equipment and supplies at the expense of the Contractor.

### **5.22 CHARACTER OF WORKER**

If any subcontractor, or person employed by the Contractor or any subcontractor shall be incompetent or act in a disorderly or improper manner, it shall be removed from the project work immediately, and such person shall not again be employed on the work. Such discharge shall not be the basis for any claim for compensation or damages against the District, the Engineer or any of their officers, directors, employees or agents.

### **5.23 SEPARATE CONTRACTS**

- **5.23.1** The District reserves the right to let other contracts in connection with this work. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate its work with the other contractor's work.
- **5.23.2** If any part of the Contractor's work depends for proper execution or results upon the work of any other contractor, the Contractor shall inspect and promptly report to the Engineer any defects in such work that render it unsuitable for such proper execution and results. The Contractor's failure to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of the Contractor's work, except as to defects that may develop in the other contractor's work after the execution of its work. To insure the proper execution of its subsequent work, the Contractor shall measure work already in place and shall at once report to the Engineer any discrepancy between the executed work and the drawings.

# **5.24 MATERIALS**

**5.24.1** Unless otherwise specifically stated in the Specifications, the Contractor shall furnish all materials necessary for the execution and completion of the work. Unless otherwise specified, all materials shall be new and shall be manufactured, handled, and installed in a workmanlike manner to insure completion of the work in

accordance with the Contract Documents. The Contractor shall, upon request of the Engineer, furnish satisfactory evidence as to the kind and quality of materials.

- **5.24.2** Where materials are to be furnished by the District, the type, size, quantity and location at which they are available will be stated in the Contract Documents.
- **5.24.3** Manufacturers' and suppliers' warranties, guarantees, operating manuals, instruction sheets and parts listed, which are furnished with certain articles or materials incorporated in the work, shall be delivered to the Engineer before final acceptance of the Contract work.

# 5.25 STORAGE OF MATERIALS; STORAGE AREAS

- **5.25.1** Articles or materials to be incorporated in the work shall be stored in such a manner as to insure the preservation of their quality and fitness for the work, and to facilitate inspection.
- **5.25.2** The Contractor's work and storage areas are limited by the right-of-way lines as indicated on the Plans. The plant facilities are to be installed in property or easements owned by the District as shown on the Plans. The District shall be specifically exempted in any agreement from any liability incurred from the use of private property for construction purposes. The Contractor shall make arrangements and pay for property off-site as required for storage, offices, work assembly areas, etc. The Contractor shall take all responsibility for storage of materials. No equipment for incorporation in the project may be stored in an area subject to flooding.

# **5.26 TRADE NAMES AND ALTERNATIVES**

For convenience in designation in the Specifications and Plans, certain articles or materials to be incorporated in the work may be designated under a trade name or the name of a manufacturer and its catalog information. The use of an alternative article or material that is of equal quality and of the required characteristics for the purpose intended will be permitted, subject to the following requirements:

- **5.26.1** The burden of proof as to the quality and suitability of alternatives shall be upon the Contractor and it shall furnish all information necessary as required by the Engineer. The Engineer shall be the sole judge as to the quality and suitability of alternative articles or materials and his decision shall be final.
- **5.26.2** Whenever the Specifications and Plans permit the substitution of a similar or equivalent material or article, no tests or action relating to the approval of such substitute material or article will be made until the request for substitution is made in writing by the Contractor accompanied by complete data as to the equality of the material or article proposed. Such request by the Contractor must be made within thirty-five (35) days after award of Contract.

### 5.27 CERTIFICATES OF COMPLIANCE

- **5.27.1** A Certificate of Compliance shall be furnished prior to the use of any materials for which the Specifications require that such a certificate be furnished. In addition, when so authorized in the Specifications, the Engineer may permit the use of certain materials or assemblies prior to sampling and testing if accompanied by a Certificate of Compliance. The Certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall state that the materials involved comply in all respects with the requirements of the Contract. A Certificate of Compliance shall be furnished with each lot of material delivered to the work and the Jot so certified shall be clearly identified in the Certificate.
- **5.27.2** All materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the work which conforms to the requirements of the Contract Documents and any such material not conforming to such requirements will be subject to rejection whether in place or not.
- **5.27.3** The District reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance.
- **5.27.4** The form of the Certificate of Compliance and its disposition shall be as directed by the Engineer.

# 5.28 ASSIGNMENT

The Contractor shall not assign the Contract or sublet it as a whole or in part without the written consent of the District, nor shall the Contractor assign any monies due, or to become due to it hereafter, without the prior written consent of the District.

# 5.29 USE OF COMPLETED PORTIONS, RIGHT TO OPERATE UNSATISFACTORY EQUIPMENT OR FACILITIES

- **5.29.1** The District may, at any time, and from time to time, during the performance of the work, enter the work site for the purpose of installing any necessary work by District labor or other contracts, and for any other purpose in connection with the installation of facilities. In doing so, the District shall endeavor not to interfere with the Contractor and the Contractor shall not interfere with other work being done by or on behalf of the District.
- **5.29.2** If, prior to completion and final acceptance of all the work, the District takes possession of any structure or facility (whether completed or otherwise) comprising a portion of the work with the intent to retain possession thereof (as distinguished from temporary possession contemplating the return to the Contractor), then, while the District is in possession of the same, the Contractor shall be relieved of

liability for loss or damage to such structure other than that resulting from the Contractor's fault or negligence. Such taking of possession by the District shall not relieve the Contractor from any provisions of this Contract respecting such structure, other than to the extent specified in the preceding sentence, nor constitute a final acceptance of such structure or facility.

**5.29.3** If, following installation of any equipment or facilities furnished by the Contractor, defects requiring correction by the Contractor are found, the District shall have the right to operate such unsatisfactory equipment or facilities and make reasonable use thereof until the equipment or facilities can be shut down for correction of defects without injury to the District.

# 5.30 LANDS FOR WORK, RIGHT-OF-WAY CONSTRUCTION ROADS, TEMPORARY UTILITY SERVICES

**5.30.1** The District will provide the lands, easements, rights-of-way, and/or encroachment permits necessary or other rights to enter and work on lands necessary for the performance of the work. Other permits and licenses are addressed by section 5.11. Should the Contractor find it advantageous to use any additional land for any purpose whatever, the Contractor shall provide for the use of such land at its expense. The Engineer shall be furnished with a copy of written agreements or otherwise be notified in writing of additional working space which is acquired. Nothing herein contained and nothing marked on the Plans shall be interpreted as giving the Contractor exclusive occupancy of the territory provided by the District.

When two or more contracts are being executed at one time on the same or adjacent land in such a manner that work on one contract may interfere with that on another, the Engineer shall decide which contractor shall cease work, and which shall continue, or whether the work on both contracts shall progress at the same time and in what manner; and the decision of the Engineer shall be final and binding. When the territory of one contract is the necessary or convenient means of access for the performance of another contract, such privilege of access or any other reasonable privilege may be granted by the Engineer to the contractor so desiring, to the extent, amount, in the manner, and at the time permitted. No such decision as to the method or time of conducting the work or the use of territory shall be the basis of any claim for delay or damage.

- **5.30.2** Lands, easements or rights-of-way to be furnished by the District for construction operations will be specifically shown on the Plans.
- **5.30.3** The Contractor shall construct and maintain all roads necessary to reach the various parts of the work and for the transportation thereto of construction material and personnel. The cost of constructing and maintaining such roads shall be borne by the Contractor.

**5.30.4** The Contractor shall make its own arrangements for any utility services it may require during the life of this project. The Contractor shall make its own arrangements for telephone service which it will require for its field office.

### 5.31 PROGRESS SCHEDULE

- **5.31.1** The Contractor shall submit within 10 days after Date of the Contract a schedule or schedules which shall show the dates at which the Contractor will start and complete the several parts of the work. This schedule shall conform to the completion time specified in the Contract. The Contractor shall review and, if necessary, revise the progress schedule at least once per month, and in any event shall submit a current schedule to the Engineer at his request at any time during the contract period.
- **5.31.2** The Engineer shall be advised in advance by the Contractor when construction work is scheduled and the days when no construction work will take place. If the Contractor fails to notify the Engineer in advance of the day or days when no construction work will be done, the Contractor will be charged the cost of inspection for that day or days and such charges may be deducted from any payment due the Contractor.
- **5.31.3** When, in the judgment of the Engineer, it is necessary to accelerate any part of the work ahead of schedule, the Contractor shall, when directed, concentrate its efforts on such part after the work.

# 5.32 COMMENCEMENT AND PROGRESS OF THE WORK AND TIME OF COMPLETION/CONSTRUCTION SEQUENCE

- **5.32.1** The Contractor shall commence the work covered by this Contract within fifteen (15) days after date of issuance of Notice to Proceed from the District to proceed with the work. Work will be considered to have commenced when the Contractor begins ordering materials and equipment or starts site work. The Contractor shall not commence work or incur any expenses in connection therewith, before it is notified to proceed with the work. **Work on the total project shall be commenced within 14 calendar days from the issuance of the Notice to Proceed.** The time allowed for completion includes an allowance for working time lost due to normal inclement weather. **Work schedule shall be coordinated with and approved by District staff.**
- **5.32.2** The Contractor shall give the Engineer written notice not less than two (2) working days in advance of the actual date on which the work will be started. The Contractor shall be entirely responsible for any delay in the work that may be caused by this failure to give such notice. The Engineer shall have the right to specify the locations where the Contractor shall start and proceed with the work.
- **5.32.3** The Contractor shall diligently pursue the work and complete the work as specified within the time limits as set forth in the Contract Documents.

### **5.33 SUSPENSION OF WORK**

- **5.33.1** The Engineer may at any time, by notice in writing to the Contractor, suspend any part of the work for such period of time as may be necessary to prevent improper execution of the work on the project by the Contractor, its subcontractors or agents, and the Contractor shall have no claim for damages or additional compensation on account of any such suspension.
- **5.33.2** The District may at any time suspend any part or all of the work upon ten (1 0) days written notice to the Contractor, who shall thereupon discontinue all work suspended except for all operations to prevent loss or damage to work already executed as may be directed by the Engineer. In the event a part of the work is suspended, the Contractor, if the suspension is not through its fault or the fault of its subcontractors or agents, shall be paid in accordance with section 5.3.9 for costs of work performed in accordance with such orders of the Engineer during such suspension, provided that this shall not include any cost pertaining to work not suspended by the notice to suspend work. Work shall be resumed by the Contractor after such suspension on subsequent written notice to resume work from the District. In the event of suspension of the entire work by the District, the Contractor, if the suspension is not through the fault of the Contractor or the fault of its subcontractors or agents, shall be paid the sum of \$50 for each calendar day during which the entire work shall have been suspended. Said sum is hereby mutually agreed upon as fixed and liquidated damages in full settlement of all costs and expenses, losses and damages resulting to the Contractor from such suspension.
- **5.33.3** In the event of any suspension of the work in whole or in part under subsection 5.33.2 above, if the suspension is not through the fault of the Contractor or the fault of its subcontractors or agents, the Contractor shall be entitled to an extension of time wherein to complete the work to the extent of the delay caused the Contractor thereby. If no agreement can be reached as to the time for extension, the Contractor shall submit a claim to the District within fifteen (15) days of a notice from the District that no agreement can be reached. The claim shall be processed in accordance with section 5.4.
- **5.33.4** In the event the entire work shall be suspended by order of the District, and shall remain so suspended for a period of sixty (60) consecutive days, through no fault of the Contractor or its subcontractors or agents, and notice to resume the work shall not have been served on the Contractor, Contractor may, at its option, by written notice to the District, terminate the Contract in the same manner and on the same terms as if the termination had been initiated by the District pursuant to section 5.34.6, and the District shall have no claim for damages because of such termination of the Contract.

# 5.34 TERMINATION FOR DEFAULT - DAMAGES FOR DELAY - TIMELY EXTENSION

- **5.34.1** The Contractor shall at all times employ such force, plant, materials, supplies, equipment and tools as will be sufficient, in the opinion of the Engineer, to prosecute the work at not less than the rates fixed under the terms of the Contract and to complete the work or any part thereof within the time limits fixed by the Contract. If the Contractor refuses or fails to prosecute the work, or any separable part thereof, with such diligence as will ensure the completion within the time specified in the Contract, or any extension thereof, or fails to complete said work within such time, the District may, after giving ten (10) days written notice to the Contractor, terminate its right to proceed with the work or such part of the work as to which there has been delay.
- **5.34.2** The Contractor's right to proceed shall not be so terminated nor the Contractor charged with resulting damage if:
- **5.34.2.1** The delay in the completion of the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to Acts of God, acts of the public enemy, acts of the District, acts of another contractor in the performance of a contract with the District, fires, floods (excluding site flooding due to groundwater), epidemics, quarantine restrictions, strikes, lockouts, freight embargoes, unusually severe weather, or delays of subcontractors and suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of either the Contractor or such subcontractors and suppliers; and
- **5.34.2.2** The Contractor, within ten (10) days from the beginning of any such delay (unless the Engineer grants a further period of time before the date of final payment under the Contract), notifies the Engineer in writing of the causes of delay and requests an extension of time. The Engineer shall ascertain the facts and the extent of the delay and extend the time for completing the work when, in his judgment, the findings of fact justify such an extension. If the Contractor disagrees with the Engineer's decision, it shall submit a claim to the District within fifteen (15) days after the Engineer's decision, which claim shall be processed in accordance with section 5.4.
- **5.34.3** A request for an extension of time, or the granting of an extension of time, shall not constitute a basis for any claim against the District for additional compensation or damages unless caused by the District or another contractor employed by the District.
- **5.34.4** If the Contractor should be adjudged bankrupt, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed for the Contractor on account of its insolvency and not be discharged within ten (10) days after its appointment, or if the Contractor should fail to make prompt payments to subcontractors or suppliers, or should it persistently disregard laws, ordinances, or the instructions of the Engineer, or should it improperly execute the work, or should it

otherwise commit a substantial violation of any provisions of the Contract, the District may, after giving ten (10) days written notice to the Contractor, terminate the Contract and/or the Contractor's right to proceed with the work.

- **5.34.5** The rights and remedies of the District provided in this section are in addition to any of the rights and remedies provided by law or under this Contract.
- **5.34.6** In addition to the District's rights under this section, if at any time before completion of the work under the Contract, it shall be determined by the District that it is advisable for it, for whatever reason, to terminate the work, it may do so upon ten (10) days written notice to the Contractor. Upon service of such notice of termination, the Contractor shall discontinue the work in such manner, sequence, and at such times as the Engineer may direct. The Contractor shall have no claim for damages for such discontinuance or termination, nor any claim for anticipated profits on the work thus dispensed with or uncompleted, nor any other claim except for the work actually performed up to the time of termination, including any extra work ordered by the Engineer to be done, nor for any claim for liquidated damages in accordance with the provisions of section 5.33.

# 5.35 RIGHTS OF DISTRICT UPON TERMINATION

- **5.35.1** In the event the right of the Contractor to proceed with the work, or any portion thereof, has been terminated because of the fault of the Contractor and the Contractor has been given ten (10) days notice to cure such fault and has not done so, the District may take over the work and prosecute the same to completion by contract or any other method the District deems expedient, and may take possession of and utilize in completing the work such materials, appliances, equipment and plant as may be on the site of the work and necessary therefor. Whether or not the Contractor's right to proceed with the work is terminated, it and its sureties shall be liable for all damages, including but not limited to, costs of managerial and administrative services, engineering, legal and other consultant fees, sustained or incurred by the District in enforcing the provisions of section 5.34 and in completing or causing to complete the Contract work.
- **5.35.2** Upon termination, the Contractor shall not be entitled to receive any further payment until the work is finished. If upon completion of the work the total cost to the District, including, but not limited to, engineering, legal and other consultant fees, costs of managerial and administrative services, construction costs and liquidated damages, shall be less than the amount which would have been paid if the work had been completed by the Contractor in accordance with the terms of the Contract, then the difference shall be paid to the Contractor in the same manner as the final payment under the Contract. If the total cost incurred by the District on account of termination of the Contractor and subsequent completion of the work by the District by whatever method the District may deem expedient shall exceed said amount which the Contractor would otherwise have been paid, the Contractor and its sureties shall be liable to the District for the full amount of such excess expense.

**5.35.3** The rights and remedies of the District provided in this section are in addition to any of the rights and remedies provided by law or under this Contract.

# 5.36 FAILURE TO COMPLETE THE WORK IN THE TIME AGREED: LIQUIDATED DAMAGES

- **5.36.** It is agreed by the parties to the Contract that time is of the essence; and that in case all the work is not completed before or upon the expiration of the time limit as set in the Bid, Contract and Progress Schedule, or within any time extensions that may have been granted, damage will be sustained by the District; and that it may be impracticable to determine the actual amount of damage by reason of such delay; and it is, therefore, agreed that the Contractor shall pay to the District as damages the amount of \$500.00 per day for each and every day's delay in finishing the work in excess of the completion date. The parties expressly agree that this liquidated damage clause is reasonable under the circumstances existing at the time the Contract was made. The District shall have the right to deduct the amount of liquidated damages from any money due or to become due the Contractor.
- **5.36.2** In addition, the District shall have the right to charge to the Contractor and to deduct from the final or progress payments for the work the actual cost to the District of legal, engineering, inspection, superintendence, fines or penalties from federal, state, or local agencies and other expenses, which are directly chargeable to the Contract and which accrue during the period of such delay, except that the cost of final inspection and preparation of the final estimate shall not be included in the charges.
- **5.36.3** Notwithstanding the provisions of section 5.36.1, the Contractor shall not be liable for liquidated damages or delays caused by the removal or relocation of utilities when such removal or relocation is the responsibility of the District or the owner of the utility under California Government Code section 4215.

# 5.37 CLEAN-UP

**5.37.1** During the progress of the work, the Contractor shall maintain the site and related structures and equipment in a clean, orderly condition and free from unsightly accumulation of rubbish. Upon completion of work and before the final estimate is submitted, the Contractor shall at its own cost and expense remove from the vicinity of the work all plants, buildings, rubbish, unused work materials, concrete forms, and temporary bridging and other like materials, belonging to it or used under its direction during the construction; and in the event of its failure to do so, the same may be removed by the District after ten (10) calendar days notice to the Contractor, such removal to be at the expense of the Contractor. Where the construction has crossed yards or driveways, they shall be restored by the Contractor to the complete satisfaction of the Engineer, at the Contractor's expense.

**5.37.2** The Contractor shall dispose of all testing or disinfection water without damage to property, and all in accordance with applicable regulations. All chlorinated water shall be dechlorinated prior to discharge.

# 5.38 COMPLIANCE WITH LAWS; PERMITS; TAXES

Contractor is an independent contractor and shall at its sole cost and expense do the following: comply with all laws, rules, ordinances and regulations of all federal, state and local agencies having jurisdiction over the work; procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the lawful prosecution of the work; pay all federal, state and local taxes, including manufacturers' taxes, sales taxes, use taxes, processing taxes, and payroll, wage, insurance, social security, and unemployment taxes on wages, salaries or any remuneration paid to Contractor's employees, whether levied under existing or subsequently enacted laws, rules or regulations; and pay all property tax assessments on materials or equipment used until acceptance by the District. If any discrepancy or inconsistency is discovered in the Plans or Specifications, or in this Contract in relation to any such law, rule, ordinance, regulation, order or decree, the Contractor shall forthwith report the same to the Engineer in writing. The Contractor shall also protect, defend, hold harmless and indemnify the District, the Engineer, and all of the District's officers, directors, agents, and employees against any claim or liability arising from or based upon the violation of any such Jaw, rule, ordinance, regulation, order or decree, whether by the Contractor itself or by its employees. Particular attention is called to the following:

- **5.38.1** Without limitation, materials furnished and performance by Contractor hereunder shall comply with Safety Orders of the Division of Industrial Safety, State of California, Federal Safety regulations of the Bureau of Labor, Department of Labor; and any other applicable Federal regulations.
- **5.38.2** The Contractor, upon request, shall furnish evidence satisfactory to the District and Engineer that any or all of the foregoing obligations have been or are being fulfilled. The Contractor warrants to the District that it is licensed by all applicable federal, state and local governmental bodies to perform this Contract and will remain so licensed throughout the progress of the work, and that it has, and will have, throughout the progress of the work, the necessary experience, skill and financial resources to enable it to perform this Contract.

# 5.39 PREVAILING WAGE, AND TRAVEL AND SUBSISTENCE PAY

**5.39.1** The Contractor shall forfeit as penalty to the District not more than the sum of fifty dollars (\$50) for each calendar day or portion thereof for each worker (whether employed by the Contractor or subcontractor) paid less than the stipulated prevailing rates for any work done under the Contract in violation of the provisions of the California Labor Code and in particular, sections 1772 to 1780. The amount of this penalty shall be determined by the Labor Commissioner and shall be based on consideration of the contractor's mistake, inadvertence, or neglect in failing to pay the

correct rate of prevailing wages, or the previous record of the contractor in meeting its prevailing wage obligations, or a contractor's willful failure to pay the correct rates of prevailing wages. A mistake, inadvertence, or neglect in failing to pay the correct rate of prevailing wages is not excusable if the contractor had knowledge of its obligations under Labor Code sections 1720, et seq. In addition to the aforementioned penalty, each worker shall be paid the difference between the prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof or which said worker was paid less than the prevailing wage.

**5.39.2** The District will not recognize any claims for additional compensation because of the payment of the wages set forth in the Contract Documents. The possibility of wage increases is one of the elements to be considered by the Contractor in determining its Bid, and will not under any circumstances be considered as the basis of a claim against the District or the Engineer.

### 5.40 LABOR DISCRIMINATION

Attention is directed to California Labor Code section 1735 which is applicable to the work under this Contract and which reads as follows: "A contractor shall not discriminate in the employment of persons upon public works on any basis listed in subdivision (a) of Section 12940 of the Government Code, as those bases are defined in Sections 12926 and 12926.1 of the Government Code, except as otherwise provided in Section 12940 of the Government Code. Every contractor for public works who violates this section is subject to all the penalties imposed for a violation of this chapter."

# **5.41 EIGHT-HOUR DAY LIMITATION**

**5.41.1** In accordance with the provisions of the California Labor Code, and in particular, sections 1810 to 1815, eight hours labor shall constitute a day's work, and no worker, in the employ of the Contractor, or any subcontractor, doing or contracting to do any part of the work contemplated by this Contract, shall be required or permitted to work more than eight (8) hours in anyone calendar day and forty (40) hours in anyone calendar week in violation of those provisions; provided that subject to Labor Code Section 1815, a worker may perform work in excess of either eight (8) hours per day or forty (40) hours during anyone week upon compensation for all hours worked in excess of eight (8) hours per day or forty (40) hours during anyone week at not less than one and one-halftimes the basic rate of pay. Except as just provided, the Contractor shall forfeit as a penalty to the District the sum of twenty-five dollars (\$25) for each worker employed in the performance of this Contract by it or by any subcontractor under it for each calendar day during which such worker is required or permitted to labor more than eight (8) hours in anyone calendar day and forty (40) hours in anyone calendar week in violation of sections 1810 through 1815.

**5.41.2** The Contractor shall comply in all respects with the provisions of Labor Code section 1776, whose provisions are incorporated therein by this reference. In accordance with section 1776, the Contractor and each subcontractor shall keep an

accurate record showing the names, addresses, social security numbers, work classifications, and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by it in connection with the work specified therein, which record shall be open at all reasonable hours at the principal office of the Contractor to the inspection of the District, State and Federal officers and agents. Certified copies of the payroll records shall be furnished or made available for inspection to others as provided in section 1776. These payroll records shall be certified and shall be on forms provided by the State Division of Labor Standards Enforcement, or shall contain the same information as the forms provided by the Division. The Contractor shall file a certified copy of the payroll records with the entity that requested the records within 10 days after receipt of a written request. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated in a manner so as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor shall not be marked or obliterated.

The Contractor shall inform the District of the location of the payroll records, including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address. The Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this section. In the event that the Contractor fails to comply with the 10-day period, he or she shall, as a penalty to the District, forfeit twenty-five dollars (\$25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

### 5.42 EMPLOYMENT OF APPRENTICES

The Contractor's attention is directed to California Labor Code sections 1777.5, 1777.6 and 1777.7 pertaining to employment of indentured apprentices, which are hereby incorporated by reference into this Contract. As applicable, the Contractor or any subcontractor employed by it in the performance of the Contract work shall take such actions as necessary to comply with the provisions of sections 1777.5, 1777.6 and 1777.7.

# **5.43 WATER POLLUTION**

The Contractor shall exercise every reasonable precaution to protect streams, lakes, reservoirs, and canals from pollution with fuels, oils, bitumens, calcium chloride, and other harmful materials and shall conduct and schedule its operations so as to avoid or minimize muddying and silting of said streams, lakes, reservoirs, and canals. Care shall be exercised to preserve vegetation beyond the limits of construction. The Contractor shall comply with California Fish and Game Code section 5650 and all other

applicable statutes and regulations relating to the prevention and abatement of water pollution.

### **5.44 PATENTS**

The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated into the work, and agrees to indemnify, defend, protect and save harmless the District, the Engineer, and all of their officers, directors, employees, and other representatives, from all suits at law, or actions of every nature for, or on account of, the use of any patented materials, equipment, devices, or processes.

# **5.45 PUBLIC CONVENIENCE**

- **5.45.1** This section defines the Contractor's responsibility with regard to convenience of the public and public traffic in connection with its operations.
- **5.45.2** The Contractor shall conduct its operations as to offer the least possible obstruction and inconvenience to the public; and it shall have under construction no greater length or amount of work than it can prosecute properly with due regard to the rights of the public.
- **5.45.3** Unless otherwise provided in the Contract Documents, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible.
- **5.45.4** Spillage resulting from hauling operations along or across any publicly traveled way shall be removed immediately by the Contractor at its expense.
- **5.45.5** Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners.
- **5.45.6** Convenient access to driveways, houses and buildings along the line of the work shall be maintained and temporary approaches to crossings or intersecting highways shall be provided and kept in good condition. When the abutting property owner's access across the right-of-way line is to be eliminated, or to be replaced under the Contract by other access facilities, the existing access shall not be closed until the replacement access facilities are usable.
- **5.45.7** Water shall be supplied at Contractor's expense if ordered by the Engineer for the alleviation or prevention of dust nuisance as provided in the Contract Documents.
- **5.45.8** In order to expedite the passage of public traffic through or around the work, the Contractor shall install signs, lights, flares, barricades, and other facilities for the sole convenience and direction of public traffic. Also, the Contractor shall provide

and station competent flaggers whose sole duties shall consist of directing the movement of public traffic through or around the work. The cost of furnishing and installing such signs, lights, flares, barricades, and other facilities, and the cost of providing and stationing such flaggers, all for the convenience and direction of public traffic, will be considered as included in the Contract price and no additional compensation will be allowed.

**5.45.9** Flaggers and guards, while assigned to traffic control, shall perform their duties and shall be provided with the necessary equipment in accordance with the current "Instructions to Flaggers" of the California Department of Transportation . The equipment shall be furnished and kept clean and in good repair by the Contractor at its expense.

# **5.46 UNDERGROUND UTILITIES**

Prior to conducting any excavation, the Contractor shall contact the appropriate regional notification center as required by and shall otherwise comply with California Government Code section 4216, et seq. In accordance with Government Code section 4215, the Contractor shall be compensated for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, and removing or relocating existing main or trunkline utility facilities not indicated in the Contract Plans and Specifications with reasonable accuracy, and for the equipment on the project necessarily idled during such work; provided that the Contractor shall first notify the Engineer before commencing work on locating, repairing damage to, removing or relocating such utilities.

### **5.47 SAFETY AND TRENCHING**

- **5.47.1** The Contractor shall be solely and completely responsible for the conditions of the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety provisions shall conform to all applicable Federal, State, and local laws, ordinances, and codes, and to the rules and regulations established by the California Division of Industrial Safety, and to other rules of law applicable to the work.
- **5.47.2** The services of the Engineer in conducting construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's work methods, equipment, bracing or scaffolding or safety measures, in, on, or near the construction site, and shall not be construed as supervision of the actual construction nor make the Engineer or the District responsible for providing a safe place for the performance of work by the Contractor, subcontractors, or suppliers; or for access, visits, use work, travel or occupancy by any person.
- **5.47.3** The Contractor shall carefully instruct all personnel working in potentially hazardous work areas as to potential dangers and shall provide such necessary safety

equipment and instruction as is necessary to prevent injury to personnel and damage to property. Special care shall be exercised relative to electrical work, work involving excavation and in pump sump work.

- **5.47.4** All work and materials shall be in strict accordance with all applicable State, Federal and local laws, rules, regulations, and codes.
- **5.47.5** Nothing in this Contract is to be construed to permit work not conforming to governing law. When Contract Documents differ from governing law, the Contractor shall furnish and install the higher standards called for without extra charge. All equipment furnished shall be grounded and provided with guards and protection as required by safety codes. When vapor-tight or explosion-proof electrical installation is required by law, this shall be provided.
- **5.47.6 Shoring and Trench Safety Plan**. Attention is directed to California Civil Code section 832 relating to lateral and subjacent support, and the Contractor shall comply with this law.
- **5.47.7** In accordance with California Labor Code § 6705, if the total amount of the contract is in excess of \$25,000, the Contractor shall submit to the District for acceptance, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches 5 feet of more in depth.
- **5.47.7.1** The plan shall be prepared by a registered civil or structural engineer. As a part of the plan, a note shall be included stating that the registered civil or structural engineer certifies that the plan complies with applicable requirements of the United States Department of Labor regulations (29 CFR Part 1926) and the Cal-OSHA Construction Safety Orders, whichever are more stringent, or that the registered civil or structural engineer certifies that the plan is not less effective than the shoring, bracing, sloping, or other provisions of OSHA and the Safety Orders.
- **5.47.7.2** The District or the Engineer or their consultants may have made investigations of subsurface conditions in areas we the work is to be performed. If so, these investigations are identified in the Contract Documents and the records of such investigations are available for inspection at the office of the Engineer. The detailed plan showing the design of shoring, etc., which the Contractor is required to submit to the District for acceptance of excavation will be not accepted by the District if the plan is based on subsurface conditions which are more favorable than those revealed by the investigations made by the District or the Engineer or their consultants; nor will the plan be accepted if it is based on soils-related criteria which is less restrictive than the criteria set forth in the report on the aforesaid investigations of subsurface conditions.
- **5.47.7.3** The detailed plan showing the design of shoring, etc., shall include surcharge loads for nearby embankments and structures, for spoil banks, and for construction equipment and other construction loadings. The plan shall indicate for

all trench conditions the minimum horizontal distances from the side of the trench at its top to the near side of the surcharge loads.

- **5.47.7.4** Nothing contained in this section shall be construed as relieving the Contractor of the full responsibility for providing shoring, bracing, sloping, or other provisions which are adequate for worker protection. Review of the plan by the District and/or Engineer is only for general conformance to OSHA and the Safety Orders. Their failure to note exceptions) to the submittal does not relieve Contractor of any responsibility or liability for the plan. Contractor remains solely and completely responsible for all trench safety and for the means, methods, procedures, and materials therefor.
- **5.47.7.8** In accordance with California Public Contract Code section 7104, in the event that the work involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the District in writing, of any:
  - (a) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 251 17 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law;
  - (b) Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids; or,
- (c) 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. The District shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the Contract. In the event that a dispute arises between the District and the Contractor whet the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the 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. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

### 5.48 PROTECTION OF PERSON AND PROPERTY

**5.48.1** The Contractor shall take whatever precautions are necessary to prevent damage to all existing improvements, including above ground and underground utilities, trees, shrubbery that is not specifically shown to be removed, fences, signs, mailboxes,

GDPUD 5-33 OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT survey markers and monuments, buildings, structures, the District's property, adjacent property, and any other improvements or facilities within or adjacent to the work. If such improvements or property are injured or damaged by reason of the Contractor's operations, they shall be replaced or restored, at the Contractor's expense, to a condition at least as good as the condition they were in prior to the start of the Contractor's operations.

- **5.48.2** The Contractor shall adopt all practical means to minimize interference to traffic and public inconvenience, discomfort or damage. The Contractor shall protect against injury to any pipes, conduits or other structures crossing the trenching or encountered in the work and shall be responsible for any injury done to such pipes or structures, or damage to property resulting therefrom. The Contractor shall support or replace any such structures without delay and without any additional compensation to the entire satisfaction of the Engineer. All obstructions to traffic shall be guarded by barriers illuminated at night. The Contractor shall be responsible for all damage to persons and property directly or indirectly caused by its operations and, under all circumstances, it must comply with the laws and regulations of the County and the State of California relative to safety of persons and property and the interruption of traffic and the convenience of the public within the respective jurisdictions.
- **5.48.3** The Contractor is cautioned that it must replace all improvements in rights-of-way and within the public streets to a condition equal to what existed prior to its entry onto the job.
- **5.48.4** Type and time of construction required at any road subject to interference by Contract work will be determined by those authorities responsible for maintenance of said road. It shall be the responsibility of the Contractor to determine the nature and extent of all such requirements, including provision of temporary detours as required; however, any construction right-of-way obtained by the District at affected roadways will be adequate for provision of all required detours. As required at any road crossing, the Contractor shall provide all necessary flaggers, guardrails, barricades, signals, warning signs and lighting to provide for the safety of existing roads and detours. Immediately after the need for temporary detours ceases, or when directed, the Contractor shall remove such detours and perform all necessary cleanup work, including replacement of fences, and removal of pavement. Included shall be all necessary replacement of existing roadway appurtenances, grading work, soil stabilization and dust control measures, as required and directed. The cost of all work specified under this section shall be borne by the Contractor.
- **5.48.5** The Contractor shall examine all bridges, culverts, and other structures over which it will move its materials and equipment, and before using them, it shall properly strengthen such structures we necessary. The Contractor shall be responsible for any and all injury or damage to such structures caused by reason of its operations.

# 5.49 RESPONSIBILITY FOR REPAIR OF FACILITIES

All public or private facilities, including but not limited to canals, structures, telephone cables, roadways, curbs, gutters, parking lots, private drives, levees and embankments for creeks, ponds and reservoirs disturbed during construction of the work shall be repaired and/or replaced by the Contractor to match facilities existing prior to construction. In addition, the Contractor shall be responsible for any settlement damage to such facilities or adjoining areas for a period of one year after acceptance of such required facilities.

### 5.50 DISTRICT'S REPAIR

In the event the Contractor refuses or neglects to make good any loss or damage for which it is responsible under this Contract, the District may itself, or by the employment of others, make good any such loss or damage, and the cost and expense of doing so, including any reasonable engineering, legal and other consultant fees, and any costs of administrative and managerial services, shall be charged to the Contractor. Such costs and expenses may be deducted by the District from claims for payment made by the Contractor for work completed or remaining to be completed.

# 5.51 CONTRACTOR'S LICENSE NOTICE

STATEMENT REQUIRED BY CALIFORNIA BUSINESS & PROFESSIONS CODE SECTION 7030:

"CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STATE LICENSE BOARD WHICH HAS JURISDICTION TO INVESTIGATE COMPLAINTS AGAINST CONTRACTORS IF A COMPLAINT REGARDING A PATENT ACT OR OMISSION IS FILED WITHIN FOUR YEARS OF THE DATE OF THE ALLEGED VIOLATION. A COMPLAINT REGARDING A LATENT ACT OR OMISSION PERTAINING TO STRUCTURAL DEFECTS MUST BE FILED WITHIN 10 YEARS OF THE DATE OF THE ALLEGED VIOLATION. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO: REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 26000, SACRAMENTO, CALIFORNIA 95826."

#### 5.52 INSURANCE

**5.52.1** The Contractor shall procure and maintain for the duration of the Contract the following insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, its agents, representatives, employees or subcontractors.

**5.52.2 Minimum Scope of Insurance.** Coverage shall be at least as broad as:

a. Commercial general liability coverage (Insurance Services Office

GDPUD 5-35 OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT Commercial General Liability coverage occurrence Form CG 0001), including liability coverage for premises and operations, explosion and collapse hazard, underground hazard, products/completed operations hazard, contractual liability, use of independent contractors, and broad form property damage with completed operations.

- b. Automobile liability coverage (Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code 1 (any auto)).
- c. Workers' compensation insurance as required by the State of California and employer's liability insurance.
- d. Course of construction (also known as builder's risk) insurance form providing coverage for all risks of physical loss, damage or destruction to the work, to insure against such losses until final acceptance of the work by the District.
- **5.52.3 Minimum Limits of Insurance.** The Contractor shall maintain limits no less than:
  - a. General Liability: \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If commercial general liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
  - b. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
  - c. Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
  - d. Course of Construction: Completed value of the project.

The above insurance limits can be met through provision of umbrella or excess policy insurance coverage consistent with the provisions of this Section 5.52.

- **5.52.4 Deductibles and Self-Insured Retentions.** Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.
- **5.52.5** The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

GDPUD 5-36
OLD AUBURN LAKE TRAILS
WATER TREATMENT PLANT DEMOLITION PROJECT

- **5.52.5.1** The District and its officers, officials, employees, agents and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Contractor, products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, and their officers, officials, employees, agents or volunteers. The additional insured coverage or endorsement shall comply with California Insurance Code section 11580.04.
- **5.52.5.2** For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the District and its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the District and its officers, officials, employees, agents or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- **5.52.5.3** Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the District and its officers, officials, employees, agents or volunteers.
- **5.52.5.4** The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- **5.52.5.5** Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after 30 days' prior written notice by U.S. mail has been given to the District.
- **5.52.6** Course of construction policies shall contain, or be endorsed to contain, the following provisions: (a) District shall be named as loss payee; and (b) The insurer shall waive all rights of subrogation against the District.
- **5.52.7** Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-:VII or equivalent, unless otherwise approved by District.
- **5.52.8 Verification of Coverage.** Prior to commencing work, Contractor shall provide to District the following proof of insurance: (a) certificate(s) of insurance on ACORD Form 25-S (or insurer's equivalent) evidencing the required insurance coverages; and (b) endorsement(s) on ISO Form CG 2010 (or insurer's equivalent), signed by a person authorized to bind coverage on behalf of the insurer(s) and certifying the additional insured coverages, or equivalent additional insured blanket endorsement. The District reserves the right to require complete copies of all required insurance policies and/or endorsements affecting required insurance coverage at any time.

- **5.52.9 Subcontractors.** The Contractor shall include all actions and activities of its subcontractors as insureds under its policies, or shall require each subcontractor to provide insurance coverage consistent with the foregoing and to furnish separate endorsements or certificates to the District. All coverages for subcontractors shall be subject to all of the requirements stated in this section.
- **5.52.10** Any products/completed operations insurance coverage shall be maintained after completion of the project for the full guarantee period.
- **5.52.11** The requirements as to the types, limits, and the District's approval of insurance coverage to be maintained by the Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Contractor under the Contract.
- **5.52.12** In addition to any other remedy the District may have, if the Contractor or any of the subcontractors fails to maintain the insurance coverage as required in this section 5.52, the District may obtain such insurance coverage as is not being maintained, in form and amount substantially the same as required herein, and the District may deduct the cost of such insurance from any amounts due or which may become due the Contractor under this Contract.

# 5.53 INDEMNITY AND LITIGATION COST

- **5.53.1** Contractor shall protect, defend, indemnify and hold harmless the District and Engineer, and their respective officers, directors, agents, employees, volunteers, representatives, boards, and consultants from and against all penalties and fines imposed by law and all loss, claim, cause of action, demand, suit, judgment, cost, damage, expense, and liability (including but not limited to court or arbitration costs and reasonable attorneys' and expert witness fees) resulting from injury to or death of persons, including without limitation employees of the District, Engineer and Contractor, or damage to or loss of property, caused by, arising out of or in any way connected with the Contractor's or its subcontractors' or suppliers' performance, operations or activities under this Contract, except to the extent the sole negligence, active negligence or willful misconduct of an indemnified party proximately causes the loss, claim, demand, cost, suit, judgment, penalty, fine, cause of action, damage, expense, or liability. Upon the request of an indemnified party hereunder, Contractor shall defend any suit asserting a claim covered by this indemnity and shall pay any cost that may be incurred by an indemnified party in enforcing this indemnity. In all cases, the indemnified party shall have the right to approve counsel selected by Contractor in the defense of any legal action or with respect to any claim, which approval shall not be unreasonably withheld. In addition, the indemnified party shall have the right to participate in and be represented by counsel of its own choice and at its own expense in any legal action or with respect to any claim.
- **5.53.2** The District may withhold from payment due Contractor hereunder such amounts as, in the District's opinion, are sufficient to provide security against all loss,

damage, expense, penalty, fine, cost, claim, demand, suit, cause of action, judgment, or liability covered by the foregoing indemnity provision.

- **5.53.3** In any and all claims against the District or the Engineer and his consultants, and each of their officers, directors, employees and agents by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under this section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable under Worker's Compensation statutes, disability benefit statutes or other employee benefit statutes.
- **5.53.4** Neither termination of this Contract nor completion of the acts to be performed under this Contract shall release Contractor from its obligations to indemnify, so long as the event upon which the claim is predicated shall have occurred prior to the effective date of any such termination or completion and arose out of or was in any way connected with performance or operations under this Contract by Contractor, its employees, agents, suppliers or subcontractors, or the employee, agent or subcontractor of anyone of them.
- **5.53.5** Submission of insurance certificates or submission of other proof of compliance with the insurance requirements in this Contract does not relieve Contractor from liability under this indemnification and hold harmless clause. The obligations of this indemnity section shall apply whet or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.
- **5.53.6** In accordance with California Public Contract Code section 920I(b), if District receives any written third-party claim relating to work performed under this Contract, then District agrees to promptly notify Contractor about the third-party claim.

# 5.54 PROTECTION OF WORK

**5.54.1** The Contractor shall be responsible for the care of all work until its completion and final acceptance; and it shall, at its own expense, replace damaged or lost material and repair damaged parts of the work or the same may be done at its expense by the District and the Contractor and its sureties shall be liable therefor. The Contractor shall make its own provisions for properly storing and protecting all material and equipment against theft, injury, or damage from any and all causes. Damaged material and equipment shall not be used in the work. The Contractor shall take all risks from floods and casualties except as provided by law, and shall make no charge for the restoration of such portions of the work as may be destroyed or damaged by flood or other casualties or because of danger from flood or other casualties or for delays from such causes. The Contractor may, however, be allowed a reasonable extension of time on account of such delays, subject to the conditions hereinbefore specified.

- **5.54.2** The Contractor shall effectively secure and protect adjacent property and structures, livestock, crops and other vegetation. If applicable, the Contractor shall open fences on or crossing the right-of-way and install temporary gates of sound construction thereon so as to prevent the escape of livestock. Adjacent fence posts shall be adequately braced to prevent the sagging or slackening of the wire. Before such fences are opened, the Contractor shall notify the owner or tenant of the property and, we practicable, the opening of the fence shall be in accordance with the wishes of said owner or tenant. The Contractor shall be responsible that no loss or inconvenience shall accrue to the owner or tenant by virtue of its fences having been opened or the gate not having been either shut or attended at all times. We special types of fences are encountered, the Contractor shall install temporary gates made of similar materials and of suitable quality to serve the purposes of the original fences. In all cases we the Contractor removes fences to obtain work room, it shall provide and install temporary fencing as required, and on completion of construction shall restore the original fence to the satisfaction of the Engineer. All costs of providing, maintaining and restoring gates and fencing shall be borne by the Contractor. The Contractor shall provide and maintain all passageways, guard fences, lights and other facilities for protection required by public authority or local conditions.
- **5.54.3** The Contractor shall use extreme care during construction to prevent damage from dust to crops and adjacent property. The Contractor, at its own expense, shall provide adequate dust control for the right-of-way and take other preventative measures as directed by the Engineer.
- **5.54.4** The Contractor shall be responsible for all damage to any property resulting from trespass by the Contractor or its employees in the course of their employment, or subcontractors or their employees in the course of their employment, or anyone directly or indirectly employed by any of them, whet such trespass was committed with or without the consent or knowledge of the Contractor.
- **5.54.5** The Contractor shall see that the worksite is kept drained and free of all ground water and any other water which may impede the progress or execution of the Contract work.
- **5.54.6** The Contractor shall be responsible for any damage caused by drainage or water runoff from construction areas and from construction plant areas.
- **5.54.7** In an emergency affecting the safety of life, or of the work, or of adjoining property, the Contractor, without special instruction or authorization from the Engineer, is hereby permitted to act at its discretion to prevent such threatened loss or injury, and it shall so act without appeal if so instructed or authorized. Should the Engineer deem an emergency condition to exist, the Contractor shall immediately do those things and take those steps ordered by the Engineer. The decision of the Engineer in this respect shall be final and conclusive. Any claims for compensation made by the Contractor on account of emergency work shall be determined as specified under section 5.3.

- **5.54.8** Except as provided by California Government Code section 4215, the Contractor shall be responsible for the removal, relocation and protection of all public and private utilities, including irrigation facilities in the nature of utilities, located on the site of the construction project if and to the extent that the same are identified in the Contract Documents; and the Contractor shall not be entitled to any extension of time or claim for damages for extra compensation in connection therewith. If and to the extent that such utilities or facilities are not identified in the Contract Documents, as between the Contractor and the District, the District will be responsible for the cost of their removal, relocation or protection, as the case may be, but the Contractor shall perform any such work in conformance with applicable provisions of section 5.3, if so directed by the Engineer and in such situation the Contractor shall not be responsible for delay in completion of the project caused by the failure of the District or the owner of the utility to provide for such removal or relocation. If the Contractor, while performing the Contract, discovers utility or irrigation facilities not identified by the District in the Contract Documents, it shall immediately notify the Engineer in writing.
- **5.54.9** When the work to be performed under the Contract crosses or otherwise interferes with existing streams, watercourses, canals, farm ditches, pipelines, drainage channels, or water supplies, the Contractor shall provide for such watercourse or pipelines and shall perform such construction during the progress of the work so that no damage will result to either public or private interests; and the Contractor shall be liable for all damage that may result from failure to so provide during the progress of the work.

### 5.55 ACCIDENTS

- **5.55.1** The Contractor shall provide and maintain, in accordance with California Labor Code section 6708 and Cal-OSHA requirements, adequate emergency first-aid treatment for its employees and anyone else who may be injured in connection with the work.
- **5.55.2** The Contractor shall promptly report in writing to the Engineer all accidents of any nature arising out of, or in connection with, the performance of the work, on or adjacent to the site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death, serious injury, or serious damage occurs, the Contractor shall report the accident immediately by telephone or messenger to the District and the Engineer.
- **5.55.3** If any claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the Engineer, giving full details of the claim.

# 5.56 NO PERSONAL LIABILITY

Neither the District, the Engineer, nor any of their officers, directors, agents, or employees shall be personally responsible for any liability arising under the Contract, except such obligations as are specifically set forth herein.

### 5.57 MEASUREMENT OF QUANTITIES

Where the Contract provides for payment on a lump sum price basis, no measurement of quantity will be made. Where the Contract provides for payment on a unit price basis, the quantities of work performed will be computed by the Engineer on the basis of measurements taken by the Engineer, and these measurements shall be final and conclusive. All quantities of work computed under the Contract shall be based upon measurements by the Engineer according to United States Measurements and Weights. Methods of measurement are specified herein and in the Specifications.

### 5.58 SCOPE OF PAYMENT

- **5.58.1** The Contractor shall accept the compensation provided in the Contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to the completed work and for performing all work contemplated and embraced under the Contract; also for loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work until the acceptance by the District and for all risks of every description connected with the prosecution of the work; also for all expenses incurred in consequence of the suspension or discontinuance of the work as provided in the Contract; and for completing the work according to the Specifications and Plans. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.
- **5.58.2** No compensation will be made in any case for loss of anticipated profits. Increased or decreased work involving supplemental agreements will be paid for as provided in such agreements.

### 5.59 PROGRESS ESTIMATE

For each calendar month of Contract work, the Engineer will prepare a progress estimate of all work performed under the Contract. Within the first ten (10) days of each succeeding calendar month, the Engineer will prepare in writing and certify to the District, an estimate which in his opinion is a fair approximation of the value of all work done under the Contract, including any amounts due the Contractor for extra work and change orders. In arriving at the value of the work done, the Engineer will give consideration to the value of labor and materials which have been incorporated into the permanent work by the Contractor during the preceding month. Consideration will not be given to preparatory work done or for materials or equipment on hand. In order to

assist the Engineer, the Contractor shall furnish the Engineer with copies of invoices for all such items delivered to the job site and incorporated into the work.

#### **5.60 PROGRESS PAYMENTS**

- **5.60.1** The District will pay the Contractor ninety (90%) percent of the amount of each properly submitted and undisputed progress payment request. Ten (10%) percent of the amount of each payment request shall be retained by the District until final completion and acceptance of all work under the Contract; provided, however, that if the Engineer, at any time after fifty (50%) percent of the work has been completed, finds that satisfactory progress is being made, the District may pay any or all of the remaining progress payments in full.
- **5.60.2** In accordance with California Public Contract Code section 20104.50, a written payment request from the Contractor shall be reviewed by the Engineer as soon as practicable in order to determine whether it is proper. If it is determined not to be a proper payment request suitable for payment, then the Engineer shall return it to the Contractor with a written explanation of the deficiencies as soon as practicable, but not later than 7 days after receipt of the payment request. If the payment request is determined to be properly submitted and is undisputed, the Engineer will certify the payment as provided above and the District shall make the payment to the Contractor within 30 days after receipt of the payment request. If a properly submitted and undisputed payment request is not paid within this 30 day period, then the District shall pay interest on the overdue amount to the Contractor at the legal rate set forth at California Code of Civil Procedure section 685.010. This section shall not apply if District funds are not available for payment of the payment request or if payment is delayed due to an audit inquiry by the financial officer of the District.

#### **5.60.3** Omitted.

- **5.60.4** When, in the judgment of the Engineer, the work is not proceeding in accordance with the provisions of the Contract, or when in his judgment the total amount of the work done since the last estimate amounts to less than \$1,000, no pay estimate will be prepared and no progress payment will be made.
- **5.60.5** No progress estimate or payment shall be considered to be an approval or acceptance of any work, materials or equipment. Estimated amounts and values of work done and materials and equipment incorporated into the work will be conformed to actual amounts and values as they become available in subsequent progress estimates, progress payments and the final estimate and payment. All estimates and payments will be subject to correction in subsequent progress estimates and payments and the final estimate and payment.
- **5.60.6** It is mutually agreed between the parties to the Contract that no payments made under the Contract, including progress payments and the final payment, shall be evidence of the performance of the Contract, either wholly or in part, and no payment

shall be construed to be an acceptance of any defective or incomplete work or improper materials

**5.60.7** District reserves the right to make payments jointly to the order of the Contractor and to any of its subcontractors or suppliers that might have a right to file a stop notice with the District. The District shall have no obligation to payor to ensure the payment of money to a subcontractor or supplier, except as may otherwise be required by law.

#### 5.61 FINAL ACCEPTANCE AND DATE OF COMPLETION

Whenever the Contractor shall deem all work under this Contract to have been completed in accordance therewith, it shall so notify the Engineer in writing, and the Engineer shall promptly ascertain whether the work has been satisfactorily completed and, if not, shall advise the Contractor in detail and in writing of any additional work required. When all the provisions of the Contract have been fully complied with to the satisfaction of the Engineer, he shall proceed with all reasonable diligence to determine accurately the total value of all work performed by the Contractor at the prices set forth in the Contract or fixed by Change Orders, and the total value of all extra work, all in accordance with the Contract. The Engineer will then certify to said final estimate and to the completion of the work, and will file copies thereof with the District and the Contractor. The date of completion shall be the date upon which the District Board adopts a Resolution accepting the Project as complete.

#### **5.62 FINAL PAYMENT**

Within 10 days after the date of completion, the District will file in the office of the County Recorder, a Notice of Completion of the work herein agreed to be done by the Contractor. On the expiration of60 days after the recordation of such Notice of Completion, the difference between said final estimate and all payments theretofore made to the Contractor shall be due and payable to the Contractor, subject to any requirements concerning the furnishing of a maintenance bond, and excepting only such sum or sums as may be withheld or deducted in accordance with the provisions of this Contract or as required by law. All prior certifications upon which partial payments may have been made, being merely estimates, shall be subject to correction in the final certificate. In accordance with California Public Contract Code section 7107(c), in the event of a dispute between the District and the Contractor, the District may withhold from the final payment an amount not to exceed 150% of the disputed amount.

#### **5.63 FINAL RELEASE**

Final payment to the Contractor in accordance with the final estimate is contingent upon the Contractor furnishing the District with a signed written release of all claims against the District arising by virtue of the Contract. Disputed Contract claims in

stated amounts may be specifically excluded by the Contractor from the operation of the release. The release shall be in substantially one of the following forms:

# **UNCONDITIONAL WAIVER AND RELEASE UPON FINAL PAYMENT**

The undersigned has been paid in furnished to the District on the job	ıll for all labor, services, equipment or of the District located at			
California, and does hereby waive and rele notice, or any right against a labor and mat claims for extra work in the amount of \$	ase any right to a mechanic's lien, stop erial bond on the job, except for disputed			
CONTRACTOR				
	[Contractor name] [Authorized signature] [Name] [Title]			
	IG UP THOSE RIGHTS. THIS DOCUMENT J SIGN <i>IT,</i> EVEN IF YOU HAVE NOT BEEN			
CONDITIONAL WAIVER AND REL	EASE UPON FINAL PAYMENT a check from the District in the sum of			
\$ payable to Contractor and wh and has been paid by the bank upon which	en the check has been properly endorsed its is drawn, this document shall become op notice, or bond right the undersigned has ment to the undersigned of all labor, on the job, except for disputed claims for sefore any recipient of this document relies			
Dated:	[Contractor name] [Authorized signature] [Name] [Title]			

## 5.64 RIGHT TO WITHHOLD PAYMENTS

In addition to all other rights and remedies of the District hereunder and by virtue of law, the District may withhold or nullify the whole or any part of any progress payment or up to 150% of the disputed amount from the final payment (see California Public Contract Code section 7107(c)) to such extent as may reasonably be necessary to protect the District from loss on account of:

- **5.64.1** Defective work not remedied, irrespective of when any such work be found to be defective;
- **5.64.2** Claims or liens filed or reasonable evidence indicating probable filing of claims or liens including, but not limited to, claims under California Labor Code sections 1775, 1776, or 1777.7;
- **5.64.3** Failure of the Contractor to make payments properly for labor, materials, equipment, or other facilities, or to subcontractors and/or suppliers;
- **5.64.4** A reasonable doubt that the work can be completed for the balance then unearned:
- **5.64.5** A reasonable doubt that the Contractor will complete the work within the agreed time limits;
- **5.64.6** Costs to the District resulting from failure of the Contractor to complete the work within the proper time; or

#### 5.64.7 Damage to work or property.

Whenever the District shall, in accordance herewith, withhold any monies otherwise due the Contractor, written notice of the amount withheld and the reasons therefor will be given the Contractor. After the Contractor has corrected the enumerated deficiencies, the District will promptly pay to the Contractor the amount so withheld. When monies are withheld to protect the District against claims or liens of mechanics, suppliers, materialmen, subcontractors, etc., the District may at its discretion permit the Contractor to deliver a surety bond in terms and amount satisfactory to the District, indemnifying the District against any loss or expense, and upon acceptance thereof by the District, the District shall release to the Contractor monies so withheld.

# **5.65 WAIVER OF INTEREST**

The District shall have no obligation to pay and the Contractor hereby waives the right to recover interest with regard to monies that the District is required to withhold by reason of judgment, order, statute or judicial process, or may withhold pursuant to the provisions of this Contract.

## 5.66 SATISFACTION OF CLAIMS AND LIENS

Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the District, a complete release of all liens and claims arising out of this Contract, or receipts in full in lieu thereof and, if required in either case, an affidavit that so far as it has knowledge or information the releases and receipts include all the labor and material for which a lien or claim could be filed; but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the District, to indemnify the District against any lien or claim. If any lien or claim remains unsatisfied after all payments are made, the Contractor shall refund to the District all monies that the latter may be compelled to pay in discharging such a lien, or claim, including all costs and reasonable attorney's fees.

#### 5.67 ASSIGNMENT

In accordance with California Public Contract Code section 7103.5, the Contractor hereby offers and agrees to assign to the District 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. section 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 Contract Documents. This assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgment by the parties.

# 5.68 AVAILABILITY AND AUDIT OF INFORMATION

- **5.68.1** The District's duly authorized representatives shall have, during the term of the Contract and for two years thereafter, the right to inspect, copy and audit all of the Contractor's and its subcontractors' accounts and records of all description, including but not limited to source documents and computer files, and to interview personnel, pertaining to the Contract to verify or review the quantity, quality, work program and progress of the work, reimbursable costs, amounts claimed by the Contractor, estimates of cost for fixed rates including those applicable to proposed changes, and for any other reasonable purposes.
- **5.68.2** The Contractor's and its subcontractors' accounts shall be kept in accordance with generally accepted accounting principles in the particular industry and shall be kept in such a manner and in sufficient detail to clearly disclose the nature and amounts of the different items of service and cost pertaining to the Contract and the basis for charges or allocations to the Contract. The Contractor and its subcontractors shall preserve all such accounts and records for a period of two years after the term of the Contract.
- **5.68.3** The Contractor shall include the necessary provisions in its subcontracts to ensure that its subcontractors comply with this provision.

GDPUD 5-47 OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT **5.68.4** The parties acknowledge that this Contract, and performance and payments under this Contract, are subject to examination and audit by the State Auditor General for three years following final payment under this Contract pursuant to California Government Code section 8546.7.

#### 5.69 HAZARDOUS MATERIALS

The California Health and Safety Code requires businesses to provide warnings prior to exposing individuals to materials listed by the Governor as chemicals "known to cause cancer or reproductive toxicity." The District may use chemicals on the Governor's list at many of its facilities. In addition, many of these chemicals are present at non-District-owned facilities and locations. Accordingly, in performing the work or services contemplated under this Contract, Contractor, its employees, agents, and subcontractors may be exposed to chemicals on the Governor's list. Contractor is responsible for notifying its employees, agents, and Subcontractors that work performed hereunder may result in exposures to chemicals on the Governor's list.

#### 5.70 INTEGRATION

The Contract Documents constitute the sole, final, complete, exclusive and integrated expression and statement of the terms of this contract among the parties concerning the subject matter addressed herein, and supersedes all prior negotiations, representations or agreements, either oral or written, that may be related to the subject matter of this Contract, except those other documents that are expressly referenced in the Contract Documents.

#### 5.71 WAIVER

The waiver at any time by any party of its rights with respect to a default or other matter arising in connection with this Contract shall not be deemed a waiver with respect to any subsequent default or matter.

# **5.72 REMEDIES NOT EXCLUSIVE**

The remedies provided in this Contract are cumulative and not exclusive, and are in addition to any other remedies that may be provided by law or equity. The exercise by either party of any remedy under this Contract shall be without prejudice to the enforcement of any other remedy.

#### 5.73 SEVERABILITY

The invalidity, illegality or unenforceability of any provision of the Contract Documents shall not render the other provisions unenforceable, invalid or illegal.

#### 5.74 GOVERNING LAW AND VENUE

Except as otherwise required by law, this Contract shall be interpreted, governed by, and construed under the laws of the State of California. The County shall be venue for any litigation concerning the enforcement or construction of this Contract.

#### 5.75 NOTICES

Any notice, demand, invoice or other communication required or permitted to be given under this Contract shall be in writing and either served personally or sent by prepaid, first class U.S. Mail and addressed as follows: for the District, either to the Engineer or the District at the addresses set forth in the Invitation to Bid; for the Contractor, at the address set forth in its Bid. Any party may change its address by notifying the other party in writing of the change of address.

# TECHNICAL SPECIFICATIONS (SECTION 6 - SPECIAL PROVISIONS)

For

# GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

# OLD AUBURN LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT

JUNE 2021

# **Prepared and Reviewed By**:

**COASTLAND CIVIL ENGINEERING** 

ASA UTTERBACK, P.E.

CE 57700

DATE: <u>JUNE 9, 2020</u>



Georgetown Divide Public Utility District Old Auburn Lake Trails Water Treatment Plant Demolition Project

# SECTION 6 SPECIAL PROVISIONS

# **6-1 GENERAL**

#### 6-1.01 General Description of Work

The District recently constructed a new water treatment plant at the treatment plant site. Some elements of the old water treatment plant need to be demolished and removed from the site. The Contractor is to remove all deactivated elements as called out for removal on the project plans. Major items to be removed include: three (3) 8' x 30' horizontal pressure filters, including contents of the filters and concrete footings; demolish and remove control building, including entire contents of the building and building foundation; remove generator and wood deck generator pad; remove 30-ft diameter bolted steel tank and foundation; demolish and remove miscellaneous concrete pads and all other miscellaneous items from the site within the limits of work. All above ground piping shall be removed, cut to 12" below grade, and capped or plugged. A minor element of work includes installing a blind flange on an existing pressurized 12" butterfly valve. Finally, contractor shall regrade the area; fill in holes with gravel or crushed rock; and cover the limits of work with gravel, crushed rock, or other suitable material as approved by the District. Approximately 60 cubic yards (CY) of aggregate base, gravel, or other material import is anticipated to fill voids from building foundation and footings, concrete pads, etc. At the contractor's option, concrete to be removed from the site (foundations, pads, etc.) may be pulverized to 1.5" minus material and recycled on site to fill in voids.

The materials removed from the site shall become the property of the Contractor and shall be removed from the site and disposed of by the Contractor. The operation of the new water treatment plant shall remain uninterrupted at all times.

The work includes handling and disposal of hazardous materials. A Hazardous Materials Survey was conducted and the associated Hazardous Materials Survey Final Report, prepared by Entek Consulting Group, is included in Exhibit D. Handling and disposal of all hazardous materials encountered on the site shall be in accordance with Section 6-1.07 of these specifications and Exhibits A through D of these specifications.

The Contractor shall conduct site cleanup, site restoration and environmental controls, as necessary, to protect the project area during construction and return the project site to pre-project conditions, or better.

The Contractor shall maintain and protect existing property line fencing to protect the site during construction and to return fencing to pre-project condition. Any damage to existing fencing caused by the Contractor's operations shall be repaired by the Contractor at no additional cost.

The unit price bid for each item shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in the bid item.

# 6-1.02 Preconstruction Meeting

Following contract award, the Contractor shall contact the District to arrange for a meeting date and time. The pre-construction meeting shall occur within 14 calendar days of the contract execution. The Notice to Proceed will be issued after the preconstruction meeting.

#### 6-1.03 Work Schedule

The Contractor shall prepare and have accepted by the Engineer a schedule for performing work prior to beginning construction. Submittal of a revised schedule will not supersede a previous schedule until it is accepted in writing by the District. The Contractor shall submit a general schedule three (3) working days prior to the pre-construction meeting. The Contractor shall commence the work required by the contract documents within fifteen (15) calendar days after the date of the Notice to Proceed, and will diligently prosecute the work to completion. Contractor shall complete the work in accordance with the following schedule:

<u>Issuance of Notice To Proceed and start of the project shall be coordinated with the District. Project shall be complete, including all site cleanup and removal of equipment, within 30 working days.</u>

# 6-1.04 Contractor's Office, Equipment, and Storage Facilities

The Contractor shall be responsible for the security of their plant and equipment at all times. The District will not take responsibility for missing or damaged equipment, tools, or personal belongings. During the performance of the contract, the Contractor may furnish and maintain a suitable office (or offices) at the site of the Work.

The Contractor shall provide staging area(s) for the protection of equipment, material, supplies and tools. Staging area(s) shall be located in the general area of the Work or as designated by the District. The District will designate a paved area at the treatment plant (shown on the plans) that the Contractor may use for parking and storing of equipment and tools. Materials, equipment, and garbage removed from the site shall be immediately removed from the premises or stored within the Limits of Work and shall not be stored in the designated staging area. The District is not responsible for the safety or security of the Contractor's equipment, materials and tools stored on the District property. The Contractor shall make arrangement for locating staging area(s) at or near the project site if additional space is needed. The location of any offsite storage areas shall be approved by the District.

The Contractor shall store all equipment and materials in a manner which does not interfere with public right of way or the treatment plant operation. No equipment will be allowed to be parked overnight within the limits of the public right-of-way.

Contractor may make arrangements with other local property owners for temporary staging areas; however, the location shall first be brought to the attention of the District and the Engineer for approval. Contractor will also be required to provide proof in writing from the property owner that the Property is allowed for use as a temporary staging area. All private property used for staging and storage shall be restored to the original site condition or better, as approved by the property owner.

#### 6-1.05 Pre-Construction Photographs

Georgetown Divide Public Utility District
Old Auburn Lake Trails
Water Treatment Plant Demolition Project

The Contractor shall provide the District with a digital file of each pre-construction photograph taken for the Project.

The contractor shall photograph or video the entire site prior to construction.

Photos shall clearly show the existing condition of the site, pavement, surface improvements, fences, buildings, vegetation and landscaping within the project area, and all other existing features in the vicinity of the work area. Each photo shall be taken from a point four to six feet above the ground. All photos shall show good detail in both shadow and sunlit areas.

The contractor is responsible for repairing any damage to existing features caused by the contractor's operations. If damage is identified by the District and no pre-construction photograph exists to show that the damage was existing prior to the start of work, the contractor will be responsible for all repairs.

The cost of the preconstruction photographs shall be included in the price paid for other items of the Work and no separate payment will be made therefor.

# 6-1.06 Safety and Health

- A. In accordance with generally accepted construction practice and applicable laws, the Contractor shall be solely and exclusively responsible for:
  - 1. Construction means and methods.
  - 2. Safety of employees engaged in the Work while on and off the site.
  - 3. Safety of the Work itself including material and equipment to be incorporated therein.
  - 4. Safety of other property at the site or directly affected by the work.
  - 5. Safety programs, equipment and protective devices required to assure the safety of persons and property within the work area and/or for whom/which the Contractor is responsible.
- B. The duties of the District or its representatives in conducting review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's Work methods, equipment, bracing, scaffolding or safety measures in, on, or near the construction site.
- C. The Contractor is hereby informed that Work on this project could be hazardous. The Contractor shall carefully instruct all personnel working in potentially hazardous Work areas as to potential dangers and shall provide such necessary safety equipment and instructions as required to prevent injury to personnel and damage to property, and to comply with all applicable laws and regulations including CALOSHA, OSHA Confined Space Entry, Federal OSHA, and other regulations referenced in these Contract Documents. Attention is directed to the findings of the Hazardous Materials Survey Final Report prepared by Entek Consulting Group, dated May 21, 2021 and included herein as Exhibit D. Contractor shall refer to Section 6-1.07 of these specifications for Hazardous Materials requirements.

- D. To the District's knowledge, there are no large quantities of chemicals located within the limits of work of the project. Contractor is advised that chlorine feed lines located underground and within the existing control building may contain residual chlorine and shall be treated as hazardous unless proven otherwise.
- E. The Contractor shall, at all times, maintain the job in a condition that is safe for the District, the District's Engineer and their Consultants to make site visits and to conduct construction reviews. If the District or the Engineer cannot allow personnel to visit the job because it is not safe, the Contractor is not providing required safe access to the Work as required by the General Conditions.
- F. The Contractor shall prepare a Safety Plan meeting the requirements of applicable regulations. As a minimum, the Contractor's Safety Plan shall set forth definite procedures for informing workers about safety, for instructing workers in safe practices, for assuring that workers are using appropriate safety equipment and safe Work practices and for reporting accidents.
- G. Permit-Required Confined Space Entry: For the purpose of this Project all Water Storage Tanks and filters shall be considered as Permit Required Confined Spaces. All entries shall require a confined space entry permit pursuant to Cal/OSHA regulations as set forth in Title 8 California Code of Regulations (CCR) Sections 5157 or 5158 unless the Contractor can show, either by changing known site conditions and/or documentation, how this requirement is not warranted. Confined space entry shall have the meaning ascribed in Title 8 CCR Sections 5157 and 5158. For any confined space entry for construction operations regulated by Title 8 CCR Section 1502, the Contractor shall comply with Title 8 CCR Section 5158, "Other Confined Space Operations." For any other confined space operations, Contractor shall comply with Title 8 CCR Section 5157, "Permit-Required Confined Spaces."

The Contractor shall provide a Confined Space Entry Program to the District for review at least 10-working days prior to any confined space entry.

The Contractor shall immediately inform the District of any previously unidentified hazards confronted or created during confined space entry.

#### 6-1.07 Hazardous Materials

The contractor is hereby informed that items identified for removal as part of the project scope have been found to contain hazardous materials.

Entek Consulting Group, Inc. conducted an investigation for hazardous materials specific to areas included in the project scope. The investigation included an assessment of the following:

- Asbestos Materials
- Lead in Paint, Coatings, Ceramic Products and other Construction Components
- Fluorescent Light Tubes
- Light Ballasts
- Polychlorinated Biphenyls (PCB)

- Mercury Containing Thermostats and Switches
- Smoke Detectors with Radioactive Americium 241
- Exit Signs with Radioactive Gas Tritium
- Freon

Handling and disposal of all hazardous materials encountered on the site shall be in accordance with the following documents, which shall be considered to be made a part of these special provisions:

- Asbestos Requirements Specification prepared by Entek Consulting Group (included herein as Exhibit A)
- Requirements for Disturbance of Lead in Construction Specification prepared by Entek Consulting Group (included herein as Exhibit B)
- Other Hazardous Materials Specification prepared by Entek Consulting Group (included herein as Exhibit C)
- **Hazardous Materials Survey Final Report** prepared by Entek Consulting Group, dated May 21, 2021 (included herein as Exhibit D).

# 6-1.08 Workmanship

The Contractor shall provide written evidence to the District that workers furnished have performed quality work and possess experience and knowledge in work of a similar nature to that which is required within this project.

# 6-1.09 Cleanup

The Contractor shall not allow the project site to become littered with trash and waste but shall maintain the site in a neat orderly condition throughout the construction period. On or before the completion of the Work, the Contractor shall carefully clean out all pits, drain lines, and drains, chambers or conduits and shall tear down and remove all temporary structures built by him and shall remove rubbish of all kinds from any of the grounds which he has occupied and leave them in a condition satisfactory to the District.

#### 6-1.10 Contractor's Utilities

#### A. Power

The Contractor shall provide power as required for the Work. The control building power has been disconnected and the PG&E transformer has been removed from the site.

#### B. Water

The Contractor shall obtain the water needed for potable and construction purposes. Water may be obtained from the District's system with application for a fire hydrant meter. The Contractor shall make all arrangements and shall supply all pumps, hoses, fittings, or other related items for drawing water at no cost to the District. Water not incorporated into the final Work shall be disposed

of by the Contractor as part of the Work. Contractor may arrange for temporary water service through the District.

# C. Telephone

The Contractor shall arrange telephone service at his construction site office(s), if applicable.

#### D. Sanitary Facilities

The Contractor shall provide toilet and wash-up facilities at the site of the Work. Such facilities shall be subject to the acceptance of the District as to location and type. The Contractor shall maintain the sanitary facilities in acceptable condition from the beginning of the Work until completion and shall then remove the facilities and disinfect the premises.

# 6-1.11 Shop Drawings, Product Data, and Samples

#### A. Procedure:

The Contractor shall submit a digital copy of all submittals. Submittals will be returned to the Contractor in digital format upon review by the District. Submittals shall contain:

- 1. The date of submission and the dates of any previous submissions.
- 2. The project title and number.
- 3. Contract identification.
- 4. The names of:
  - a. Contractor
  - b. Supplier
  - c. Manufacturer
- 5. Identification of the product, with the specification section number.
- 6. Clearly reference shop drawings to the plan sheet and details where they occur.
- 7. Field dimensions, clearly identified as such.
- 8. Relation to adjacent or critical features of the work or materials.
- 9. Applicable standards, such as ASTM for Federal Specifications numbers.
- 10. Identification of deviations from contract documents.
- 11. Identification of revisions on resubmittals.
- Contractor's stamp, initialed or signed, certifying the review of submittal, verification
  of products, field measurements, and field construction criteria, and coordination
  of the information within the submittal with requirements of the work and of contract
  documents.
- 13. Pages of submittals shall be consecutively numbered.

#### B. Resubmittal Requirements:

Make any correction or changes in the submittals required by the District and resubmit until no further exceptions are taken.

Shop drawings and product data:

- 1. Revise initial drawings or data and resubmit as specified for the initial submittal.
- 2. Indicate any changes which have been made other than those requested by the District.
- 3. Samples: Submit new samples as required for initial submittal.

# **6-1.12 Environmental Measures**

A Storm Water Pollution Prevention Plan (SWPPP) was not prepared for this project since the construction site and the area of disturbance is less than one acre.

The Contractor shall exercise every reasonable precaution to protect channels, storm drains, and bodies of water from pollution and shall conduct and schedule its operations as so to minimize or avoid contaminating, muddying and silting of said channels, drains, and waters. Water pollution control work shall consist of constructing those facilities which may be required to provide prevention, control, and abatement of water pollution.

Water pollution control work is intended to provide prevention, control and abatement of water pollution to streams, waterways, and other bodies of water, and shall consist of constructing those facilities which may be shown on the plans, specified herein or in the special provisions, or directed by the Engineer.

Full compensation for conforming to the requirements of this 6-1.16 "Environmental Measures" Section shall be considered as included in the various items of work, and no additional compensation will be allowed therefor.

#### 6-1.13 Measurement and Payment:

Payment for work required under this 6-1 "General Requirements" Section which are not otherwise specified shall be included in the prices bid for the various items of work and no additional compensation will be allowed therefor.

# 6-2 EXISTING FACILITIES

#### 6-2.01 Existing Facilities

Contractor shall perform all work in a manner that does not damage existing utilities and facilities which are to remain. The contractor is advised that there are active, underground pipelines within the limits of work. Contractor shall take all necessary precautions to protect existing improvements and utilities which are to remain in place from damage. All improvements or utilities damaged by the contractor's operation shall be expeditiously repaired or reconstructed without additional compensation.

Operation of any valves shall be performed by GDPUD Personnel only. Under no circumstances shall anyone other than a representative of GDPUD open or close any valve in a GDPUD system. Shut

downs for the purpose of completing this work are not permitted unless otherwise authorized by the District.

### 6-2.02 Modifications to Existing Facilities

Contractor shall not modify existing active utility lines unless directed by the plans or otherwise approved by the District.

A. The existing 12" RW tee in front of the control room door shall be modified so that the 12" RW to the control building can be permanently disconnected. Contractor shall disconnect and remove the existing pipe and install a blind flange on the existing 12" BFV south of the tee. Cutting of the pipe to be removed at the removal limits may be required. All excavation and work in the vicinity of this tee shall be observed by a District representative at all times.

# 6-2.03 Removal of Miscellaneous Items

Various items described in these Special Provisions to be removed will be completely removed and disposed of. All above ground features in the limits of work for the project shall be removed from the site, even if they are not explicitly called out on the plans. All miscellaneous pavement and concrete pads shall be removed.

No separate payment shall be made for the various items to be removed unless specified and listed in the Bid Schedule.

Full compensation for conforming to the requirements of this section shall be considered as included in the contract prices paid for the various contract items of work and no additional compensation will be allowed.

#### 6-2.04 Measurement and Payment

Payment for work items required under this 6-3 "Existing Facilities" section which are not otherwise specified shall be included in the prices bid for the various items of work and no additional compensation will be allowed therefor.

#### 6-3 SITE DEMOLITION

#### 6-3.01 Summary and Scope of Work

The Contractor shall remove the existing pressure filters and their concrete footings, miscellaneous above ground piping, bolted steel tank and foundation, miscellaneous concrete pads and equipment, demolish the existing control building (including foundation), and remove all contents of the control building from the site. The Contractor shall regrade the site to fill voids and drain. Where facilities have been removed provide a 3" layer of gravel, crushed rock, or other suitable material as approved by the District. The Contractor shall coordinate all work with the District and shall notify District staff of any discrepancies between the plans and actual site conditions. All above ground features within the limits of work shall become the property of the awarded Contractor and shall be removed from the site and

disposed of in a legal manor. All concrete pads and miscellaneous pavement within the limits of work shall be removed, even if not explicitly shown on the plans.

### 6-3.02 Submittals

- A. The Contractor shall submit a general schedule for approval a minimum of three (3) working days prior to the pre-construction meeting.
- B. Pre-construction, interim-construction, and post-construction submittals as required per Exhibits A and B.

## 6-3.03 Existing Pressure Filters

- A. The contractor shall remove the three (3) existing horizontal pressure filters and their contents from the site.
- B. The contractor shall remove the concrete footings from under the filter vessels.

Payment for all labor, equipment, materials and other work items required to remove the existing filters and footings as required under this "Existing Pressure Filters" section and as shown on the plans shall be included in the Lump Sum price bid for **Site Demolition** and no additional compensation will be allowed therefor.

# 6-3.04 Existing Control Building

- A. The existing control building and the complete contents of the building become the property of the awarded contractor and shall be removed from the site and disposed of in a legal manor.
- B. The contractor shall remove the contents of the building, the building foundation, and cut and cap or plug all pipes 12" below grade.
- C. Contractor shall demolish the existing structure and foundation and dispose of all waste.

Payment for all labor, equipment, materials and other work items required to remove the existing filters and footings as required under this "Existing Control Building" section and as shown on the plans shall be included in the Lump Sum price bid for **Site Demolition** and no additional compensation will be allowed therefor.

#### 6-3.05 Existing Piping

- A. Below grade piping is shown on the plans. Removal of below ground piping is not generally required, except portions within 12-inches of existing grade as required by these specifications.
- B. All above ground pipe and fitting materials within the defined limits of work shall be removed and disposed of by the contractor. Above grade piping in the limits of work shall be removed, cut down to 12" below grade, and capped or plugged. Above grade piping is not explicitly called out on the plans.

- C. The 12" Raw Water intake line north of the control building is active and shall remain in service at all times. Contractor shall locate the line prior to beginning excavation and ensure that the line is not disturbed during the contractor's operations. See the project plans and section 6-2.02 of these specifications for information regarding blind flange to be installed on the existing tee.
- D. The 16" back wash water line north of the bolted steel tank line is active and shall remain in service at all times. Contractor shall locate the line prior to beginning excavation and ensure that the line is not disturbed during the contractor's operations.

Payment for all labor, equipment, materials and other work items required to remove the existing filters and footings as required under this "Existing Piping" section and as shown on the plans shall be included in the Lump Sum price bid for **Site Demolition** and no additional compensation will be allowed therefor.

## 6-3.06 Existing Bolted Steel Tank

A. Contractor shall remove the existing bolted steel tank and any internal, above grade piping, if any. All piping shall be cut 12" below grade and capped or plugged. Contractor shall remove the tank floor and fill in major voids, if any, with gravel, crushed rock, or other suitable material to the satisfaction of the District. At the contractor's option, concrete to be removed from the site (foundations, pads, etc.) may be pulverized to 1.5" minus material and recycled on site to fill in voids.

Payment for all labor, equipment, materials and other work items required to remove the existing filters and footings as required under this section and as shown on the plans shall be included in the Lump Sum price bid for **Site Demolition** and no additional compensation will be allowed therefor.

#### 6-3.07 Existing Generator

A. Contractor shall remove the existing wood deck and standby generator (Kohler).

Payment for all labor, equipment, materials and other work items required to remove the existing filters and footings as required under this section and as shown on the plans shall be included in the Lump Sum price bid for **Site Demolition** and no additional compensation will be allowed therefor.

#### 6-3.08 Finished Grade

Following the completion of site demolition and removal of all items to be disposed of, Contractor shall regrade the site within the project limits by filling in large holes and pits with gravel, crushed rock, or other suitable material. Contractor shall fill in voids and place an approximately 3-inch layer of gravel, crushed rock, or other material approved by the District over the limits of removed facilities and grade the area to drain. At the contractor's option, concrete to be removed from the site (foundations, pads, etc.) may be pulverized to 1.5" minus material and recycled on site to fill in voids. Resulting gradation of pulverized material is subject to approval of District. No recycled materials from other sites will be accepted. Contractor shall provide a neat, graded aggregate surface at project completion.

Georgetown Divide Public Utility District
Old Auburn Lake Trails
Water Treatment Plant Demolition Project

Payment for all labor, equipment, materials and other work items required to remove the existing filters and footings as required under this section and as shown on the plans shall be included in the Lump Sum price bid for **Site Demolition** and no additional compensation will be allowed therefor.

# 6-3.09 Measurement and Payment

Payment for work items required under this 6-3 "Site Demolition" section which are not otherwise specified shall be included in the prices bid for the various items of work and no additional compensation will be allowed therefor.

# **6-4 MOBILIZATION**

#### 6-4.01 Mobilization

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for establishment of all offices and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site. Mobilization shall include demobilization as defined herein.

Mobilization shall include but not be limited to the following principal items:

- 1. Signed Contract by the District and the Contractor.
- 2. Completion of all tasks and submittal of all documents (bonds, insurance, schedule, etc.) required as conditions of issuing the Notice to Proceed.
- 3. Moving onto the site of all Contractor's equipment required for operations.
- 4. Installing temporary construction water supply, power, wiring and lighting facilities, as required.
- 5. Providing field office trailers if needed by the Contractor.
- 6. Providing all on-site communication facilities, including telephones and radio pagers.
- 7. Obtaining all required permits.
- 8. Having all OSHA required notices and establishment of safety programs.
- 9. Attendance at Pre-Construction Conference of Contractor's principal construction personnel.
- 10. Beginning work on the project or at the subject site as applicable.

Demobilization shall include, but not limited to, removal of all equipment, unused materials, all temporary utilities, job trailers, and all temporary communication facilities.

#### 6-4.02 Measurement and Payment

**Mobilization, Insurance, and Bonds** will be measured and paid for on a **lump sum** basis in accordance with the provisions of Section 9-1.16D, "Mobilization," of the Standard Specifications.

District maximum allowed lump sum price for Mobilization is five (5) percent of the total bid price.

No payment for mobilization, or any part thereof will be approved for payment under the contract until all applicable mobilization items listed above have been completed.

# **Exhibits**

Exhibit A	Asbestos Specifications
Exhibit B	Lead in Construction Specifications
Exhibit C	Other Hazardous Materials Requirements
Exhibit D	Hazardous Materials Survey Final Report

# Exhibit A

Asbestos Specifications

# **EXHIBIT A**

# ASBESTOS REQUIREMENTS TABLE OF CONTENTS

SECTION 1.	ASBESTOS BIDDING REQUIREMENTS.  Part 1.1 - Site Investigations.  Part 1.2 - Insurance Requirements.  Part 1.3 - Licenses and Qualifications Requirements.	. <u>1</u> . <u>1</u>
SECTION 2.	ASBESTOS GENERAL REQUIREMENTS - DEFINITIONS	. <u>3</u>
SECTION 3.	NOTIFICATIONS, SUBMISSIONS, POSTINGS	
	Part 3.2 - Pre-Construction Submittals  Part 3.3 - Submittals During the Work Process  Part 3.4 - On-Site/Clean-Room Area Postings and Documentation  Part 3.5 - Job Site Documents  Part 3.6 - Project Close-out Documents	11 11 12
SECTION 4.	SITE SECURITY.	<u>12</u>
SECTION 5.	EMERGENCY PLANNING	<u>13</u>
SECT	ION 6. PRE-CONSTRUCTION MEETING	<u>14</u>
SECTION 7.	MATERIALS AND EQUIPMENT.  Part 7.1 - Contractor Equipment and Supplies.  Part 7.2 - Rental Equipment and Supplies.	14
SECTION 8.	WORK SITE FACILITIES	<u>16</u>
SECTION 9.	RESPIRATORY PROTECTION	<u>16</u>
SECTION 10.	PERSONNEL PROTECTION REQUIREMENT AND TRAINING	<u>19</u>
SECTION 11.	WORKER DECONTAMINATION ENCLOSURE SYSTEMS	<u>20</u>
SECTION 12.	WORKPLACE ENTRY AND EXIT PROCEDURES	<u>21</u>
SECTION 13.	DIFFERENTIAL AIR PRESSURE SYSTEMS.  Part 13.1 - Negative Pressure Requirements.  Part 13.2 - DOP Testing.  Part 13.3 - Differential Pressure Recording Requirements.  Part 13.4 - Differential Pressure System.	22 22 23
SECTION 14.	EXECUTION, WORK SCHEDULE. Part 14.1 - Execution. Part 14.2 - Power Outage Procedures. Part 14.3 - Work Schedule.	24 27
SECTION 15.	REMOVAL PROCEDURES	<u>28</u>
SECTION 16.	WASTE CONTAINER PASS-OUT PROCEDURES	28

# **EXHIBIT A**

# ASBESTOS REQUIREMENTS TABLE OF CONTENTS

SECTION 17.	CLEAN-UP PROCEDURE.  Part 17.1 - Clean-up Procedure.  Part 17.2 - Visual Clearance Criteria.	29
SECTION 18.	CLEARANCE AIR MONITORING.	<u>30</u>
SECTION 19.	MONITORING	<u>31</u>
SECT	ION 20. DISPOSAL PROCEDURES.  Part 20.1 - Disposal Procedures.  Part 20.2 - Transportation to the Landfill.  Part 20.3 - Disposal at the Landfill.	32 32
SECTION 21.	PATENTS AND PREVAILING WAGES Part 21.1 - Patents Part 21.2 - Prevailing Wage Requirements	33
SECTION 22.	PERMITS AND FEES	<u>33</u>
SECTION 23.	SPECIFIC PROCEDURES AND REQUIREMENTS.  Part 23.1 - General Repair of Damaged Thermal System Insulation (TSI).  Part 23.3 - Mini-Cube Enclosure Requirements.  Part 23.5 - Vinyl Floor Tile (VFT) & Associated Adhesive Abatement Requirements.  Part 23.6 - Carpet Removal over Vinyl Floor Tile (VFT)/Tile Adhesive Requirements.  Part 23.7 - Boiler Unit Removal Requirements.  Part 23.8 - Sheetrock and Joint Compound Abatement Requirements.  Part 23.9 - Impact to and Removal of Transite Pipe, Shingle, or Sheeting Materials.  Part 23.10 - Demolition with Selected Asbestos Containing Materials Left in Place.  Part 23.11 - Contaminated Attic Space Procedures.  Part 23.12 - Non-Friable, Non-Hazardous, Glazing Abatement Requirements.  Part 23.13 - Subfloor Crawl Space Dirt Removal Requirements.  Part 23.14 - Subfloor Enclosure Requirements.  Part 23.15 - Installation of "Rat Slab" in Subfloor Crawl Space Requirements.  Part 23.16 - Stucco/Texture Removal and Containment Requirements.  Part 23.17 - Fireproofing Abatement Requirements.	34 34 34 34 34 34 34 35 35 35 35
SECTION 24.	ASBESTOS SPECIFICATIONS/PROCEDURES. Part 24.1 - Contacts. Part 24.2 - Removal Locations. Part 24.3 - Materials to be Abated. Part 24.4 - Containment and Abatement Requirements. Part 24.5 - Contractor Assist Requirements. Part 24.6 - Worker Protection. Part 24.7 - Electrical and Water Hook-Ups. Part 24.8 - Visual and Air Clearance Criteria. Part 24.9 - Owner's Responsibility.  Part 24.10 - Disposal Requirements. Part 24.11 - Work Periods. Part 24.12 - Pre-Construction Submittal List. Part 24.13 - Interim Construction Submittals.	35 35 35 36 37 37 37 37 37 37 37 37 38 38 39 41
SECTION 25.	Part 24.14 - Post Construction Submittal List	

#### **EXHIBIT A**

SECTION 26.	SITE MAP	<u>43</u>
SECTION 27.	FORMS	44

## SECTION 1. ASBESTOS BIDDING REQUIREMENTS

#### Part 1.1 - Site Investigations

By submitting a bid for asbestos related work, the asbestos abatement contractor acknowledges that they have investigated and satisfied themselves as to: a) the conditions affecting the work, including but not limited to, physical conditions of the site which may bear upon site access, handling, and storage of tools and materials, access to water, electric, or other utilities, or otherwise affect performance of required activities; b) the character and quality of all surface and subsurface materials or obstacles to be encountered, in so far as, this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the Owner or a designated consultant, as well as, information presented in drawings and specifications included with this contract. Any failure by the asbestos abatement contractor to acquaint themselves with available information will not relieve them from the responsibility for estimating properly the difficulty or cost of successfully performing the work. The Owner is not responsible for any conclusions or interpretations made by the asbestos abatement contractor on the basis of the information made available by the Owner.

#### Part 1.2 - Insurance Requirements

Successful asbestos abatement contractor shall purchase and maintain insurance that will protect them from claims that may arise out of or result from the activities under this Contract, whether those activities are performed by the asbestos abatement contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

Successful asbestos abatement contractor shall submit proof of coverage, as well as, Subcontractors under the Worker's Compensation insurance system of the State of California or other similar benefit acts.

Successful asbestos abatement contractor shall submit a certificate of general liability insurance protecting against liability for bodily injury and property damage arising from asbestos abatement contractor's activities under this contract.

Such certificate of insurance must contain the following provisions:

- (a) The limit of liability shall not be less than \$1,000,000.00 per occurrence for bodily injury and property damage liability combined.
- (b) The Owner, Owner's Agents, and Consultant must be named as additional insured, but only in respect to liability arising or resulting from activities under this contract.
- © In the event of cancellation of the insurance policy, the <u>Owner shall be given thirty</u> days advance written notice.
- (d) The insurance certificate must state that the insurance includes liability coverage for asbestos abatement work.

Successful asbestos abatement contractor's Subcontractors shall submit a certificate of general liability insurance protecting against liability for bodily injury and property damage arising from

**EXHIBIT A** 

Contractor's activities under this contract.

Such certificates of insurance must contain the following provisions:

- (a) The limit of liability shall not be less than \$1,000,000.00 per occurrence for bodily injury and property damage liability combined.
- (b) The Owner, Owner's Agents, and Consultant must be named as an additional insured, but only in respect to liability arising or resulting from activities under this contract.
- © In the event of cancellation of the insurance policy, the Owner shall be given thirty days advance written notice.

#### Part 1.3 - Licenses and Qualifications Requirements

The asbestos abatement contractor shall be duly licensed in the State of California with the Contractors State License Board (CSLB) in accordance with the provisions of Chapter 9 of Division 3 of the Business and Professions Code, as amended. This includes certification for asbestos-related work, and all other trades or work required under this contract and within these specifications.

The asbestos abatement contractor shall submit a statement, signed by an officer of the company, containing the following information:

- 1. A record of any citations issued by Federal, State, or Local regulatory agencies within the last 3 years, relating to asbestos abatement activity. Include projects, dates, and resolutions.
- 2. A list of penalties incurred through non-compliance with asbestos abatement project specifications, including liquidated damages, overruns in scheduled time limitations, and resolutions.
- 3. Situations in which an asbestos-related contract has been terminated including projects, dates, and reasons for terminations.
- 4. A list of any asbestos-related legal proceedings/claims in which the Contractor (or employees scheduled to participate in this project) has participated or is currently involved. Include descriptions or role, issue, and resolution to date.

The asbestos abatement contractor is fully and totally responsible at all times for compliance with payment of prevailing wage rates pursuant to provisions of the <u>California Labor Code</u>, for compliance with Division 2, Part 7, Chapter 1, <u>California Labor Code</u>, including but not limited to Section 1776; and for compliance with <u>California Labor Code</u>, Section 1777.5 for all <u>apprentice able</u> occupations.

**EXHIBIT A** 

#### SECTION 2. ASBESTOS GENERAL REQUIREMENTS - DEFINITIONS

<u>Abatement</u> - Procedures beyond a special operations and maintenance program to control fiber release from asbestos-containing materials. Includes removal, encapsulation, enclosure, repair.

<u>ACGIH</u> - American Conference of Governmental Industrial Hygienists, 6500 Glenway Avenue, Building D-5, Cincinnati, Ohio 45211

**AHERA** - Asbestos Hazard Emergency Response Act

AIHA - American Industrial Hygiene Association, 475 Wolf Ledges Parkway, Akron, Ohio 44311

Air Filtration Device - See "Pressure Differential Unit"

<u>Airlock</u> - A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three (3) feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

<u>Air Monitoring</u> - The process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure normally utilized for asbestos follows the NIOSH Standard Analytical Method for Asbestos in Air P&CAM 239 or Method 7400. For clearance air monitoring, electron microscopy methods may be utilized for lower detection and specific fiber identification.

<u>Air Sampling Professional</u> - The professional contracted or employed by the Owner to supervise and/or conduct air monitoring and analysis schemes. This individual may also function as the Asbestos Project Manager, if qualified. Supervision of air sampling and evaluation of results should be performed by an individual certified in the Comprehensive Practice of Industrial Hygiene (CIH) or having specialized experience in air sampling for asbestos. Other acceptable Air Sampling Professionals include Environmental Engineers, Architects, Chemists and Environmental Scientists or others with equivalent experience in asbestos air monitoring. This individual shall not be affiliated in any way other than through this contract with the contractor performing the abatement work.

<u>Ambient Air</u> - The air outside the buildings and structures or the air as it normally exists in a space prior to abatement.

Amended Water - Water to which a surfactant has been added.

ANSI - American National Standards Institute, 1430 Broadway, New York, New York, 10018

<u>Asbestos</u> - Means the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite grunerite (amosite), anthophyllite, actinolite, and tremolite.

<u>Asbestos Containing Hazardous Waste</u> - Materials defined by the State of California to be packaged, labeled, transported, and disposed of as an asbestos hazardous waste. This includes all friable asbestos-containing material over one-percent (1%) asbestos. This also includes all asbestos-containing material containing less than one-percent asbestos for which one or more bulk samples have not been point counted and found to contain less than one-percent (1%) asbestos.

<u>Asbestos Containing Material (ACM)</u> - Cal/OSHA - Material composed of asbestos of any type and in an amount greater than one percent (1%) either alone or mixed with fibrous or non-fibrous materials.

**EXHIBIT A** 

<u>Asbestos Containing Construction Material (ACM)</u> - a manufactured construction material containing greater than 0.1% asbestos by weight by the PLM method.

<u>Asbestos Containing Waste</u> - Asbestos-containing material or asbestos-contaminated objects requiring disposal.

<u>Asbestos Project Manager (APM)</u> - (Competent Person) - An individual qualified by virtue of experience and education, designated as the Owner's representative and responsible for overseeing the asbestos abatement project.

ASTM - American Society for Testing and Materials, 916 Race Street, Philadelphia, PA 19103.

<u>Authorized Visitor</u> - The Owner (and any designated representative) and any representative of a regulatory or other agency having jurisdiction over the project.

<u>Bidder</u> - A duly licensed and accredited asbestos contractor who was present at the bid-walk and has submitted a bid.

Cal/OSHA - California Division of Occupational Safety and Health.

<u>Certified Asbestos Consultant (CAC)</u> - A certified asbestos consultant as defined by the Department of Industrial Relations (Cal/OSHA).

<u>Certified Industrial Hygienist (CIH)</u> - An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.

<u>Clean Room</u> - An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of workers' street clothes and clean protective equipment.

<u>Competent Person</u> - A person who is an accredited EPA Asbestos Contractor/Supervisor and whose accreditation is current.

Containment - Isolation of the work area from the rest of the building to prevent escape of asbestos fibers.

<u>Contract Documents</u> - Written contractual agreements between the Owner and the Contractor that pertain to the work on this project.

<u>Contractor</u> - The individual and/or legal entity and its subcontractors and employees of the contractor and subcontractor awarded the contract.

<u>Contractor/Supervisor</u> - A person who successfully completed an initial U.S. EPA and/or state-approved five-day AHERA accreditation course and who has maintained that training through approved annual refresher training, and possesses current and valid AHERA accreditation documentation as a AHERA accredited Contractor/Supervisor.

<u>Class I, II, III, or IV Work</u> - Work classes described in 8 CCR 1529 that describe different levels of asbestos work.

<u>Critical Barrier</u> - Critical Barriers used to restrict water and air flow. Critical Barriers are the barriers placed over openings in the walls and ceilings of a work area in order to ensure that airborne fibers cannot escape the work area via these openings. The Contractor will construct impermeable barriers at all exits or openings, including doorways, duct chases, mechanical shafts, elevator shafts, floor openings, drains, and the like, so that all possible exit or entrance routes are effectively barricaded and sealed. Unless otherwise specified in the Contract documents, critical barriers shall be constructed of at least one layer of 6-mil thick poly.

**EXHIBIT A** 

<u>Critical Barrier Negative Pressure Test</u> - Required test for negative pressure with only critical barriers and air filtration units installed. This test must be conducted prior to the installation of cleaning barriers, but may be conducted with or without the decontamination unit in place.

<u>Decontamination Enclosure System</u> - (Also known as Decon or Waste Transfer Decon) A series of connected rooms designed for the decontamination of workers and equipment that is separated from the work area and from each other by z-flapped curtained doorways. This unit shall be constructed with at least six-mil poly for the floors, walls, and ceiling. All decontamination enclosure systems used for worker entry and exit shall be equipped with a shower.

<u>Demolition</u> - The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations.

DOP - Dispersed Oil Particulate which are normally used as an agent for testing the efficiency of HEPA filters.

<u>Dust or Debris</u> - Any visible dust or debris remaining in an abatement area will be considered asbestoscontaining residue.

**Encapsulant** - A liquid material which can be applied to asbestos-containing material which controls 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).

EPA - U.S. Environmental Protection Agency

**Equipment Room** - A contaminated area or room which is part of the worker decontamination enclosure system with provisions for storage of contaminated clothing and equipment.

Exterior of Containment HEPA Filtered Pressure Differential Unit - An air-purifying unit positioned outside, rather than inside the regulated work area. The face, or filter portion of the unit is integrated within the work area, and the remainder of the unit (housing, wheels, rivets, control panel, etc.) is located outside of the work area. This allows filters on the air intake to be changed from within the regulated area but access to the machine itself is available to those outside the area. Pressure differential units which pass DOP testing across the HEPA filter, but fail at rivets, control panels, wheels, etc. may be used in this fashion as long as the failure point of the unit can remain on the exterior of containment while the face of the unit and filters are inside containment.

Facility - Any institutional, commercial or industrial structure, installation, or building.

<u>Facility component</u> - Any pipe, duct, boiler, tank, reactor, turbine, or furnace at or in a facility or any structural member or a facility.

Fed OSHA or OSHA - Federal Occupational Safety and Health Administration.

<u>Fixed object</u> - A piece of equipment or furniture in the work area which cannot be removed from the work area.

<u>Friable asbestos</u> - Asbestos-containing material which can be crumbled to dust when dry, under hand pressure or by mechanical means.

<u>Glove Bag Technique</u> - A method with limited applications for removing small amounts of friable asbestos-containing materials from ducts, short piping runs, valves, joints, elbows, and other non-planar surfaces. The glove bag is constructed of 6 mil transparent polyethylene with two inward projecting long sleeves, an internal tool pouch, and an attached, labeled receptacle for asbestos waste.

**EXHIBIT A** 

**HVAC** - Heating, ventilation and air conditioning system.

<u>HEPA Filter</u> - A high efficiency particulate air filter capable of removing particles 0.3 microns in diameter from an air stream with 99.97% efficiency.

**HEPA Vacuum** - A vacuum system equipped with HEPA filtration.

Lock-down - To mist the air and to wet surfaces with an agent designed to bind asbestos fibers together.

Magnehelic gauge - Instrument for measuring the static air-pressure differential across a barrier.

Manometer - See "Magnehelic gauge".

<u>Mini-Enclosure</u> - Mini-enclosures shall be constructed of 6 mil polyethylene (attached with tape and/or glue to walls and floors) and shall be small enough for 1-2 workers who can enter the enclosure, complete the abatement exercise, pass out the containerized debris and exit.

#### Monitoring - May include:

- a) Visual inspection for the presence of visible emissions; or
- b) Air monitoring performed in accordance with accepted methods;
- c) Core samples of encapsulated or bridged materials.
- d) Bulk sampling of soil during and following abatement.
- e) Sampling substrata following abatement.

<u>Movable Object</u> - An unattached piece of equipment or furniture in the work area which can be removed from the work area.

**NVLAP** - National Voluntary Laboratory Accreditation Program.

**NESHAP** - The National Emissions Standards for Hazardous Air Pollutants (40 CFR Part 61, Nov. 20, 1990)

<u>NIOSH</u> - The National Institute for Occupational Safety and Health CDC-NIOSH, Building J N.E. Room 3007, Atlanta, GA 30033

Outside Air - The air outside buildings and structures.

Owner - The Owner or Owners authorized Representative.

**PCM** - Phase contrast microscopy according to NIOSH Method 7400.

Plasticize - See "Poly".

<u>Poly</u> - Polyethylene sheeting. Used to cover floors, walls, ceilings, create critical barriers, and seal open vents on mechanical systems, etc. Note: All poly must be flame-retardant.

<u>Pressure Differential Unit (PDU)</u> - Also called negative air units. A portable exhaust system equipped with HEPA filtration and capable of exhausting air out the asbestos work area to create a negative pressure work environment..

<u>Regulated Area</u> - means an area established by a Contractor to demarcate areas where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limit. Additionally "Regulated Area" means any measure used to restrict access to an area where personnel impacting asbestos-containing materials are required to wear respiratory protection and/or

**EXHIBIT A** 

protective clothing by the project specifications regardless of airborne asbestos concentration levels.

Regulations - shall include but not be limited to:

- a. U.S. Environmental Protection Agency Regulations for Asbestos (Title 40, Code of <u>Federal Regulations</u>, Part 61, Subparts A & B)
- b. U.S. Environmental Protection Agency, Office of Toxic Substances, <u>Asbestos-Containing</u> Materials in School Buildings, A Guidance Document, Parts 1 & 2.
- c. Title 8, Chapter 4, Subchapters 1 through 21, <u>California Administrative Code</u>, General Industry Safety orders, Section 5208 "Asbestos" or the applicable sections of the Federal Asbestos Regulations. Cal/OSHA Construction Safety Orders, Section 1529.
- d. "Asbestos Hazard Emergency Response Act", U. S. Environmental Protection Agency, 40 CFR, Part 763. Final Rule and Notice.
- e. Applicable local county Air Pollution Control Owners and Air Quality Management Districts.

Removal - The stripping of any asbestos-containing materials from surface or components of a facility.

<u>Renovation</u> - Altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or taken out are excluded.

<u>Shower Room</u> - A room between the clean room and the equipment room in the decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination. The shower room must be equipped with an overflow pan to contain water splashed, leaked or spilled out of the shower unit.

<u>Staging Area</u> - Either the holding area or some area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

<u>Structural Member</u> - Any load-supporting member of a facility, such as beams and load-supporting walls or any non-load-supporting member, such as ceilings and non-load supporting walls.

<u>Submittals</u> - Pre, interim, and post job documents submitted by the contractor to Owner/Owner's Representative as indicated in General Requirements and Bidding Requirements.

**Surfactant** - A chemical agent added to water to improve wetting and penetration into asbestos materials.

**TEM** - Transmission Electron Microscopy according to AHERA specifications for Level II analysis.

<u>Visible emissions</u> - Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

<u>Waste Load-out/Transfer System</u> - A decontamination system utilized for transferring containerized waste from inside to outside of the work area. A series of three connected rooms used for the load-out of asbestoscontaining materials that have been properly containerized. The waste load out chamber system shall normally consist of three connected chambers adjacent to the work area. Each chamber shall be constructed with sixmil thick poly for the floors, walls, and ceiling

<u>Wet Cleaning</u> - The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other utensils which have been dampened with water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.

**EXHIBIT A** 

<u>Work Area</u> - 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.

<u>Worker</u> - Contractor employee who has completed course work and passed the exam for an EPA accredited, AHERA asbestos abatement worker. Certificate must be current.

#### SECTION 3. NOTIFICATIONS, SUBMISSIONS, POSTINGS

#### Part 3.1 - Notification

Prior to commencement of work the Contractor shall send notices of work to be completed to the agencies listed below with a copy of each to be provided to the Owner or its representative at the pre-construction meeting.

For compliance with 40 CFR part 61.146 of Subpart M, send notice at least 10 working days prior to start of work to the following appropriate agencies if trigger quantities of RACM are met or for a demolition:

U.S. EPA - Region IX Asbestos NESHAP Notification (Air 5) 75 Hawthorne Street San Francisco, California 94105 Tel (415) 947-4182

Send Copy or Fax To:

California Air Resources Board Enforcement Division Asbestos NESHAP Notification Post Office Box 2815 Sacramento, California 95812 Tel (916) 322-6036 Fax: (916) 445-7986

For compliance with Title 8, California Administrative Code, Construction Safety Order 1529, Asbestos Regulations send written notice at least one day prior to start of work to:

#### State of California

Department of Occupational Safety and Health (Cal/OSHA)

These notices shall include, at a minimum, the name and address of the Contractor, the name and address of the work site, the type of work to be done including the percent asbestos content of the material, the methods used to prevent migration of the fibers, personal protective measures, the number of his workers involved, any union representation of the workers and the methods of disposal including the names and EPA numbers of both the certified hauler and the waste disposal site. The notices shall also include start and finish dates. Changes in start and completion dates shall be reported immediately to the proper agency. Use forms provided by agency whenever possible.

#### **EXHIBIT A**

#### Part 3.2 - Pre-Construction Submittals

Submit copies of documents required to be included in the Bidding Requirements. At a minimum these documents will include:

- Copy of State of California Contractor License Issued by CSLB
- 2. Copy of State of California CSLB Active License
- 3. Copy of State of California CSLB Asbestos Certification
- 4. Copy of Department of Industrial Relations; Division of Occupational Safety and Health; Certificate of Registration for Asbestos-related Work
- 5. Copy of signed statement from company officer listing citations and pending proceedings against the Contractor, or if there have been no citations, a copy of the statement that no actions by regulatory agencies have occurred in the last three years signed by an officer of the company.

Submit copies of insurance certificates which meet requirements as outlined in Section 1, Part 1.2, of this Specification.

Submit copies of notifications to government agencies.

Submit proof satisfactory to the Owner that required permits have been acquired applicable to the project being performed and specific to the project site and location. If no city, county, or other permits for parking, waste container location, or variances for scheduled work hours are required this should be stated in writing and submitted to the Owner.

Submit Sub-contractors information or statement that Sub-contractors will not be required or used during this project. This statement should also include that if it becomes necessary to use a Sub-contractor during this project that Sub-contractor will not be allowed to perform work until all required documentation has been submitted for review by the Owner or Owner's CAC, and the Contractor receives written approval for use of the Sub-contractor on this project.

Submit a complete list of all rented equipment, or equipment expected to be rented from an outside contractor for use in "Regulated Areas", "Work Areas", or "Containments", where the equipment may be exposed to elevated levels of airborne asbestos. If no equipment is to be rented a statement should be submitted stating no equipment will be used on the project. The statement should also include that if it becomes necessary to use rented equipment that written statements from each rental company will be provided to the Owner prior to its use, indicating the rental companies acknowledgment that the equipment is provided for and may be used in areas where airborne levels of asbestos may be present.

Submit non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments. This list of numbers shall also include the Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor.

Submit detailed written directions from the project site to the medical facility to be used in case of an emergency. Also include a map which sufficiently shows the route to be taken from the site to the designated medical facility.

Submit written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.

**EXHIBIT A** 

Submit detailed information on preparation of work area, personal protective equipment, employee experience, training and assigned responsibilities during the project. Also list decontamination procedures for personnel, work area and equipment, abatement methods and procedures, required air monitoring program, procedures for handling and disposing of waste materials and procedures for final decontamination and cleanup.

Submit a detailed work schedule. The schedule shall have, as a minimum, the work area and the day/month for beginning and terminating work in each work area. During progress of work, it shall be the Contractor's responsibility to keep the schedule current and up to date.

Submit documentation satisfactory to the Owner that the Contractor's employees, including foremen, supervisor, and any other company personnel or agents who may be exposed to airborne asbestos fibers or who may be responsible for any aspects of abatement activities, have received required US EPA AHERA training.

Submit documentation from physician that all employees or agents who may be exposed to airborne asbestos in excess of background levels have been provided with an opportunity to be medically monitored to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health effects. In addition, document that personnel have received medical monitoring as required by Cal/OSHA regulations. The Contractor must be aware of and provide information to the examining physician about unusual conditions in the workplace environment (e.g., high temperatures, humidity, chemical contaminants) that may impact on the employee's ability to perform work activities.

Submit documentation of respirator fit-testing for all Contractor employees and agents who must enter any work area where asbestos-containing materials may or will be impacted. This fit-testing shall be in accordance with qualitative procedures as required by OSHA regulations or be quantitative in nature. Documentation pertaining to NIOSH approvals for all respiratory protective devices utilized on site shall also be included.

Submit copy of waste transporters Department of Toxic Substances Control, Hazardous Waste Transporter Registration if hazardous asbestos-containing waste is to be removed during the project. If hazardous asbestos-containing waste will not be generated submit the name, address, and registration information for the waste hauler to be used for transporting the waste.

Submit documentation listing the name and site address of the waste facility designated to receive asbestos-containing waste generated during this project. This documentation shall also include the EPA Identification number, and a copy of the current permit authorizing the waste facility to accept and dispose of asbestos-containing waste.

Submit Safety data sheets (SDS) for any and all applicable, materials, supplies, etc. These documents must be legible and completely reveal information required to be communicated to the Contractor's employees, visitors, and Owner Representatives.

Submit manufacturers' certifications that high efficiency particulate air (HEPA) vacuums, pressure differential units and other local exhaust ventilation equipment conform to ANSI Z9.2-79.

Submit name of laboratory/person to be used for Phase Contrast Microscopy (PCM) analysis and copy of current NVLAP Certificate of Accreditation (if applicable), and most recent NIOSH Proficiency Analytical Testing Program results.

Submit a written statement that OSHA monitoring will be performed for all asbestos-related activities performed during this project. This statement must be on company letterhead, dated, include name of the site or project being worked on, and signed by an authorized agent of the company performing the asbestos-related work.

**EXHIBIT A** 

Submit manufactures documentation pertaining to the capability of waste water filters to filter particles of 1.0 micron in size.

#### Part 3.3 - Submittals During the Work Process

Submit weekly - copies of work site entry/exit logs as well as information on worker and visitor access.

Submit weekly - copies of results of air sampling data collected during the course of the abatement including OSHA compliance air monitoring results.

Submit weekly - copies of air-differential manometer graphs and HEPA filter change logs. (see Section 13)

Submit weekly - copies of all transport manifests, trip tickets, weights and disposal receipts as applicable for all asbestos waste materials removed from the site during the abatement process.

Submit as applicable - copies of current insurance certificates, notifications, worker documentation, etc. if these items expire during the course of the project.

During abatement the Owner will upon request submit to the Contractor results of bulk material analyses and air sampling data collected during the course of the abatement. These serve only to monitor Contractor performance during the project.

Submit upon request during or after completion of the project, documentation deemed by the Owner to be pertinent to the project.

#### Part 3.4 - On-Site/Clean-Room Area Postings and Documentation

The following items shall be posted at the entrance to "Regulated Areas", "Work Areas", and "Containments", or in the possession of the Contractor's on-site supervisor where respiratory protection or protective clothing is required by this Specification.

A Cal/OSHA Information poster and a Cal/OSHA Construction Site poster.

A copy of the CAL-OSHA and the local AQMD/APCD or EPA NESHAP Notification (if applicable).

Non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments. This list of numbers shall also include the Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor. Detailed written directions from the project site to the medical facility to be used in case of an emergency. Also a map which sufficiently shows the route to be taken from the site to the designated medical facility.

Written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.

Written entry/exit procedures shall be posted in the clean room and equipment room. (See Section 12)

List of persons authorized to be in restricted area. The list shall include, among others, the following names with addresses and phone numbers:

**EXHIBIT A** 

Contractor Air-sampling Professional Asbestos Project Manager

TBD TBD TBD

Testing Laboratory Owner's representatives Any other designated by the Owner

TBD TBD TBD

Entry/exit log for work performed in all "Regulated Areas", "Work Areas", and "Containments" where respiratory protection or protective clothing is required by this Specification. Contractor shall maintain copies of all entry/exit logs on the site during the performance of asbestos-related work.

All of the Contractor's personnel and area air sampling results shall be posted in the clean room area or in the possession of the Contractor's site supervisor if no decontamination unit is required for the work being performed within 72 hours of collection, and submitted to Owner's CAC weekly unless otherwise noted.

Copies of Safety data sheets (SDS) for all materials on-site.

#### Part 3.5 - Job Site Documents

The following shall be in the possession of the Contractor's supervisor at each job site:

- 1. All contract specifications to include, change orders, etc. Contractor competent person must sign a document stating he has full knowledge of all Sections included in this specification.
- 2. Written Injury and Illness Prevention Program.
- 3. Written Respiratory Protection Program
- 4. An updated list of all contractor employees who have worked on this job.
- 5. List of all US EPA AHERA competent employees (supervisors).
- 6. Training records
- 7. Medical records
- 8. Respiratory fit test records

#### Part 3.6 - Project Close-out Documents

Contractor shall submit post-construction submittals to Owner/Owner's Representative within thirty (30) days of the completion of asbestos-related work. This documentation shall include at a minimum any and all applicable documents as outlined in Part 3.2 and Part 3.3 of this Section. In addition the Contractor should consult and submit as applicable documents identified in Section 24, Part 24.3 - Post Construction Submittal List

#### **SECTION 4. SITE SECURITY**

The work area is to be restricted to authorized, trained and protected personnel. A list of authorized personnel shall be established prior to job start and posted in the clean room of the work decontamination facility, or in the possession of the on-site supervisor for the Contractor.

Contractor shall report to the Owner immediately entry into the work area by unauthorized individuals.

A log book shall be maintained during the project. Anyone who enters the work areas must record name, affiliation, time in, and time out for each entry.

Access to all "Regulated Areas", "Work Areas", and "Containments" shall be through a designated entry point. All other means of access (doors, windows, hallways, etc.) shall be blocked or locked so as to prevent entry to or exit from these areas. The only exceptions for this rule are the waste pass out air-lock, and emergency exits in case of fire or accident.

**EXHIBIT A** 

Emergency exits shall NOT be locked, however, they shall be sealed with polyethylene sheeting and tape until needed. All emergency exits shall be clearly designated. They shall also have a razor knife permanently in place to facilitate emergency exit.

Contractor should have control of site security during abatement operations whenever possible, in order to protect work efforts and equipment. During off-hours access to the abatement area shall be restricted by a lockable entry.

Contractor will have Owner's assistance in the enforcement of restricted access by Owner's employees.

Storage of debris will be such that access to it is limited to the Contractor. Lockable bins shall be utilized and they shall be locked at all times except when loading occurs. No soft covers will be allowed for any storage containers. When a container with rolling tops is being used all access points to the interior of the container must be secured by the Contractor with locks of sufficient strength to require special effort to gain access to the interior of the waste container.

#### **SECTION 5. EMERGENCY PLANNING**

Emergency planning and procedures shall be developed by the Contractor and shall include considerations of fire, explosion, toxic atmospheres, electrical hazards, slips, trips and falls, and heat related injury and agreed to by Contractor and Owner prior to abatement initiation. These emergency procedures shall be established and presented to all employees and the Owner prior to the beginning of any work. A written emergency plan shall be posted or in the possession of the on-site supervisor for the Contractor regardless of the work being performed.

A copy of the Contractor's written Injury and Illness Prevention Program shall be posted or in the possession of the on-site supervisor for the Contractor regardless of the work being performed.

Employees shall be trained in evacuation procedures in the event of workplace emergencies. Telephone numbers of all emergency response personnel shall either be in the possession of the on-site supervisor, or be prominently posted in the clean change area and equipment room, along with the locations of the nearest telephone indicated on a map or diagram.

At least two fire extinguishers shall be present on site and in close proximity to the work being performed regardless of the type of work being conducted. At least one fire extinguisher shall be present outside of any containment. Additional extinguishers shall be distributed according to Cal/OSHA requirements or as identified in this Specification.

When open abatement is being performed, an emergency blast horn (canned air horn) shall be placed inside of containment for emergency evacuation in the event of a fire or other emergency.

If noted in any other section of this Specification, a means of communication shall be established between inside and outside of containment whenever a decontamination setup is required, particularly for all open abatement projects. This requirement may be met through walkie talkies or cell phones.

During hot working conditions, such as in an attic space during summer, or in containments where live steam or hot water lines are exposed, special attention must be given to the possibility of heat stress and burns. The Owner's site representative may make recommendations for work breaks for employees, but the supervisor is ultimately responsible for his workers.

**EXHIBIT A** 

#### SECTION 6. PRE-CONSTRUCTION MEETING

A pre-construction meeting will be held at a time and location to be determined by the Owner. The successful Bidder, his on-site supervisory personnel, and Air Sampling Professional (if applicable), representatives of the Owner, Owner's Representative, and other individuals as necessary shall be present at this meeting.

At this meeting the Contractor shall provide all required submittals, as indicated above in Section 3, Part 3.2. The Contractor should use the Pre-Construction Submittal List provided in Section 24, Part 24.1 to assure all required submittals are included in his submittal package.

#### SECTION 7. MATERIALS AND EQUIPMENT

#### Part 7.1 - Contractor Equipment and Supplies

Deliver all consumable materials in the original packages, containers or bundles bearing the name of the manufacturer and brand name (where applicable). These must be approved by the Owner. Polyethylene (Poly) sheeting, of appropriate thicknesses for walls, floors, and ceilings, (4 mil's thick for walls, 10 mil's thick for lining of waste containers, 6 mil's thick for floors and all other uses), shall be provided in widths selected to minimize the frequency of joints.

All poly shall be flame-retardant (fire-rated) regardless of its designated use inside or outside any building.

Poly sheeting utilized for worker decontamination enclosure shall be opaque white or black in color and each layer shall be a minimum of 6 mil thick. Modesty barriers are to be erected whenever and wherever the Owner's CAC determines one is needed.

Disposal bags shall be constructed of 6 mil poly with labels required by OSHA, CDPH, Toxic Substance Control regulations. Disposal drums shall be metal or fiber board with locking ring tops to be used only if required and/or allowed by selected waste facility.

Stick-on labels as per DTSC, DOT and OSHA requirements for disposal drums shall be provided.

Warning signs as required by OSHA shall be provided and posted per regulations.

Surfactant (wetting agent) shall be a 50/50 mixture of polyoxyethylene ether and polyoxyethylene ester, or equivalent, mixed in a proportion of one (1) fluid ounce to five (5) gallons of water or as specified by manufacturer. If amphibole asbestos in present in the materials being removed, the Contractor shall use a surfactant that is designed to wet the materials. This information shall be submitted to the Owner's CAC before the start of the project.

A sufficient quantity of pressure differential units equipped with HEPA filtration and operated in accordance with ANSI Z9.2-79 and EPA guidance document EPA 560/5-83-002 <u>Guidance for Controlling Friable Asbestos-Containing Materials in Buildings</u>, Appendix F: Recommended Specifications and Operating Procedures for the Use of Negative Pressure Systems for Asbestos Abatement, shall be utilized so as to meet the requirements of Section 12.

An adequate number of respirators for the work force shall be on hand. These respirators will include, when specified:

- a. Type "C" air-supplied respirators in positive pressure or pressure demand mode with full face pieces and HEPA-filtered disconnects.
- b. Full-face powered-air respirators with HEPA-filters.

**EXHIBIT A** 

c. Half-face or full face respirators with HEPA filters.

All respirators shall be NIOSH-approved and be equipped with supplies for immediate replacement of defective parts.

Full body disposable protective clothing, including head, body, and foot coverings consisting of material impenetrable by asbestos fibers shall be provided to all workers and authorized visitors in sizes adequate to accommodate movement without tearing.

Additional safety equipment such as hard hats, eye protection, safety shoes, disposable PVC gloves, etc., as necessary shall be provided to all workers and authorized visitors.

Non-skid footwear shall be provided to all abatement workers.

If launderable clothing is to be worn underneath disposable protective clothing, it shall be provided by the Contractor to all abatement workers. Laundering must occur in accordance with applicable OSHA requirements.

A sufficient supply of scaffolds, ladders, lifts and hand tools (e.g., scrapers, wire cutters, brushes, utility knives, wire saws, etc.) shall be provided as needed.

Rubber dustpans and rubber squeegees shall be provided for cleanup.

A sufficient supply of HEPA-filtered vacuums and HEPA filtered negative air units shall be provided to meet the specifications.

All HEPA equipment to be used on the project must be delivered to the site empty of all debris, clean, free of dust, and in full operating condition. All HEPA equipment to be used shall be DOP tested onsite by a third party at the start of the project before being used on the project. This DOP certification must be verified by Owner's CAC prior to its use.

DOP certification testing shall be observed and witnessed by an Owner's CAC. Copies of DOP test results and certification must be submitted to Owner's CAC within 24 hours of the testing being performed.

No product or material will be used on the project unless the product data sheets and all SDS's have been submitted, reviewed, and approved by the Owner for use. Any product or material found on the project which has a product data sheet and/or SDS available and has not been approved will be removed from the site by the Contractor until review and approval has been completed by the Owner.

#### Part 7.2 - Rental Equipment and Supplies

Any equipment rented and delivered to the site for the purpose of conducts asbestos abatement work must be accompanied with documentation verifying that the rental agency has been notified, and acknowledges receipt of notification that the equipment being rented will be used for asbestos abatement work. This documentation must be submitted to the Owner's CAC prior to the equipment being delivered to the job site. Rental equipment, including scaffolding, will be held to the same standard of cleanliness as all other equipment on this project.

All rented equipment must be inspected and accepted by Owner's CAC as it arrives onsite. Any equipment covered with dust (no matter the source of dust), plaster debris, multiple layers of encapsulant and/or spray glue, or any other debris will not be accepted. Delays caused by a lack of clean equipment will not extend Contractor's schedule. Equipment rejected due to a lack of cleanliness must be removed from Owner's grounds in order to be cleaned. Dirty equipment wrapped in plastic will not be acceptable.

The Owners' agent/site representative must be informed 24 hours prior to the delivery of any rental equipment.

**EXHIBIT A** 

The decision of the Owner or its representative on all rental equipment and supplies shall be final.

#### SECTION 8. WORK SITE FACILITIES

The Owner shall provide sanitary facilities for abatement personnel outside of the enclosed work area. To use these facilities all workers shall wear street clothes, not bathing suits or disposable coverall while using the facilities.

The Owner shall provide water for construction purposes. Contractor shall connect to existing Owner system.

The Owner shall provide the electrical source.

The Owner or its representative shall specify the waste water discharge location and location of waste containers.

The Owner shall specify on-site parking areas, if available, and access to the site.

#### **SECTION 9. RESPIRATORY PROTECTION**

All respiratory protection shall be provided to workers in accordance with the submitted written respiratory protection program, which includes all items as required by OSHA. This program shall be posted in the clean room of the worker decontamination enclosure system or adjacent to the clean room.

The Contractor shall ensure that all workers entering the regulated area wear appropriate respiratory protection. Respiratory protection provided workers shall be in accordance with 8 CCR 1529, and 8 CCR 5144 and the respiratory protection program submitted by the Contractor. This program shall be available at the project site.

The Owner or their representative may deny access to a regulated area to anyone who, in the final judgement of the Owner or their representative, is not properly wearing adequate respiratory protection for the project conditions. This includes but is not limited to those wearing unidentified respirators, those with improperly sealed respirators, those wearing respirators in an improper manner such as over their protective suit hood, or in any other fashion judged by the Owner or their representative to be improper or inadequate to protect the individual from the airborne asbestos at the project site.

The Contractor shall provide each worker needing respiratory protection with his or her own, individually identified, NIOSH-approved respirator. At a minimum, these respirators will be equipped with a P-100 series HEPA filter. The Contractor shall provide additional filter types if that becomes necessary for specific hazards discovered on the job site or if required in the contract documents.

The Contractor shall ensure that all workers use the respirator in compliance with the manufacturer's instructions for proper use and care of that product.

Workers must perform positive and negative respirator seal checks each time a respirator is put on, provided the respirator design so permits.

The Contractor shall ensure that those workers wearing powered air purifying respirators test the air flow rate according to the frequency and methods specified by the manufacturer.

Workers shall be given, at least, a qualitative fit test in accordance with procedures detailed in the Cal/OSHA requirements for all respirators to be used on this abatement project. An appropriately administered quantitative fit test may be substituted for the qualitative fit test.

**EXHIBIT A** 

The Contractor shall ensure and provide written records to the Owner's CAC that all workers wearing tight-fitting respirators have been appropriately fit tested in accordance with the requirements of 8 CCR 5144.

The Contractor shall ensure that nothing interferes with the seal of the respirator to the face of the worker. This includes but is not limited to facial hair, clothing, protective clothing, equipment or anything else that comes between the respirator and the face of the worker.

Use of any respirator must be in compliance with the manufacturer's instructions for proper use and care of that product.

The Contractor shall ensure that workers wear respirators underneath protective clothing.

Workers conducts any work that may create an airborne release of asbestos must wear appropriate respiratory protection. This includes, but is not limited to the pre-cleaning of asbestos contamination off of furniture, equipment and floors, and the set-up of contaminated work areas.

The judgement of the Owner's CAC shall be final if there is a disagreement between the Owner and the Contractor regarding the need for wearing or the type of personal protection required..

In no event will a negative exposure assessment be allowed to lower respiratory protection, from that listed in the Scope of Work or required by regulation in the absence of an NEA, prior to the start of a project. Air samples used for negative exposure assessments created after the project has started must be from work conducted under this contract.

#### Minimum Respiratory Protection for OSHA Class I Work

All Class I asbestos work will require tight-fitting, full-face powered-air purifying respirators pursuant to Title 8 1529.

Unless stated otherwise in the contract documents, for the purposes of respiratory protection, Class I work will include the removal of materials such as gypsum board surfaces that are covered with a texturing or skim coat material that contains >1% asbestos.

#### Minimum Respiratory Protection for Class II and III Work Practices

Unless specified differently in the contract documents, the Contractor's employees conducts Class II or III work will wear a minimum of half-face air-purifying respirators. Contract documents may require additional respiratory protection, such as the use of full face air-purifying respirators or powered air purifying respirators.

After work has begun, if a Contractor wishes to lower respiratory protection requirements, he or she must demonstrate to the Owner's CAC that personal air sampling results from that project prove that airborne fibers levels are below the limit of quantification for the phase contrast microscopy method. The Owner's CAC will normally require sampling results used for this purpose to include several days of sampling taken during the work expected to generate the highest expected airborne levels. The Owner's CAC will have final authority regarding whether or not the respiratory protection may be reduced or eliminated. For example, the Owner's CAC may require personal samples be analyzed by TEM before determining that asbestos does not pose an airborne health risk.

All Class I work shall require full-face powered air purifying respirators and are not subject to a reduced level of respiratory protection regardless of the air sample results.

The Owner's CAC has full authority to raise the level of respiratory protection required for access to the regulated area if in his or her judgement additional respiratory protection is required. For example, if personal air sample results collected by either the Contractor or Owner's CAC indicate higher than expected levels, the Owner's CAC is authorized to increase the level of required respiratory protection. The Owner's CAC will determine if the increased respiratory protection is due to new, unexpected developments such as the

**EXHIBIT A** 

discovery of new materials, or if the increase is due to the Contractor failing to follow good work practices. The judgement on this matter by the Owner's CAC will be final.

The Owner is not responsible for increased costs or delays resulting from the need to increase respiratory protection should the reason for the increased respiratory protection be due to the Contractor's failure to adequately utilize good engineering controls and work practices and/or the prompt cleanup of debris.

The Contractor may only implement respiratory protection changes after receiving written approval for the change from the Owner's CAC.

Powered-air purifying respirators must be worn if waste containers spill, break, or in any other fashion require a Class I work cleanup be performed.

The Contractor shall comply with the respiratory protection requirements in 8 CCR 5144 includes assigned protection factors for all respirators. The following list of respirators and their assigned "protection factors" shall be the criteria for the selection of respiratory protection.

Respirator Selection	<b>Protection Factor</b>
Half-face or full-face air purifying respirator equipped with HEPA filter.	10
Full-face air purifying respirator equipped with HEPA filter with quantitative fit test.	50
Full-face Type C continuous flow supplied air.	1000
Full-face, powered air purifying respirator equipped with HEPA filter.	1000
Full-face supplied air respirator operated in pressure demand mode.	1000
Full-face supplied air respirator operated in pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus.	1000

Workers shall be provided respirators equipped with HEPA filters approved by NIOSH to be worn in the designated work area and/or whenever a potential exposure to asbestos exists. Owner or its representative may refuse entry to the work area to a worker with inappropriate respiratory protection.

Sufficient filters shall be provided for replacement as required by the workers or applicable regulations. Disposable respirators shall not be used.

Whenever type C respirator protection is used, compressed air systems shall be designed to provide air volumes and pressures to accommodate respirator manufacturer specifications. The compressed air system shall have a reservoir of adequate capacity to allow the escape of all respirator wearers from contaminated areas in the event of compressor failure.

Compressors must meet the requirements of 29 CFR 1910.134(d). Location of compressors must be approved by Owner for exhaust and noise considerations. Location of compressors must be approved by Owner for exhaust and noise considerations.

Compressors must have an in-line carbon monoxide monitor and periodic inspection of carbon monoxide monitors must be documented. Documentation of adequacy of compressed air systems/respiratory protection

**EXHIBIT A** 

systems must be retained on site. This documentation will include a list of compatible components with the maximum number and type of respirators that may be used with the system. Periodic testing of compressed air shall insure that systems provide air of sufficient quality (Grade D breathing air). Documentation of this testing, including a description of the process used to perform the test and results of each test must be submitted to the Owner's CAC weekly.

Whenever powered air-purifying respirators are required, a sufficient supply of replacement batteries and HEPA filter cartridges shall be provided to the workers. Spare fully charged batteries must be available on-site for replacement. The flow rate delivered to the face piece shall be checked and recorded by the Contractor on the sheet provided by the Owner's CAC each time a worker dons the respirator. Written respiratory protection program must detail how this testing is to be performed by each employee or the onsite supervisor. The Contractor shall ensure that the flow rate for PAPRs meets the requirements listed in 8 CCR 1544 regarding tight and loose fitting respirators as appropriate. The Contractors shall also ensure that PAPRs are worn, checked and maintained according to the directions of the manufacturer.

During encapsulation operations or usage of other organic base aerosols (e.g. spray glue, expanding foam, etc.) workers shall be provided with combination organic vapor/HEPA filter respirator cartridges.

#### SECTION 10. PERSONNEL PROTECTION REQUIREMENT AND TRAINING

Prior to commencement of abatement activities all personnel who will be required to enter the work area or handle containerized asbestos containing materials must have received adequate training in accordance with the OSHA, EPA AHERA, EPA NESHAP and DTSC regulations.

All personnel performing asbestos related work shall possess a current accreditation certificate as an asbestos worker or contractor/supervisor as described in 40 CFR Part 763, Appendix C to subpart E, Asbestos Model Accreditation Plan.

Special on-site training on equipment and procedures unique to this job site shall be performed by the Contractor as required or recommended by the equipment manufacturer.

The Contractor shall provide training in emergency response and evacuation procedures.

Disposable clothing, including head, foot and full body protection, shall be provided in sufficient quantities and adequate sizes for all workers and authorized visitors. Damaged coveralls shall be immediately repaired or replaced.

Hard hats, protective eye-wear, safety shoes, proper protective gloves, rubber boots and/or other footwear shall be provided by the Contractor as required for workers and authorized visitors.

Contractor personnel shall not wear street clothes or clothes of any type underneath the protective disposable clothing during any Class I work where showering is required. Upon exiting the work area, no items worn in the work area, such as clothing, personal protective gear, footwear, or hair coverings will be allowed to be worn past the shower of the decontamination unit. Contractor workers have the option of wearing disposable undergarments or a bathing suit underneath protective disposable clothing.

Each time the worker(s) enter the work area they will don new disposable clothing. Street clothes, including but not limited to, underwear and street shoes shall not be allowed inside the work area, except during visual clearance activities.

The Owner's CAC may use personal judgement to allow authorized personal to wear street clothes under protective clothing during the construction of final visual or other short-duration visits into the regulated area during times which asbestos is not being disturbed and gross debris is not present.

**EXHIBIT A** 

#### SECTION 11. WORKER DECONTAMINATION ENCLOSURE SYSTEMS

Worker decontamination enclosure systems shall be provided at all locations where workers will enter or exit the work area. Enclosure systems may be constructed out of metal, wood or plastic support as appropriate. Plans for construction, including materials and layout, shall be submitted as shop drawings and approved, in writing, by the Owner or its representative prior to work initiation. Detailed descriptions of portable, prefabricated units, if used, must be submitted for the Owner's approval. The worker decontamination enclosure system shall consist of at least a clean room, a shower room, and an equipment room and shall be constructed with at least 6 mil fire rated plastic sheeting.

All decontamination units and pressure differential units located outside the building shall be enclosed with a 2"x 4" wood studs and ½" plywood enclosure for security. Pressure differential units shall be secured as necessary to the building or ground. Exhaust openings shall have metal grates to prevent objects from being put into the exhaust openings. Pressure differential exhaust shall be exhausted to an area acceptable to the Owner or Owner's CAC.

Entry and exit from the worker decontamination enclosure system shall be through doorways designed to restrict air movement between chambers when not in use by either means of overlapping plastic or by means of zippers. In all hospital settings, only zippered doors are acceptable between all decontamination chambers or anterooms. The dirty side shall have an extra layer of 6 mil poly sheeting on the floor as a "boat layer" and it shall be replaced at least daily.

The clean room shall designed and sized and equipped to adequately accommodate the size of the work crew for their change of clothes, cleaning supplies and respiratory protection equipment. Lighting, heat and electricity shall be provided as necessary for comfort. The clean room space shall not be used for storage of tools, equipment or materials or as office space.

A shower is required on any project that involves removal of greater than 25 linear feet of asbestos containing TSI or greater than 10 square feet of asbestos containing surfacing material. In addition, if the scope of works dictates a shower these provisions shall also apply. The shower room shall contain one or more showers as necessary to adequately accommodate workers. The shower enclosure shall be constructed to ensure against leakage of any kind. In addition, the shower shall be a separate unit from the decontamination unit walls. The shower unit cannot be made from poly. Metal or hard plastic is acceptable. An adequate supply of soap, shampoo and towels shall be supplied by the Contractor and available at all times for use by employees. Shower water shall be drained, collected and filtered through a system with at least 5.0 micron particle size collection capability.

The shower pan in the shower chamber shall be, at least, 3' x 3' in size. The shower chamber shall be constructed so that no water from the shower can spray out of the chamber, nor any water run down the sides of the poly and miss the pan. The shower chamber dimensions shall be determined by the size of the shower pan but are not to be smaller than 3' wide by 3' long by 6' tall.

Multiple showers are required if the number of asbestos workers exceeds ten per Title 8 3366 Washing Facilities. When there are less than five employees, the same shower may be used by both sexes if the shower room can be locked from the inside. A minimum of two showers will be required for more than 10 workers.

Each decontamination chamber shall have, at least, a 4" lip of poly from the floor up the wall to prevent possible transfer of water and debris between chambers. Excess poly at the corners of this floor is to be fitted to the sides of the chamber by folding poly and taping, as opposed to cutting away excess poly and taping seams. In addition to this 4" lip of poly, the shower chamber shall have an overflow pan, in which the shower unit sits inside, that is capable of holding sufficient water in the event of an overflow. The filter system and any hose connections transferring contaminated water shall be located in a secondary containment, such as a metal pan. Any water leakage shall be collected and either filtered or placed into waste bags with other asbestos waste debris.

**EXHIBIT A** 

Unless otherwise specified in the scope of work, the minimum size of the decontamination chambers shall be the following:

Clean Room 3' x 3' Shower 3' x 3' Dirty Room 3' x 3'

Abatement work will be stopped if decontamination unit is not kept in acceptable condition.

Storage or consumption of food and/or beverages shall not be permitted inside the containment or within any of the decontamination chambers. Food or drink consumption within containment will result in the dismissal of the worker from the site.

Whenever and wherever possible, the Contractor shall enclose multiple rooms within a building or wing into a single containment. Where rooms are joined by a common interior hallway or have a common exterior walkway, multiple spaces shall be joined together creating one containment using poly enclosures. When multiple rooms in a building do not have a common interior hallway, multiple rooms shall be joined using a common work chamber built by the Contractor. The common work chamber shall be constructed of wood studs and plywood sheeting for security purposes, and shall be part of the decontamination chamber. Decontamination units and joined "common areas" outside of a building shall have lockable doors or gates created with temporary fencing for security during off-hours.

#### SECTION 12. WORKPLACE ENTRY AND EXIT PROCEDURES

All workers and authorized personnel shall enter the work area through the worker decontamination enclosure system.

All personnel who enter the work area must sign the entry log, located in the clean room. This log shall have space for the workers name, time in, time out, and be identified with the project name, date, and containment location.

All personnel, before entering the work area, shall read and be familiar with all posted regulations, personal protection requirements, workplace entry and exit procedures, and emergency procedures.

For Class I work, the worker shall proceed first to the clean room and remove all street clothes and don appropriate respiratory protection and disposable coveralls, head covering and foot covering. Hard hats, eye protection and gloves shall also be worn, as appropriate. Clean respirators and protective clothing shall be provided and utilized by each person for <u>each separate entry</u> into the work area. There shall be a location for storage of the street clothes in the clean room.

Personnel wearing designated personal protective equipment shall proceed from the clean room through the shower room and equipment room to the main work area.

Before leaving the work area all personnel shall remove gross contamination from the outside of respirators and protective clothing by brushing and/or wet-wiping procedures. HEPA vacuums with brush attachments may be utilized for this purpose.

The worker shall proceed into equipment room where they remove all protective equipment except respirators. Deposit disposable clothing into an appropriately labeled container for disposal.

Reusable, contaminated footwear such as rubber boots shall be stored in the equipment room when not in use in the work area. This footwear shall be cleaned prior to being removed from the work area. Placing footwear in two sealed 6 mil poly bags is sufficient for moving from one containment to another, but not for moving from one site to another.

**EXHIBIT A** 

Still wearing respirators, personnel shall proceed into the shower area, clean the outside of the respirators and the exposed face area under running water prior to removal of respirator, then shower and shampoo to remove residual asbestos contamination. Various types of respirators will require slight modification of these procedures.

After showering, proceed to the clean room to dry and put on the street clothes.

#### SECTION 13. DIFFERENTIAL AIR PRESSURE SYSTEMS

#### Part 13.1 - Negative Pressure Requirements

Negative pressure shall be maintained at 0.030" water differential at all times during abatement activities, including entry/exit and bag out procedures. Contractor shall assign crew members to determine cause of loss of pressure any time containment's negative pressure drops below 0.030" water differential. All work will be stopped in any containment for which the negative pressure drops below 0.025" water differential, until problem is resolved and pressure returns to 0.030" water differential or better.

In the event that containment cannot be brought up to 0.030" water differential, abatement contractor must increase number of negative pressure differential units until a calculated 10 air changes per hour is taking place. The Owner's CAC will assist and review possible remedies to the negative pressure requirement.

All negative pressure units that are installed to the containment system but are shut off or not working, shall be sealed at both the exhaust location and the intake of the machine to prevent back draft which could allow asbestos fiber contamination from the HEPA filter back into the work area.

# Part 13.2 - DOP Testing

Contractor shall provide differential air pressure systems for each work area in accordance with Appendix J of EPA "Guidance for Controlling Asbestos-Containing Materials in Buildings," EPA 560/5-85-024.

All HEPA filtered systems used on this project shall be tested and certified by an independent third party company on-site prior to use. Contractors may not test their own equipment. All vacuums and pressure differential units shall meet ANSI Z9.2, using an appropriate testing agent. Written copies or electronic copies of documentation of these tests shall be provided to the Owner's CAC prior to the use of any HEPA system.

DOP, or equivalent, testing shall be conducted on-site, unless stated otherwise in the Scope of Work. All HEPA filtered units, including but not limited to, vacuums and air pressure differential units (negative air units) shall be tested onsite. Testing of air pressure differential units must include testing of the wheel attachments, control panel, seam, rivets of the housing, as well as, the HEPA filter itself.

All HEPA equipped equipment to be used on the project must be delivered to the site empty of all debris, clean and free of dust, and in full operating condition. Covering dirty units with poly, other than the HEPA filter surface, will not be acceptable.

DOP or equivalent testing is required when any HEPA filters are changed during the project

Any negative pressure unit turned upside down, or on its side, must be returned to an upright position and re-DOP tested. Negative pressure units shall not be used on this project while laid on their side or upside down.

In case of a power outage, Contractor must seal exhaust ducts against back draft into containment.

All negative air units shall will have the filter sealed with poly and tape before being shutdown to prevent back drafting before it is moved from the work area.

**EXHIBIT A** 

#### Part 13.3 - Differential Pressure Recording Requirements

Differential air pressure shall be continuously monitored by using a manometer that measures down to at least three digits to the right of the decimal point. For example, the manometer shall be able to read and display -0.035" wp, which shows three digits to the right of the decimal point. Other manometers not meeting this minimum criteria are not acceptable. The location of the pressure measurement shall be approved in advance by the Owner's CAC. The location where the air tubing of the manometer is inserted into the work area will be determined by both the contractor competent person and the Owner's CAC.

The pressure differential shall be checked a minimum of every hour during the work shift by the contractor's competent person.

On some projects, it may be specified for the manometer to maintain a printed copy of the negative pressure readings. The manometer readings will require the correct date and time. It will be the contractors responsibility to write on the recording information the location of the reading, including project name and containment location.

Defective or non-operating manometers may require temporary stoppage of work until instrumentation is replaced.

For larger projects at least one manometer station shall be in place for each 25,000 square feet of containment space. Additional manometers may be required on large projects, where a second location is needed for the Owner and representatives.

#### Part 13.4 - Differential Pressure System

The location of the air filtration units (negative air units) exhaust out of the work area shall require careful consideration with regard to the work being performed and needs of the owner. All air exhaust from negative air units shall be directed out of the building when possible. This can be accomplished through use of flexible and semi-rigid exhaust ducts from the negative air units extending to windows, doors or other openings in the building. The first choice should always be to direct PDU air exhaust out of the building through the Contractor supplied ducts. Any alternative exhaust location of negative air that cannot exhaust out the building shall be determined by the Owner's CAC.

When directing exhaust to a buildings exterior through the use of temporary supplied duct, the Contractor shall select a path of travel for these ducts which does not impede building occupants or other trades, result in creation of a hazard to building occupants, or restrict the closing of entry and exit doors to the building. The exhaust opening must not be within 10' of any air intake vents, open windows or open doors, and must not be directed at paths of travel into or out of the building.

In some very limited cases, it might be possible to exhaust air from a negative air unit into an existing building's exhaust system. When utilizing a dedicated exhaust duct system present within the building the system must be investigated to determine its capability of handling the volume of exhaust air expected to be produced by the pressure differential system. Sufficient air volume of the existing dedicated exhaust duct system should have a minimum of 5X but preferably up to about 10X the total volume capacity of the exhaust of the pressure differential air system. For example, if a single 2,000 cfm negative air unit is to be used, the dedicated exhaust fan system which will exhaust the air produced by the negative air unit should be capable of handling about 10,000 cfm of total exhaust air capacity. Use of permanent dedicated exhaust duct systems may also require temporarily sealing of adjacent registers in the same exhaust system to make up the difference in exhaust volume.

The owner shall provide approval prior to the contractor utilizing any existing dedicated exhaust systems which might be considered, since the dedicated exhaust systems will be required to operate at all times the pressure differential air system is operable, and sealing any adjacent registers may not be acceptable. It is critical to note that a dedicated exhaust system is not the same as a return air duct system which re-circulates air from

**EXHIBIT A** 

a given building space back to the HVAC fan unit and ultimately is supplied back to the work space. Return air duct systems will not be allowed for exhaust from negative air units.

Directing exhaust air into an attic or above ceiling space may only be utilized in specific conditions and is limited to attic spaces with only exposed wood, metal or concrete undersides of roof or flooring systems. The space may not under any circumstances have any existing known or assumed asbestos containing materials present regardless of their condition.

Regardless of the exhaust system utilized, the system and its components shall be inspected daily by the Contractor to ensure compliance with the requirements of this specification, remains in good repair and is otherwise not compromised in any way which could negate its designed purpose. Any deficiencies found in the system being used shall be repaired immediately and if necessary all work will cease until those repairs can be accomplished.

The work area shall have a differential air pressure of at least -0.030 inches water whenever the work is being performed including removal, gross clean-up, encapsulation of surfaces, bag-out operations and worker entry and exit procedures. If pressure differential ever drops below -0.025 inches water differential, all work, other than cleanup of waste on the floor of containment, must be halted until reason for pressure differential drop has been determined and corrected.

Only unused pre-manufactured, reinforced flexible ducts shall be used within the containment area for exhausting of filtered air. Contractor may not construct ducts using poly or other materials that do not maintain the rigidity in the exhaust duct.

All interior of containment PDU's and flexible ducts must be wrapped in poly during all abatement activities. This poly wrap is to be removed after "finish detail" work has been completed, but prior to clearance visual.

Flexible ducts must be supported by solid surface at the point of exit from containment. This may require the Contractor to install plywood, or similar, structure at the exhaust point.

# SECTION 14. EXECUTION, WORK SCHEDULE

#### Part 14.1 - Execution

## **Owner Responsibilities**

The Owner shall provide the Contractor with access to the building during scheduled work hours through their representative. This representative is expected to be the General Contractor in charge of the site. The Owner shall also be responsible for arming and disarming alarm systems on buildings where work will be performed.

The Owner shall also provide the Contractor access to water and electrical hook-ups.

#### **Contractor Responsibilities**

The Contractor is responsible for all connections, electrical cords, GFCl's, water hoses, and hose bibs necessary for attachment. GFCl's are required to be used by the Contractor on all electrical circuits in use.

The Contractor and Owner's CAC shall investigate the work area and agree (in writing if necessary) on the pre-abatement condition of the work area.

The Contractor shall post danger signs meeting the OSHA specifications at locations and approaches to locations where airborne concentrations of asbestos may exceed ambient background levels including all doors sealed as a critical barrier and at all entries to asbestos work containments.

**EXHIBIT A** 

When electrical supply within area of abatement poses a hazard, the Contractor, in conjunction with the Owner, shall shut down and lock out electric power to all work areas. The Contractor shall provide temporary power and lighting sources, ensure safe installation, including ground fault circuit interrupters of temporary power sources and equipment by complying with all applicable electrical code requirements and OSHA requirements for temporary electrical systems. The Contractor shall have a licensed electrician shut down and lock out electric power, and setup temporary power and lighting sources. All cost of electricity shall be paid for by the Owner unless specified differently in the Scope of Work. The cost for set-up of temporary power is the responsibility of the abatement contractor unless specified differently in the scope of work.

When plumbing is required to be altered or becomes damaged, the Contractor shall have a licensed plumber disconnect and cap all water as necessary within the work area. Water shall be provided by the Owner from a location near the work area, but not necessarily within the work area.

Shut down and lock out all heating, ventilating and air-conditioning-system (HVAC) components that are in, supply, or pass through the work area. Seal all intake and exhaust vents in the work area with tape and 6-mil polyethylene within the work area at both the interior and on the exterior of the building. Seal any seams in system components that pass through the work area.

Pre-clean all fixed objects in all work areas using HEPA-filtered vacuums and/or wet-cleaning techniques as appropriate and deemed necessary by the Owner's CAC. Careful attention must be paid to machinery behind grills or gratings where access may be difficult but contamination significant. After pre-cleaning, enclose fixed objects in 6-mil polyethylene sheeting and seal securely in place with tape.

Pre-clean all surfaces in all work areas using HEPA filtered vacuums and/or wet cleaning methods as appropriate. Do not disturb asbestos-containing materials during the pre-cleaning phase.

Unless otherwise stated in the scope of work or by agreement with the Owner's CAC all non-asbestos-containing materials left in the work area shall be covered by with 6-mil polyethylene sheeting. If any non-asbestos containing materials become contaminated with asbestos during removal activities these materials shall be disposed of as asbestos-containing materials by the Contractor. The Owner's CAC shall determine the friability of these materials prior to disposal.

Contractor shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and other openings between the work area and uncontaminated areas outside of the work area. These openings must be sealed with 6-mil polyethylene sheeting and tape. These protective layers shall be in addition to the two polyethylene layers on floors, ceilings and walls. These openings are referred to as critical barriers. Seal all cracks in critical barrier areas with tape, caulk, or foam prior to sealing critical barriers.

Prior to the Contractor covering critical barriers with additional layers of wall, floor, or ceiling poly, the installation and integrity of critical barrier seals must be approved by the Owner's CAC.

All items attached to asbestos-containing materials and items which cannot be removed without disturbing asbestos-containing materials shall be removed by the Contractor after establishment of containment and negative pressure. If these items are to be "saved and returned" or "reused" by the Owner, the Contractor must remove and clean them without damage. These items must be cataloged using the attached "Return Item Inventory Sheet" provided by the Owner.

Contractor shall cover floors in the work area with polyethylene sheeting. Floors shall be covered with a minimum of two layers of 6-mil polyethylene sheeting. Plastic shall be sized to minimize seams. A distance of at least six (6) feet between seams is sufficient. DO NOT locate any seams at wall/floor joints. Floor sheeting shall extend at least twelve inches (12") up the sidewalls of the work area. Sheeting shall be installed in a fashion so as to prevent slippage between successive layers of material. A layer of 10-mil polyethylene sheeting and/or plywood may be required by the Owner's CAC to protect certain flooring materials -- carpets, hardwood floors, tiles, etc. and will be specified in the scope of work if required. At no time will wall or ceiling

**EXHIBIT A** 

materials be permitted to be dropped onto unprotected floors. This includes areas where the floor surfaces contain asbestos.

Contractor shall cover walls in the work area with polyethylene sheeting. Walls shall be covered with a minimum of two layers of 4-mil polyethylene sheeting. Plastic shall be sized to minimize seams. Seams shall be staggered and separated by a distance of at least six feet (6'). DO NOT locate any seams at wall/floor joints. Wall sheeting shall overlap floor sheeting by at least twelve inches (12") beyond the wall/floor joint to provide a better seal against water damage and for pressure differential maintenance. Wall sheeting shall be secured adequately to prevent it from falling away from the walls. This may require additional support/attachment when pressure differential systems are utilized.

In some projects when specified in the scope of work, the Contractor shall cover ceilings in the work area with polyethylene sheeting. Ceilings shall be covered with a minimum of one layer of 4 mil polyethylene sheeting. Plastic shall be sized to minimize seams. Seams shall be staggered and separated by a distance of at least six feet (6'). DO NOT locate seams at wall/ceiling joints. Ceiling sheeting shall overlap wall sheeting by at least twelve inches (12") beyond the ceiling/wall joint to provide a better seal against water damage and for pressure differential maintenance. Ceiling sheeting shall be secured adequately to prevent it from falling away from the walls such as wires attached between walls to provide additional support. Additional support/attachment might be required when pressure differential systems are utilized.

The Contractor shall add clear viewing windows in the containment walls at least 1' x 2' in size. The Owner's CAC will approve quantity and placement of these inspection windows. The Owner's CAC has the right to require more clear viewing windows or require placement of windows to be altered.

The equipment room shall be used for storage of equipment and tools at the end of a shift after they have been decontaminated using a HEPA-filtered vacuum and/or wet-cleaning techniques as appropriate. A six-mil. disposal bag or a drum lined with a labeled 6-mil polyethylene bag for collection of disposable clothing and contaminated supplies shall be located in this room.

The Contractor shall be responsible for all clean-up and costs associated with the decontamination of occupied spaces adjacent to any containment where removal of asbestos-containing material is conducted.

The Contractor shall also be responsible for damage to building finishes and costs associated with removal of tape glue, staining of wall finishes, or destruction of wall surface integrity from spray glue application, staples, nails, hooks, etc. installed to support containment. It is the responsibility of the Contractor to identify with the General Contractor all aspects of the project requirements pertaining to these types of damages.

There shall be a sufficient number of negative air units in the work area to maintain a minimum -0.030 " water pressure in the regulated area. A sufficient number of negative air units shall be installed to maintain a minimum of four air changes per hour. All negative air units shall have pre-filters at the intake of the system which must be changeable from inside the containment area. Openings made in the enclosure system to accommodate these units shall be made airtight with tape and/or caulking as needed. They shall NOT be exhausted into occupied areas of the building. Twelve inch (12") extension ducts shall be used to reach from the work area to the outside when required. Careful installation, air monitoring and daily inspections shall be done to ensure that the ducts does not release fibers into uncontaminated building areas.

Once the containment has been constructed and reinforced as necessary with pressure differential units in operation as required, the Contractor shall test the enclosure for leakage utilizing smoke tubes. The containment shall be repaired or reconstructed as needed.

Contractor shall clearly identify and maintain emergency and fire exits from the work area.

Work shall not begin each day until:

#### **EXHIBIT A**

- a. Enclosure systems, or modifications thereof, have been designed and built by the Contractor and each step approved by the CAC. If design of containment is to be altered in any way, after it is approved by the CAC, a written explanation of how and why the containment is to be altered must be submitted to the Owner's CAC for approval.
- b. Pressure-differential systems are functioning according to an acceptable design.
- c. All pre-abatement submissions, notifications, postings and permits have been provided and are satisfactory to the Owner or its representative.
- d. All equipment for abatement, clean-up and disposal is on hand.
- e. All current worker training documents are present.
- f. The Contractor has installed all required clear transparent viewing windows made of plastic or equivalent, in the containment so that activities can be visually monitored by the Owner's CAC from outside the containment. This window shall measure approximately 1' wide by 2' high. It shall be installed at a location approved by the Owner's CAC.
- g. All negative air units and vacuums have received and passed onsite DOP testing.
- h. Contractor has at least one competent person at each site in which work is taking place.
- I. All necessary documents and information have been posted or are on the work site. See Section 2.

#### Part 14.2 - Power Outage Procedures

The following procedures shall be followed in the event of a power outage (no matter the source of the outage):

- 1. Immediately stop abatement activities.
- 2. Wet all debris and/or friable materials within the containment.
- 3. Depart containment area as soon as reasonable. Shower out or use Hudson type water sprayers to decontaminate worker if shower is inoperable due to power outage.
- 4. Seal containment area including:
  - A. Decontamination units
  - B. Makeup air ports
  - C. Bag out chambers

If a generator is required by the project conditions, made necessary due to extended power outages, or chosen to be used by the abatement contractor the following issues must be addressed:

- 1. Generator must not violate any local noise ordinances nor disturb adjacent building occupants.
- 2. Generator exhaust must not be allowed to contaminate the makeup air being pulled into the containment. It must, also, not be allowed to mix with HVAC air supplied to adjacent occupied buildings.

## Part 14.3 - Work Schedule

Contractor shall schedule work as required to meet the needs of the project. During progress of work, it shall be the Contractor's responsibility to inform the Owner's CAC 48 hours or earlier of any and all work shifts to be performed. If at least 48 hours notice is not given, the proposed work shift may be canceled by the Owner's CAC.

Contractor shall be responsible for informing the Owner's CAC in writing at least 48 hours or earlier prior to the proposed addition of any off hours work, work expected to include more than one shift per day, or extend beyond 10 hours in a shift. If 48 hours notice is not given, work shift may be canceled by the Owner's CAC. The Owner's CAC reserves the right to deny any changes in the work schedule.

**EXHIBIT A** 

If the Contractor wishes to work on a Federal or State holiday, more than five days a week, or more than 9 hours a day, Contractor becomes responsible for cost of project management fees to cover extended hours. If the Contractor fails to appear on-site without notifying Owner's CAC at least 24 hours in advance of a scheduled work shift, the Contractor becomes responsible for all Owner's CAC travel fees, on-site time fees, and other associated project management fees for that day.

At no time shall a work shift extend beyond 12 hours in a day.

#### SECTION 15. REMOVAL PROCEDURES

Wet all asbestos-containing material with an amended water solution using equipment capable of providing a fine spray mist, in order to reduce airborne-fiber concentrations when the material is disturbed. Saturate the material to the substrate; however, do not allow excessive water to accumulate in the work area. Keep all removed material wet enough to prevent fiber release until it can be containerized for disposal. Maintain high humidity in the work area by misting or spraying to assist in fiber settling and reduce airborne concentrations. Wetting procedures are not equally effective on all types of asbestos-containing materials but shall be used in all cases.

Saturated asbestos-containing material shall be removed in manageable sections. Removed material should be containerized immediately. Surrounding areas shall be periodically sprayed and maintained in a wet condition until visible material is cleaned up. Gross debris shall be cleaned up and bagged prior to end of each shift

Material removed from building structures or components shall not be dropped or thrown to the floor. Material should be removed as intact sections or components whenever possible and carefully lowered to the floor.

Waste containers shall be sealed when full. Double bagging of waste material into 6 mil plastic is required. Bags shall not be overfilled. They should be securely sealed to prevent accidental opening and leakage by tying tops of bags in an overhand knot or by taping in gooseneck fashion. Do not seal bags with wire or cord.

Asbestos-containing waste with sharp-edged components (e.g., nails, screws, metal lath, tin sheeting) will tear the polyethylene bags and sheeting and shall be placed into drums or burlap bags and then into leak tight containers for disposal.

After completion of all stripping work, surfaces from which asbestos-containing materials have been removed shall be wet-brushed and sponged or cleaned by some equivalent method to remove all visible residue.

After the work area has been rendered free of visible residues and verified clean by the CAC, a thin coat of a satisfactory encapsulating agent shall be applied to lock-down non-visible fibers on all surfaces in the work area including structural members, building components and plastic sheeting on walls, floors and covering non-removable items.

#### SECTION 16. WASTE CONTAINER PASS-OUT PROCEDURES

Asbestos-contaminated waste that has been containerized shall be transported out of the work area through the waste transfer airlock or through an approved pass-out arrangement.

Waste pass-out procedures shall utilize two teams of workers, an "inside" team and an "outside" team. The inside team, wearing appropriate protective clothing and respirators for inside the work area, shall clean the outside, including bottoms, of properly labeled containers (bags, drums, or wrapped components) using HEPA vacuums and wet-wiping techniques and transport them into the waste container pass-out airlock. Provisions for spray cleaning exterior of bags, equipment, and removable items shall be present in the waste pass-out. Waste water from this operation shall be collected and filtered as required through a 5.0 micron filter.

**EXHIBIT A** 

The three-chamber system is utilized in the following manner. Workers inside the work area place the waste in the leak tight waste container, which is usually a 6 mil bag. They then rinse the bag and seal it. They hand it to a worker in the dirty chamber room who inspects the bag and, if it is clean, places it in the second leak tight waste container. The second leak tight waste container is either another bag or a lined rigid-wall container such as a barrel or box. The worker then seals the second container and may attach the proper labeling. The worker places the container in the middle chamber (shower containment). The worker in the clean chamber then reaches in and lifts the container into the clean chamber. The worker inspects it and if not already labeled, attaches the proper labels. The worker then passes the container to the outside worker who transports the container either to the waste transport vehicle or to a holding area. At no time shall z-flaps of transfer system chambers be taped, held or otherwise blocked open. The Contractor must not allow more than one poly airlock doorway to be open at any one time. This prevents a tunnel system and a breakdown in the isolation of the work area. Negative pressure must be maintained during all waste load-out activities.

The contract documents or the Owner's CAC may in allow a one or two chamber system for waste pass out to be used for some projects, as long as the Owner's CAC agrees to the work practice. As with a three-chamber system, in a one or two chamber system, the Contractor may never allow more than one poly air flap doorway to be open at any one time. For example, a one chamber system would function in the following manner. Workers in the work area rinse and seal the initial waste container. They hand the initial container to a worker in the load-out chamber. That worker verifies that the container is clean and then places it into the second container which will be either another bag or lined ridged-wall container depending on the specifications. The load-out worker then seals the container and applies the appropriate labels. The sealed, labeled container is then passed to the outside workers who transport it to the waste transport container or holding area.

The exit from this airlock shall be secured to prevent unauthorized entry.

#### **SECTION 17. CLEAN-UP PROCEDURE**

#### Part 17.1 - Clean-up Procedure

Remove and containerize all visible accumulations of asbestos-containing material and asbestos-contaminated debris utilizing rubber dust pans and rubber squeegees to move material around. DO NOT use metal shovels to pick up or move accumulated waste. Special care shall be taken to minimize damage to floor sheeting.

Wet-clean all surfaces in the work area using rags, mops and sponges as appropriate. Note: Some HEPA vacuums might not be wet-dry vacuums. To pick up excess water and gross wet debris, a wet-dry shop vacuum with HEPA filter may be used.

Airless sprayers and water hoses shall not be used in a "power washing" fashion on any surfaces unless approval is provided by the CAC.

The Contractor shall remove each cleaned layer of polyethylene sheeting from walls and floors. Windows, doors, HVAC system vents and all other critical barriers shall remain sealed. The pressure differential units shall remain in continuous operation. Decontamination enclosure systems shall remain in place and be utilized.

Remove all containerized waste from the work area. Decontaminate all tools and equipment and remove at the appropriate time in the cleaning sequence.

Contractor shall clean work area and conduct a pre-clearance visual. Once pre-visual has been passed by the Contractor, the containment shall allow time for the airborne dust to settle within containment for 24 hours, then return and re-clean by HEPA-vacuuming and/or wet-cleaning all objects and surfaces in the work area again. At this point Owner's CAC will conduct the final visual. If the final visual inspection fails, the Contractor

**EXHIBIT A** 

must re-clean area the work area until a final visual inspection is found acceptable to the CAC. Once the final visual inspection is passed by the CAC, Contractor will be allowed to encapsulate the containment area, unless encapsulation of containment has been disallowed in the scope of work or material specific specification.

The Contractor may request a reduction in the 24 hour waiting period, if personal samples collected during the abatement work and detail clean-up work have shown fiber levels below the PEL. Reduction of waiting period must be made in writing, accompanied by personal sample results from this project. The Contractor must acknowledge that reduction in waiting period may result in failed clearance air samples and that retaking and re-analyzing these air samples will be at the Contractor's expense. Any reduction in waiting time will be at the discretion of the Owner's CAC and client.

#### Part 17.2 - Visual Clearance Criteria

The <u>Contractor</u> shall perform a pre-final visual inspection of the regulated work area and adjacent surfaces prior to requesting that the Owner's representative conduct a final visual inspection. The pre-final visual performed by the Contractor shall verify that all materials have been completely removed from the work area, and that the work area meets the requirements specified in Section 17.

In addition, the level of cleanliness in all work areas where asbestos has been removed shall meet the final clearance criteria established in the ASTM E1368-90 Standard Practice for Visual Inspection of Asbestos Abatement Projects.

Upon completion of the pre-final visual inspection by the Contractor a final visual of the containment area will be performed by the Owner's representative. The CAC will determine the clearance criteria for the project. At a minimum, no three dimensional debris shall be left within the work area; all poly shall be wet wiped so that no visible dust or debris is left; the decontamination chambers shall be clean of all debris; the waste transfer area shall be clean of all debris; all equipment and supplies shall be clean of all debris. The Contractor shall not be released to encapsulate the containment until receiving acceptance by the CAC stating the removal area and the containment have met the criteria of the CAC for completeness of removal and cleanliness of the containment barriers and surfaces.

The Owner's CAC will conduct the final visual inspection of the work area for visible residue. If any accumulation of residue is observed, it will be assumed to be asbestos and the 24 hour settling period/cleaning cycle will be repeated.

Additional cleaning cycles shall be provided by the Contractor, as necessary, at no cost to the Owner until the specified clean criteria have been met.

#### Owner's CAC has final say on whether or not an area meets these requirements.

Following the satisfactory completion of clearance-air monitoring, remaining barriers may be removed and properly discarded as non-asbestos containing waste. If contamination exists behind these critical barriers, additional cleaning will be required.

The Owner, Contractor and Owner's CAC shall jointly review the work area and make a damage assessment, after clearance air samples have passed and containment has been torn down.

#### SECTION 18. CLEARANCE AIR MONITORING

When required, clearance air sampling shall be performed following the requirements specified in Section 18 after encapsulation of the containment has taken place and a sufficient amount of time has passed to allow the encapsulant to dry. The Owner's CAC shall determine the method of analysis to be used based on the amount and type of material removed within a containment. If at a K through 12 site and the quantity of

**EXHIBIT A** 

Asbestos-Containing Material (ACM) exceeds 160 square feet or 260 linear feet, analysis of air samples must be by transmission electron microscopy (TEM) per US EPA AHERA regulations.

Clearance-air monitoring shall proceed 24 hours after lock-down or when the area is dry, whichever is later.

Contractor may request a reduction in the 24 hour waiting period, if personal samples collected during the abatement work and detail clean-up work have shown fiber levels below the PEL. Reduction of waiting period must be made by the Contractor accompanied by personal sample results from this project. The Contractor must acknowledge that reduction in waiting period may result in failed, or overloaded (with encapsulant) clearance air samples and that retaking and re-analyzing these air samples will be at the Contractor's expense. Reduction in waiting time will be at the discretion of the Owner's CAC and the Owner.

Air samples will be taken using the "aggressive" air sampling techniques described in the AHERA regulations unless noted differently in the scope of work for non-AHERA sites. In the case aggressive samples cannot be collected (e.g. in a dirt floor area) this will be noted in the Owner's CAC's notes.

If PCM analysis is used for clearance air samples, all clearance samples at all locations shall indicate a fiber concentration of less than or equal to 0.01 f/cc for release of the work area.

If TEM analysis is to be used for clearance air samples, then the clearance criteria shall be the same as AHERA, unless otherwise specified in the scope of work.

Areas exceeding these levels shall be re-cleaned and, if appropriate, re-encapsulated at no additional cost to the owner. All areas where clearance air samples fail will be re-tested.

The Contractor shall be responsible for all subsequent air sampling costs if air samples fail to meet clearance criteria levels. This cost includes four hours of time for Owner's CAC personnel to collected the air samples and the cost of laboratory analysis.

#### **SECTION 19. MONITORING**

Owner reserves the right to perform air and performance monitoring at any time.

Contractor shall provide personal air monitoring in accordance with Cal/OSHA regulations. Results shall be made available to the Owner's CAC within 72 hours of collection. Hard copies or electronic copies of these results shall be supplied to the Owner's CAC within 7 days of collection. Failure to supply these sample results in specified time may cause work to be stopped until all delinquent results have been submitted. Loss of Contractor work time because of non compliance with the provisions of this paragraph will not extend the date for work completion.

Owner's CAC may take air samples prior to, during, and after the project. Work shall not be considered complete until all air sampling has been completed and satisfactory levels have been obtained. Satisfactory levels shall be those established by AHERA, unless more stringent requirements have been identified in any other section of this Specification.

In areas where soil contamination may be present, soil samples must meet specified criteria in any other section of this specification prior to clearance air samples collection.

Owner, or Owner's CAC, shall be authorized to issue a STOP WORK order whenever the Contractor's work or protective measures are not in accord with published regulations or contract specifications.

**EXHIBIT A** 

#### SECTION 20. DISPOSAL PROCEDURES

#### Part 20.1 - Disposal Procedures

Disposal bags shall be of 6 mil poly, pre-printed with labels as required by DOT, Cal/OSHA and the Department of Toxic Substance Control (DTSC) regulations.

Disposal drums shall be metal or fiber board with locking ring tops to be used only if required and/or allowed by selected dump site.

Stick-on labels as per OSHA and DTSC requirements for disposal containers shall be provided. All containers shall be labeled in accordance with DOT, Cal/OSHA and the DTSC regulations that require a "Caution" label and a "Hazardous Waste" label with the generator's name, address, and Manifest Document number.

As the work progresses, to prevent exceeding available storage capacity on site, sealed and labeled containers of asbestos-containing waste shall be removed and transported to the prearranged disposal location.

Disposal shall be at permitted waste facilities for the type of waste. Transport vehicles shall be marked with the sign prescribed by OSHA during loading and unloading to warn people of the presence of asbestos.

All dump receipts, trip tickets, waste manifests, Waste Shipment Record (WSR) and other documentation of disposal shall be delivered to the Owner, for its records. The manifest shall be signed by the Owner, the waste transporter, and the Disposal Site Operator as the responsibility for the material changes hands. If a second waste transporter is employed, his name, address, telephone number and signature should also appear on the form. The WSR, if used, shall be signed by the Owner or its agent and the disposal site operator.

All manifests shall have asbestos waste identified as: "RQ, Asbestos, 9 NA2212, III". This requirement may be changed as new regulations are issued. See "Waste Disposal" requirements at end of "General Requirements".

All manifests shall be accompanied by a "Notice and Certification". A signed copy of this must be provided to the Owner or its agent.

#### Part 20.2 - Transportation to the Landfill

Once drums, bags and wrapped components have been removed from the work area, they shall be loaded into a fully enclosed truck or waste container, which has been lined with 6 mil poly sheeting on the walls and floor. The exception top a fully enclosed waste truck is for roofing projects and when waste loads are generated and placed into open top lined waste trucks that will be "burrito wrapped".

When moving containers, utilize hand trucks, carts and proper lifting techniques to avoid back injuries. Trucks with lift gates are helpful for raising drums during truck loading.

Any debris or residue observed on containers or surfaces outside of the work area resulting from clean-up or disposal activities shall be immediately cleaned up using HEPA filtered vacuum equipment and/or wet methods as appropriate.

No waste containers shall be on site which contain other hazardous waste, or hazardous waste from any other source or job site. Waste from multiple sites of the Owner within the same waste container is acceptable; however, it must be manifested separately.

If Contractor is storing waste from various sites of one owner, all transportation vehicles shall be covered by the same regulations as the waste container or truck being used to haul the waste to the dump. If equipment or supplies are to be left in vehicles during hauling of waste to waste container or truck, waste and

**EXHIBIT A** 

equipment/supplies must be separated by a solid (wood or metal) barrier which has been sealed as a critical barrier. A poly wall barrier is not sufficient.

Waste container, truck, or storage bin must be locked at all times except when being filled.

It is the Contractor's responsibility to see that all waste containers, trucks, and storage bins arrive on site completely free from debris.

The contractor shall provide a weight receipt that identifies the net weight of the material being discarded.

# Part 20.3 - Disposal at the Landfill

Upon reaching the landfill, trucks are to approach the dump location as closely as possible for unloading of the asbestos-containing waste.

Bags, drums and components shall be inspected as they are off-loaded at the disposal site. Material in damaged containers shall be re-packed in empty drums or bags as necessary. Local requirements may not allow the disposal of asbestos waste in drums. Check with appropriate agency and institute appropriate alternative procedures.

Waste containers shall be placed on the ground at the disposal site, not pushed or thrown out of the trucks.

Personnel off-loading containers at the disposal site shall wear protective equipment consisting of disposable head, body and foot protection and, at a minimum, half-face, air-purifying, dual cartridge respirators equipped with high-efficiency filters.

Following the removal of all containerized waste, the truck cargo area shall be decontaminated using HEPA vacuums and/or wet methods to meet the no visible residue criteria. Poly sheeting shall be removed and discarded, along with contaminated cleaning materials and protective clothing, in bags or drums at the disposal site.

#### SECTION 21. PATENTS AND PREVAILING WAGES

#### Part 21.1 - Patents

Contractor shall pay all royalties and license fees required for the performance of the work. Contractor shall defend suits or claims resulting from Contractor's or any Sub-contractor's infringement of patent rights and shall indemnify Owner and Owner's representative from losses on account thereof.

## Part 21.2 - Prevailing Wage Requirements

The asbestos abatement contractor is fully and totally responsible at all times for compliance with payment of prevailing wage rates pursuant to provisions of the California Labor Code, for compliance with Division 2, Part 7, Chapter 1, California Labor Code, including but not limited to Section 1776; and for compliance with California Labor Code, Section 1777.5 for all apprentice able occupations.

#### **SECTION 22. PERMITS AND FEES**

If any permits are required to be issued for any of the Work to be performed by Contractor, Sub-contractor(s) or Sub-subcontractor(s) as part of the Project, it shall be the sole responsibility of the Contractor to expeditiously obtain all such permits and any costs incurred by the Contractor in obtaining such Permits shall be included within the Contract Price.

#### **EXHIBIT A**

#### SECTION 23. SPECIFIC PROCEDURES AND REQUIREMENTS

NOTE: All Specific Procedures and Requirements listed in Section 23 shall be reviewed by the Contractor along with the Scope of Work issued for the project. If any perceived conflicts are present between the Scope of Work and these specifications or within the General Requirements specification itself, the Contractor shall ask for a written interpretation from the Owner's CAC prior to submission of his bid. If conflicts in the "Scope of Work" and this specification or with the General Requirements specification itself are discovered after the start of abatement, the more stringent specification and/or requirements will be enforced. The Owner's CAC shall make the determination as to what which requirements and/or specifications are more stringent.

#### Part 23.1 - General Repair of Damaged Thermal System Insulation (TSI)

**NOT USED** 

## Part 23.3 - Mini-Cube Enclosure Requirements

1. NOT USED

2

#### **General Roof Removal Instructions and Requirements**

NOT USED

#### Part 23.5 - Vinyl Floor Tile (VFT) & Associated Adhesive Abatement Requirements

**NOT USED** 

#### Part 23.6 - Carpet Removal over Vinyl Floor Tile (VFT)/Tile Adhesive Requirements

**NOT USED** 

# Part 23.7 - Boiler Unit Removal Requirements

NOT USED

#### Part 23.8 - Sheetrock and Joint Compound Abatement Requirements

**NOT USED** 

#### Part 23.9 - Impact to and Removal of Transite Pipe, Shingle, or Sheeting Materials

NOT USED

#### Part 23.10- Demolition with Selected Asbestos Containing Materials Left in Place

**NOT USED** 

## Part 23.11 - Contaminated Attic Space Procedures

**NOT USED** 

#### Part 23.12 - Non-Friable, Non-Hazardous, Glazing Abatement Requirements

**EXHIBIT A** 

**NOT USED** 

## Part 23.13 - Subfloor Crawl Space Dirt Removal Requirements

**NOT USED** 

#### Part 23.14 - Subfloor Enclosure Requirements

**NOT USED** 

#### Part 23.15 - Installation of "Rat Slab" in Sublfoor Crawl Space Requirements

NOT USED

#### Part 23.16 - Stucco/Texture Removal and Containment Requirements

**NOT USED** 

#### Part 23.17 - Fireproofing Abatement Requirements

NOT USED

#### SECTION 24. ASBESTOS SPECIFICATIONS/PROCEDURES

#### Part 24.1 - Contacts

Andy Roed Entek Consulting Group, Inc. 4200 Rocklin Road, Rocklin, CA 95677

916-632-6800

#### Part 24.2 - Removal Locations

Refer to architectural drawings for this site identifying the buildings and work included in the project and scope of work outline. The General Contractor and his Sub-contractor are responsible for estimating the amount of asbestos-containing materials to be disturbed or removed as revealed on the mandatory bid walk, and provided in the project specifications and architectural drawings. The drawings will also provide the Contractor with locations where work is to be performed to allow computation of the quantities of materials to be impacted or removed.

The asbestos contractor shall provide a complete copy of this specification to their onsite competent person for reference while conducts work on the project. A copy of these specifications shall remain onsite by the asbestos contractor for the duration of the project.

#### Part 24.3 - Materials to be Abated

Refer to the architectural drawings and project specifications for designations and instructions pertaining to what materials are to be removed or impacted during this project. Directions pertaining to materials to be impacted or removed during this project are **NOT** included in this Exhibit. This exhibit includes work practices and procedures for those materials that are impacted by the planned renovation/demolition.

**EXHIBIT A** 

Areas of roofs, walls, floors, and/or ceilings may require penetrations be made during the project which may involve asbestos containing materials (ACM) depending upon the location of penetrations. Prior to impacting any building materials which are listed as "suspect" for containing asbestos by the US EPA the Contractor should refer to Section 25, Asbestos Results List for information pertaining to specific Asbestos Containing Materials (ACM) or products known to exist on the site. Materials suspected of containing asbestos but which have not been tested are "assumed" to contain asbestos.

A hazardous materials inspection was conducted by Entek Consulting Group, Inc. for the old pump house, three (3) filter tanks and water tank in preparation of this project. The contractor shall refer to the Hazardous Materials Survey report prepared on May 21, 2021, which includes all suspect building materials that were sampled and analyzed for asbestos and included an assessment for lead in paint and ceramic products. The report also includes discussion on Freon, PCB in ballasts, fluorescent light tubes, mercury switches, radioactive tritium containing exit signs, crystalline silica and mold.

Materials commonly excluded from being suspected for containing asbestos include but are not limited to: unwrapped pink and yellow fiberglass insulating materials or products, foam insulation, wood, metal, plastic, or glass. All other types of building materials or coatings on the materials listed above are commonly listed as "suspect" and must be tested prior to impact by a Contractor.

Attic spaces at this site may already be contaminated with asbestos roofing debris from prior roofing replacement projects, but is unknown. If ceiling systems are removed and it is discovered that suspect roofing debris is present, the contractor shall stop work and bring it to the attention of the project manager to assess the potential for asbestos.

#### Part 24.4 - Containment and Abatement Requirements

The general guidelines in these specifications shall be followed by the asbestos abatement contractor for all work on this project. All requirements of Cal/OSHA Section 1529 and US EPA AHERA regulations apply, and shall be followed, as well as, other applicable regulations.

The Contractor shall follow all requirements set forth in Section 23, Specific Procedures and Requirements when disturbing or removing specific asbestos containing materials.

All asbestos related work shall be performed within negative pressure work enclosures for any class of asbestos work. The term "containment" or "enclosure" shall be construed to mean a containment which is constructed to enclose a work area (as defined in Section 2), and meet all applicable requirements set forth in Sections 2 through 22 of this Specification and all governing regulatory agency requirements. Each containment shall be tailored to meet the needs of the "work area" to be enclosed and include all requirements as set forth in the above related sections and government regulations applicable to asbestos related work.

Sufficient negative air units shall be installed which will provide a minimum of 4 air changes per hour and a minimum of -0.030" air pressure differential, while the zippered doors are opened for bag-out of waste. A digital manometer recording shall be made of all days when in use. The digital recording manometer shall have at a minimum the ability of displaying three digits after the zero (0.000). The manometer tapes shall reflect the correct location, times, and dates of all measurements recorded. Once these requirements have been met and the negative pressure has been established, the Contractor shall request a pre-start visual inspection from Owner's asbestos consultant.

A three stage decontamination unit is required and shall be comprised of zippered doors between the chambers. Flapped doors will not be acceptable. The decontamination unit shall be cleaned daily of all debris, bags, tape, towels, etc. and shall remain clean during the day. The clean room of any three stage decontamination unit shall be at least 5' in width, 5' in length, and 7' in height. Multiple showers are required if the number of asbestos workers exceeds ten per Title 8 3366 Washing Facilities. When there are less than five employees, the same shower may be used by both sexes if the shower room can be locked from the inside.

**EXHIBIT A** 

#### Part 24.5 - Contractor Assist Requirements

The asbestos contractor shall provide "contractor assist" services for electrical, plumbing, mechanical, and other trades as necessary and agreed to with the General Contractor, for work to be conducted in spaces such as attics, wall cavities, and mechanical rooms where asbestos contamination is present, or where ACM are to be disturbed in order to perform the work.

Contractor assist work shall require the asbestos contractor to construct a mini-cube enclosure, create access to the contaminated area, and wet wipe or HEPA vacuum all dust and debris from the immediate work area as needed to create a "clean" environment for the trade workers to work. All procedures specified in Section 23 shall be followed.

#### Part 24.6 - Worker Protection

At a minimum half-face respirators with P-100 (HEPA) cartridges, disposable coveralls, and hard sole shoes shall be used during the removal and disposal of all asbestos containing material. Full-face powered air purifying respirators (PAPR) with P-100 cartridges are required for all Class I work. Workers wearing tennis shoes, sandals, or soft sole type shoes will not be allowed to work on roofs or inside containments regardless of the activity being performed. Worker protection for all other work areas shall be in compliance with Cal/OSHA requirements and shall follow the respirator selection as specified in Title 8 section 5144.

#### Part 24.7 - Electrical and Water Hook-Ups

The Owner shall provide access for electrical and water hook-ups. The Contractor shall install a temporary electrical spider box to an existing electrical panel using a licensed qualified electrical contractor. The Contractor is responsible for all hook-ups, electrical cords, water hoses, and hose bibs necessary for attachment.

## Part 24.8 - Visual and Air Clearance Criteria

The Contractor shall perform a pre-final visual of the removal area and adjacent surfaces prior to requesting that Owner's asbestos consultant (CAC) conduct a final visual inspection. The pre-final visual performed by the Contractor shall verify that all materials have been completely removed from the work area, and that the work area meets the requirements specified in Section 17.

Upon completion of the pre-final visual inspection by the Contractor, a final visual of the containment area will be performed by Owner's asbestos consultant. The Contractor shall not be allowed to encapsulate the containment until receiving acceptance by Owner's asbestos consultant confirming the removal area and the containment have met the criteria of Owner's asbestos consultant for completeness of removal of asbestos materials and cleanliness of the containment barriers and surfaces.

Clearance air sampling will be performed following passing the visual inspection, encapsulation of the containment has taken place and a sufficient amount of time has passed to allow the encapsulant to dry. All clearance air samples will be analyzed by transmission electron microscopy (TEM), and performed by a NIST/NVLAP accredited laboratory. The clearance criteria for releasing the Contractor is the AHERA Standard, with the average of all air samples less than 70 asbestos structures per square millimeter. Aggressive air sampling will be used, which includes using a leaf blower in conjunction with fans to dislodge any remaining dust within the containment.

## Part 24.9 - Owner's Responsibility

Not Used

**EXHIBIT A** 

#### Part 24.10 - Disposal Requirements

Disposal of all friable hazardous asbestos containing waste must be tracked utilizing a current copy of a Uniform Hazardous Waste form. These forms are to be properly filled out by the Contractor and signed by an authorized Owner's representative. All non-friable non-hazardous asbestos waste shall be tracked using a Bill of Lading or equivalent and signed by an authorized Owner's representative. No individual or representative other than the Owner's designated representative is permitted to sign Uniform Hazardous Waste forms or bill of Lading or equivalent for the Owner.

It shall be the responsibility of the Contractor to notify Owner's CAC and coordinate having a hazardous waste manifest properly signed by a Owner representative.

#### Part 24.11 - Work Periods

Work periods shall be scheduled with Owner's CAC at least 48 hours prior to the start of any shift. If weekend work is to be conducted, shift times are to be established and approved by Owner's CAC. All shifts are to consist of 8 hours and will begin at the time specified and agreed to by Owner's CAC and the abatement contractor.

#### PREPARED BY:

Andy Roed President Entek Consulting Group, Inc. CAC#16-5695 5-25-2021

**EXHIBIT A** 

# Part 24.12 - Pre-Construction Submittal List

1	Copy of State of California - Contractor's State License		
2	Copy of State of California CSLB Active License		
3	Copy of State of California CSLB Asbestos Certification		
4	Copy of Department of Industrial Relations; Division of Occupational Safety and Health; Certificate of Registration for Asbestos-related Work		
5	Copy of signed statement from company officer listing citations and pending proceedings against the Contractor, or if there have been no citations, a copy of the statement that no actions by regulatory agencies have occurred in the last three years signed by an officer of the company.		
6	General Liability Insurance Certificate		
	a) Occurrence b) Asbestos/Lead Activities or Abatement Certificate c) Owner Named as Additional Insured d) Consultant Named as Additional Insured		
7	Auto Insurance		
8	Workers' Compensation Insurance		
9	Statement of Non-use of Sub-contractors or		
	<ul> <li>a) Name of Each Sub-contractor</li> <li>b) License Number for Each Sub-contractor</li> <li>c) General Liability Insurance Certificate for Each Sub-contractor</li> </ul>		
	1) Minimum Coverage of \$1,000,000.00 2) Owner Named as Additional Insured 3) Consultant Named as Additional Insured		
	d) Auto Insurance Certificate for Each Sub-contractor e) Workers' Compensation Insurance Certificate for Each Sub-contractor		
	Owner Named as Additional Insured     Consultant Named as Additional Insured		
10	Written Notification to CAL/OSHA		
11	Written Notification to local CARB, EPA NESHAP Region IX		
12	Copies of City Permits (e.g. Parking or Waste container) or Statement That no Permits are Required		
13	Statement That no Equipment Will be Rented for use With Asbestos or a Statement From Each Rental Company Acknowledging Their Equipment Will be Exposed to Asbestos		

# **EXHIBIT A**

14	Non-Emergency Telephone Numbers
	a) Local Police Department b) Sheriff Department c) Fire Department d) Emergency Medical Facility and Directions to That Facility From the Site
15	Written Emergency Plans
16	Written Work Plan
17	Written Schedule
18	Worker Documentation (Must Include at Least One Supervisor)
	<ul> <li>a)</li> <li>b)</li> <li>b)</li> <li>c)</li> <li>Training Records for Asbestos - AHERA (Supervisor and Worker)*</li> <li>Medical Examination Written Opinion Final Report for Each Employee*</li> <li>Respiratory Fit Tests for Each Employee*</li> </ul>
19	Equipment list, SDS for all materials to be used on the project, including but not limited to, spray glue, encapsulants, wetting agents, mastic remover, etc.
20	Name of laboratory/person used for PCM analysis and copy of current NVLAP Certificate of Accreditation (if applicable), and most recent AIHA Proficiency Analytical Testing (PAT) Program results.
21	Written Statement That OSHA Monitoring Will be Performed During the Project
22	Manufacturers documentation of 5.0 micron filter capability required for waste water
23	Name of Transporter
24	Hazardous Waste Transporter Registration (if applicable) Is required only if work to be conducted involves the removal and disposal of "hazardous" asbestos waste as determined either by definition or designated within the Asbestos Abatement Specifications/Procedures and associated attached Exhibits.
25	Waste Facility Documentation
	a) Name and Site Address b) EPA Identification Number (if applicable) c) Copy of Current Permit Authorizing Asbestos Waste Receipt and Disposal
26	Signed Copy of Competent Person Form Acknowledging Reading and Understanding the Specifications (Last Page of Forms Sections of Document) This must be signed by the asbestos Contractor/Supervisor who will onsite, not in the contractor's office

Note: Items 9, 12, 13, and 21 may be addressed in a single letter as applicable.

No Contractor's worker will be allowed to conduct asbestos related work, enter a containment, or regulated area prior to verification of AHERA, respirator, and medical

**EXHIBIT A** 

documentation. This verification must either be onsite or faxed to Owner's CAC prior to entry.

# Part 24.13 - Interim Construction Submittals

Upon request by the Owner or Owner's Representative, the Contractor shall provide copies of documentation identified to be pertinent to the project.

## Part 24.14 - Post Construction Submittal List

Contractor shall provide the following post-construction submittals to Owner's Representative within thirty (30) days of the completion of asbestos abatement work.

1	Copies of revised notifications to regulatory agencies.
2	Information on all new workers not covered by the pre-construction submittals and not submitted during the project.
3	A copy of worker exposure monitoring results collected in compliance with DOSH regulations (Title 8 CCR, Section 1529) including daily/representative/full-shift/breathing-zone air samples, and 30-minute excursion samples.
4	A copy of the worker/visitor log showing the following for all persons entering the work area: date, name, social security number, entering, and leaving times, company or agency represented, and reason for entry. The Contractor's time records will not be accepted in lieu of a worker/visitor log.
5	Copies of all accident reports submitted during the course of work. If no accidents occur during the project this should be stated in writing by the Contractor.
6	Receipts from the landfill operator acknowledging the Contractor's delivery of wastes, including dates, container types and quantities, tare weights or material delivered, and all appropriate signatures.
7	A complete record of the air filtration devices used certifying DOP testing (if performed) and a circular chart recording, indicating continuous operation and documenting differential air pressure.
8	Copies of DOP Testing Performed on HEPA Equipment not Previously Submitted
9	Manometer graphs identifying project name, date, and location.
10	A copy of the asbestos waste record showing dates, times, manifest numbers, quantities of wastes, types of containers removed from the work area, the hauler, and the signature of the recorder.
11	A Land Disposal Restrictions Notification and Certification
12	Completed Uniform Hazardous Waste forms
13	Other Documents as Requested

## **SECTION 25. ASBESTOS RESULTS LIST**

## **EXHIBIT A**

Any material not specified on the following list which the Contractor encounters at this site must be considered as "suspect" and "assumed" to contain asbestos per US EPA. The only items excluded from this statement are; bare wood, glass, and metal.

Old Pump House		
MATERIAL	SAMPLE RESULTS	US EPA CLASS.
Black/Gray Fibrous Gaskets on Multiple Pipe Systems	40-50% Chrysolite	Cat 1

- Note 1.: **Category I Non-friable ACM** is asbestos-containing packing, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent asbestos by area.
- Note 2.: **Category II Non-friable ACM** is any material, excluding Category I non-friable ACM, containing more than one percent asbestos, which is non-friable such as transite and other concrete based products.
- Note 3.: Regulated Asbestos-Containing Material (RACM) is any friable material, any Category I non-friable ACM which has become friable, any Category I non-friable ACM which will be or has been subjected to sanding, grinding, cutting, or abrading, any Class II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to a powder by the forces expected to act on the material in the course of demolition or renovation operations.
- Note 4.: **Asbestos Containing Construction Materials (ACCM)** is a manufactured construction material containing greater than 0.1% asbestos by weight by the PLM method.
- Note 5.: The terms "assume" and "presume" mean the named material is considered positive for containing asbestos and must be treated accordingly, until properly sampled in compliance with 40 CFR, Part 763 Asbestos-Containing Materials in Schools; Final Rule and Notice.

**EXHIBIT A** 

**SECTION 26. SITE MAP** 

See Hazardous Materials Report

**EXHIBIT A** 

**SECTION 27. FORMS** 

#### DOCUMENTATION OF PROPER AIR FLOW RATE FOR PAPR'S

B FOREMAN:		D.	ATE:		
WORKER'S NAME AND PAPR'S MODEL &	REQUIREME	MEETS MANUFACTURERS REQUIREMENTS FOR AIR FLOW		MEETS MANUFACTURERS REQUIREMENTS FOR AIR FLOW	
SERIAL NUMBER	MORNING SHIFT MEASURED FLOW PASS / FAIL		AFTERNOON SHIFT MEASURED FLOW PASS / FAIL		
air flow rate of every PAPR must lainment.	be checked by the	Job Foreman eac	th shift, prior to a	ny worker ei	

# **EXHIBIT A**

ASBESTOS ABATEMENT PRE-START VISUAL INSPECTION REPORT			
CLIENT: PROJECT#:			
SITE:			
CONTRACTOR:			
REMOVAL LOCATION (Building and Containment):			
WORK TO BE CONDUCTED:			
PRE-START VISUAL INSPECTION RESULT			
DATE:			
FINDINGS:			
COMMENTS:			
Signature of Owner's Representative			

# **EXHIBIT A**

	FINAL VISUAL CLEARANCE REPORT	
	PROJECT #:	
SITE:		
CONTRACTOR:	<u>:</u>	
	CATION (Building and Containment):	
WORK CONDUC	CTED:	
	FINAL VISUAL INSPECTION RESULT  E: FINDINGS:	
COMMENTS:		
C	Contractor Supervisor Requesting Inspection (Date and Time)	_
	Signature of Owner's Representative	

**EXHIBIT A** 

## **Competent Person Acknowledgment**

The Cal/OSHA standard for asbestos related construction work, found in 8 CCR, 1529, outlines specific duties and qualifications of the "Competent Person." Find below a overview of these qualifications and responsibilities. The competent person must be authorized by their employer to take prompt corrective measures to eliminate hazards on the job and protect their workers safety. The competent person must be the Supervisor onsite who is capable of:

- Identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees.
- Identifying existing asbestos hazards in the work place and selecting the appropriate control strategy for asbestos exposure.

The duties of the competent persons include, but are not limited to:

- Frequent and regular inspections of the job site, materials, and equipment.
- Supervise or perform the set-up of the regulated area and/or containment.
- Ensure the integrity of the regulated area and/or containment.
- Set up procedures to control entry to and exit from the regulated area and/or containment.
- Supervise all employee exposure monitoring and assure it is conducted according to regulatory requirements.
- Ensure that employees working within the regulated area(s) wear respirators and protective clothing as required by regulation.
- Ensure that employees working set up, use, and remove engineering controls, use work practices and personal protective equipment in compliance with the regulations.
- Ensure that employees use hygiene facilities and observe the decontamination procedures specified in the regulation.
- Ensure through continuing onsite surveillance that engineering controls are functioning properly and employees are using proper work practices.
- Ensure that notification requirements of the regulation are met.

Additionally, the EPA requires the competent person to be trained in the Federal NESHAP regulations, the means to comply with them, and be on site during all removal operations.

I have the authority to	take prompt corrective measures to eliminate	hazards
on the job and protect workers safety. Furthermore, I and under the applicable regulations, and will exercis		ed above
Date:	Employer:	
Signature of Competent Person Who Will Be Onsite		
Printed Name of Competent Person Who Will Be On	- iA-	
Printed Name of Competent Person who will be On	sile	

C:\Users\andy\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Specifications\Asbestos Specs Generic5-25-20210.wpd

# Exhibit B

Lead in Construction Specifications

# **EXHIBIT B**

# REQUIREMENTS FOR DISTURBANCE OF LEAD IN CONSTRUCTION TABLE OF CONTENTS

PART 1.0	GENERAL REQUIREMENTS	1	
1.1	Introduction		
1.2	Definitions	2	
1.3	Regulatory Compliance	7	
	1.3.1 Environmental Protection Agency (EPA)	7	
	1.3.2 Housing and Urban Development (HUD)	7	
	1.3.3 California Department of Public Health (CDPH)	7	
	1.3.4 California Occupational Safety and Health Administration (Cal/OSHA)	8	
1.4	Lead-Work Pre-Job Notification Requirements	9	
1.5	Lead Training Requirements	<u>10</u>	
	1.5.1 Minimal Training Required For All Workers Exposed To Lead	<u>10</u>	
	1.5.2 Required Training For Those Exposed Over the Action Level Or Who Conduct		
	Trigger Tasks	<u>10</u>	
	1.5.3 Required Training For Those Who Are Reasonably Expected To Be Exposed		
	Over The PEL And/Or Conduct Trigger Tasks On Over 100 Square Feet of		
	Material	<u>11</u>	
	1.5.4 Required Training for Projects Involving Disturbance of Lead-Based Paint in Ch	ıild	
	Occupied pre-1978 Homes, Child Care Facilities and Pre-schools	<u>11</u>	
1.6	Required Submittal Documents	<u>12</u>	
	1.6.1 Submittals Prior To The Start Of Work	<u>12</u>	
	1.6.2 Submittals Provided During The Work Or Following Completion Of The Work If		
	Applicable	<u>15</u>	
1.7	Third-party Oversight	<u>15</u>	
1.8	Air Sampling By The Owner and/or Project Monitor	<u>16</u>	
1.9	Notification of Employers of Employees in Adjacent Areas	<u>16</u>	
1.10	Suspension Of Work	<u>17</u>	
1.11	Pre-Start Meeting	<u>17</u>	
1.12	Testing For Lead In Paints, Coatings, Ceramic Tile, And Other Materials	<u>17</u>	
PART 2.0	MATERIALS AND EQUIPMENT	<u>17</u>	
2.1	Fire Resistant Plastic Sheeting (Poly)	<u>17</u>	
2.2	Challenge Testing Of HEPA Filtration Systems	<u>17</u>	
2.3	Vacuum-Assisted Tools	<u>18</u>	
2.4	Power Washing	<u>18</u>	
2.5	Personal Protective Equipment	<u>18</u>	
2.6	Rental Equipment	<u>19</u>	
PART 3.0	EXECUTION	19	

3.1

# **Old Auburn Lake Trails Water Treatment Plant**

# **EXHIBIT B**

# REQUIREMENTS FOR DISTURBANCE OF LEAD IN CONSTRUCTION TABLE OF CONTENTS

	3.2	Compliance With Requirements For The PEL and Action Level	19
		3.2.1 Personal Air Sampling	20
	3.3	Work Involving Whole Component Removal Or Demolition Of Entire Structure	<u>20</u>
	3.4	Prohibited Work Practices	<u>20</u>
	3.5	Competent Person	21
	3.6	Work Site Preparation & Containment Requirements	<u>2</u> 1
		3.6.1 Exterior Work Site Preparation & Containment	<u>22</u>
		3.6.2 Interior Site Preparation & Containment	23
		3.6.3 Additional Containment Requirements For Demolition Of Ceramic Tile And/Or	
		Mechanical Disturbance Or Blasting Of Lead-Containing Materials Without A	
		HEPA-Filtered-Vacuum Recovery System	<u>2</u> 4
		3.6.4 Decontamination Procedures	<u>27</u>
		3.6.5 Avoiding Contamination Of Adjacent Areas By Proper Decontamination	<u>27</u>
		3.6.6 Approval Prior To Start Of Work	28
	3.7	Wet Work Practices	28
	3.8	Prompt Cleanup Of Debris	28
	3.9	Final Cleanup Of The Work Area	_
		3.9.1 Exterior Work Areas	28
		3.9.2 Cleanup Of Interior Work Areas	29
	3.10	Final Inspection Of The Work Area	29
	3.11	Power Washing of Exterior Building Surfaces	30
		3.11.1 Waste Water Discharge Permits	
		3.11.2 Required Work Practices For Power Washing	_
	3.12	Lead Waste Management	<u>32</u>
		3.12.1 Lead Waste Testing	
		3.12.2 Uniform Hazardous Waste Manifests	_
		3.12.3 Waste Containers	
	3.13	Alternative Work Plans	34
PART 4	1.0	DOCUMENTATION SUBMITTAL REQUIREMENTS	<u>3</u> 4
PART 5	5.0	RESULTS OF LEAD TESTING.	<u>38</u>

**EXHIBIT B** 

#### REQUIREMENTS FOR THE DISTURBANCE OF LEAD IN CONSTRUCTION

#### PART 1.0 GENERAL REQUIREMENTS

#### 1.1 Introduction

These specifications are designed to minimize and control potential lead hazards during the disturbance of materials that contain lead. These procedures and precautions apply to the disturbance of lead that may result from the preparation of surfaces prior to painting, from the drilling into, cutting into, or removal of building components containing or covered with lead, or the demolition of buildings and/or structures that contain lead either in or on their surfaces.

The primary focus of these specifications is to address the work practices and procedures that the Contractor and/or other subcontractors must follow when conducting activities that may disturb lead in paint or other coatings or lead in ceramic tile glaze.

An asbestos and lead in paint inspection was conducted by Entek Consulting Group, Inc. for the old pump house, three (3) filter tanks, and water storage tank and a report was prepared on May 21, 2021. The report includes all suspect building materials that were sampled and analyzed for asbestos and included an assessment for lead in paint. Limited testing was conducted at the site to determine concentrations of lead on building surfaces. Attached are the results of the testing of paint chips of the project area in Part 5.0 Results of Lead Testing.

Entek anticipates enforcing Cal/OSHA and California Department of Public Health (CDPH) regulations regarding the training of workers disturbing lead and the containment and work practices utilized during that disturbance. The training requirements for workers and supervisors on this project are summarized in Part 1.5. Lead Training Requirements. The Contractor and other subcontractors disturbing lead must be familiar with the CDPH requirements regarding containment of lead debris and the Cal/OSHA lead in construction standard. Those requirements are summarized below in Part 1.3 Regulatory Compliance.

In summary, the Contractor and subcontractors shall utilize engineering controls to limit the release of lead dust or debris. These engineering controls may include, but are not limited to, using wet methods, using tools with vacuum recovery systems with High Efficiency Air Particulate (HEPA) filtration, using vacuums with HEPA filtration, using negative air pressure differential systems, and by the prompt clean up of any lead-containing debris that the work might produce. Dry scraping, sanding, grinding, or abrading lead-containing materials is not permitted. All work that disturbs lead will require a containment. The containment may be as simple as plastic sheeting on the floor or ground when drilling minor penetrations or scraping paint on exterior surfaces. Or, for the demolition of ceramic tile and any painted wall systems, it is likely to require the Contractor construct a full containment for the area and utilize a negative air pressure differential system. The requirements for work practices and containment are described in Part 3.5 Work Site Preparation & Containment Requirements.

The requirements of this specification apply to all employers who have employees who may reasonably be exposed to lead on this project. This includes the Contractor, who will normally be an environmental contractor such as an asbestos abatement contractor, or a painting contractor utilizing CDPH lead certified workers and supervisors. In addition, this specification applies to all subcontractors conducting work on this project who have employees who may disturb lead by drilling, cutting, scraping, or demolishing materials containing lead.

No Contractor shall begin work which will disturb known or suspect lead-containing surfaces or materials in a manner that may expose a worker to lead containing dust, create a potential for building contamination, or create possible lead containing waste, until all required pre-construction documentation has been reviewed and written approval has been received from the Owner and/or Project Monitor.

**EXHIBIT B** 

Activities expected to disturb lead-containing materials include, but are not limited to, painting preparation work such as scraping or sanding, penetration of painted surfaces through drilling or cutting, demolition of painted surfaces, removal of painted building components, and removal, drilling, or cutting of ceramic wall tiles. If the Contractor or subcontractors are observed conducting such activities without having written approval from the Owner and/or Project Monitor, they will be instructed to stop work. Work will not be allowed to resume until the Owner and/or Project Monitor provides approval for the work to begin.

This project involving potential disturbance of lead in the various painted materials is not considered a lead abatement project. The renovation project at this site would be considered "lead related construction work"; therefore, it is Entek's opinion the contractor is not required to submit a CDPH Form 8551 for this project.

#### 1.2 Definitions

**Action Level** - Airborne exposure to lead at or above 30 μg/m³ over an eight-hour-time-weighted average as discussed in 8 CCR 1532.1. Typically, when employees are exposed over the Action Level, the employer must provide blood testing, training in compliance with 8 CCR 1532, and air sampling.

**Air Filtration Unit** - A portable exhaust system equipped with HEPA filtration and capable of maintaining a constant low velocity air flow into contaminated areas from adjacent uncontaminated areas. At a minimum, the air intake for the air filtration device must have a pre-filter on it which can be changed within the containment area. In most cases, air filtration devices will need to pass challenge testing by DOP before they are allowed to be used on site.

**Airlock** - A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three feet such that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow-through contamination.

**Air Monitoring** - The process of measuring the content of a known volume of air collected during a specific period of time.

**Blood Testing** - Blood testing for lead and zinc protoporphyrin in compliance with the requirements for medical surveillance as listed in 8 CCR 1532.1.

**Cal/OSHA** - California Division of Occupational Safety and Health. A California agency that implements and enforces numerous health and safety standards regarding lead.

**Certified Lead Supervisor and Worker** - Supervisors and workers currently certified by the California Department of Public Health (CDPH).

**Challenge Testing** - Process used to verify that HEPA-filtered equipment does not leak or exhaust asbestos, lead, or other particulate. This testing must be done by a testing company, not affiliated with the Contractor, and approved by the Owner and Project Monitor. Challenge testing normally uses an oil mist as the challenge agent and measures how much, if any, of the agent is exhausted from the machine being tested.

**Clean Room** - An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of workers' street clothes and clean protective equipment. The term also includes the uncontaminated area or room of a Waste Transfer Airlock.

**EXHIBIT B** 

**Containment** - Isolation of the work area from the rest of the building to prevent escape of lead in dust, debris or in the air.

Contractor - The Contractor is the person or entity identified as such in the Contract Documents as being responsible for the environmental work as done in response to and in accordance with this document. References to the "Contractor" include the Contractor's authorized representatives. The Contractor may be a sub-contractor to the Primary Contractor. The Contractor normally will be responsible for paint preparation work that disturbs lead, paint scraping done prior to the demolition of structures, or the demolition of ceramic tile. The Contractor will typically need to use CDPH certified lead workers and supervisors to conduct their work that disturbs lead. Those employers disturbing smaller amounts of lead such as through drilling, cutting, or small component removal are typically known as a subcontractor for the purposes of this specification.

**Critical Barrier** - Critical Barriers are used to restrict water and airflow. Critical Barriers are the barriers placed over openings in the walls and ceilings of a work area in order to ensure that lead dust cannot escape the work area via these openings. Unless otherwise specified in these Specifications, critical barriers shall be constructed of at least one layer of six-mil thick poly.

**Curtained Doorway** - A device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms. These are typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the 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. Other effective designs are permissible as long as they are approved by the Project Monitor.

**Decontamination Enclosure System** - A series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers, containers, and equipment. This unit shall be constructed with at least two layers of six mil poly for the floors, walls, and ceiling. The floor of the dirty room shall consist of two layers of six mil poly plus a third layer of poly, four mil or thicker, to be used as a removable drop layer. Drop layer is to be removed as needed, but at least daily.

**CDPH** - California Department of Public Health. State agency that regulates the disturbance of lead in public buildings and on all structures in California. This agency and relevant regulations are primarily concerned with preventing childhood lead poisoning.

**DOP** - Dioctylphthalate particles, a testing agent for the efficiency of HEPA filters.

**DOT** - Department of Transportation, a Federal agency which has regulations and labeling requirements for the transportation of hazardous waste.

**DTSC** - Department of Toxic Substances Control, a department within the California Environmental Protection Agency charged with implementing and enforcing hazardous waste regulations.

Dust or Debris - Any visible dust or debris remaining in work area will be considered lead-containing residue.

**Entek** - Entek consulting Group, Inc. This is the Lead Project Monitoring/Management Firm for this project, and is the employer of the Project Monitor used on this project.

**EPA** - U.S. Environmental Protection Agency, a Federal agency that developed and enforces various asbestos and lead regulations.

**HVAC** - Heating, ventilation and air conditioning system.

**EXHIBIT B** 

**HEPA Filter** - A high efficiency particulate air filter capable of removing particles 0.3 microns in diameter from an air stream with 99.97% efficiency.

**HEPA-Filtered-Vacuum Recovery System** - This is a mechanical tool that has a shroud or covering over the area of a surface disturbed by a mechanical system in order to eliminate or significantly reduce the amount of dust released to the ambient air by the mechanical process. The shroud must be attached to a working vacuum with HEPA filtration.

**HEPA Vacuum** - A vacuum system equipped with HEPA filtration. Typically these units will need to be challenge tested before being allowed to be used inside of buildings on this project.

**Lead-Based Paint** - Materials meeting the definition of lead-based paint as defined by the California Department of Public Health and the United States Environmental Projection Agency. Currently defined as containing lead in concentrations equal to or greater than 1.0 mg/cm², 5000 ppm, or 0.5% by weight.

**Lead-Containing Material** - Materials that contain measurable, quantifiable amounts of lead. The disturbance of these materials is regulated by Cal/OSHA.

**Lead-Containing Hazardous Waste** - Materials required by the State of California to be packaged, labeled, transported, and disposed of as a lead hazardous waste.

**Lead-Containing Waste Material** - Lead-containing waster material that does not need to be treated as a lead-containing hazardous waste.

**Lead Project Management or Monitoring Firm** – The firm hired by Owner to provide third-party oversight of the disturbance of lead performed on the Owner's property by the Contractor or subcontractors.

**Mil** - A unit of length or thickness equal to one thousandth of and inch. Generally used when referring to the thickness of plastic (poly) sheeting used to contain the regulated area.

**Movable Object** - An unattached piece of equipment or furniture in the work area which can be removed from the work area.

Negative Air Machines - See Air Filtration Units.

**NIOSH** - The National Institute for Occupational Safety and Health. All respirators used on this project must be approved by NIOSH.

Outside Air - The air outside buildings and structures.

**Owner** - Property owner where the disturbance of lead will take place. For example, this may be a private building owner or manager, a government body such as a city or county agency, a military base, or a Owner district. This includes the Owner's authorized representatives and employees.

**PEL** - Permissible Exposure Limit (as used in 8 CCR 1532.1)

**Permissible Exposure Limit (PEL)** - Airborne exposure to lead above 50 µg/m³ over an eight-hour, time-weighted average as discussed in 8 CCR 1532.1. Typically, when employees are exposed over the PEL, the employer must provide blood testing, respirators, protective clothing, shower decontamination, CDPH certification, regulated areas, and air sampling.

**EXHIBIT B** 

**Poly** - Flame-retardant polyethylene sheeting used to seal critical barriers, create cleaning barriers and drop layers, and to protect surfaces from damage or contamination.

**Primary Contractor** - The Contractor may not work directly for the Owner but instead subcontract with another contractor such as a general contractor or demolition contractor. The Primary Contractor is the entity responsible for hiring the Contractor if it is not the Owner.

**Pre-start Meeting** - Meeting held before the beginning of the project in which final details of the project are discussed and Contractor provides project monitor with pre-job submittal packet.

**Project Monitor** - An individual qualified by virtue of experience and education, designated as the Owner's representative and responsible for overseeing the work that disturbs lead on this project.

**Project Monitoring** - Activities undertaken by the Project Monitoring Firm for the purpose of monitoring the work done by the Contractor on this project in regards to the disturbance of lead.

**Regulated Area** - Term used by Cal/OSHA in 8 CCR 1532.1 to indicate a work area where exposure to airborne lead might exceed the Permissible Exposure Limit or where "Trigger Activities" may be performed. The area must be demarcated with signs and barriers designed to keep unauthorized people out of the area. Additionally "Regulated Area" means any measure used to restrict access to an area where personnel impacting lead-containing materials are required to wear respiratory protection and/or protective clothing by the project specifications regardless of airborne concentration of lead.

**Renovation, Repair and Painting Program (RRPP)** - US EPA 40 CFR Part 745 Lead-Based Paint (LBP) Poisoning Prevention in Certain Residential Structures. Regulations apply where there will be disturbance to lead-based paint in homes, child care facilities and pre-schools in child occupied facilities.

**Shower Room** - A room between the clean room and the equipment room in the decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination. Unless specified elsewhere in these specifications, or determined otherwise by the program monitor, the shower shall be on a metal pan to contain water splashed, leaked or spilled out of the shower unit.

Specifications - These written requirements describing procedures the Contractor must follow for this project.

**Subcontractor** - Contractors working for the Primary (General) Contractor but who are not primarily responsible for environmental work. For example, they may be responsible for, demolition, electrical, plumbing, general construction, minor painting, or other special trades.

**Submittals** - Pre-construction, interim construction, and post construction documents submitted by the contractor to the Owner as indicated in General Requirements and Bidding Requirements.

**Trigger Task** - Term commonly used to describe the tasks described by Cal/OSHA in 8 CCR 1532.1 (d)(2). These are tasks or activities that Cal/OSHA believes are expected to result in airborne exposures over the PEL until air monitoring proves otherwise. In brief, trigger tasks include manual demolition, scraping, sanding, using HEPA-attached equipment, using heat guns to remove lead paint, welding, torch cutting, and using other more aggressive techniques. (This is a summary list and does not list all tasks that are considered trigger tasks.) In addition, trigger tasks include any activity reasonably expected to result in airborne exposures to lead above the Permissible Exposure Limit.

**EXHIBIT B** 

View Ports - Clear windows into the regulated work area that allow authorized persons to view work activities inside the regulated area without entering the area. The view ports must be of sufficient number, constructed of materials of sufficient clarity, and be located in areas determined and/or approved of by the Project Monitor. All regulated work areas including mini-enclosures will require view ports unless specifically determined not to be feasible by the Project Monitor.

**Visible Emissions** - Any emissions containing particulate material that are visually detectable without the aid of instruments. For example, dust, debris, and water leaks are considered visible emissions.

**Waste Load-out/Transfer System** - A decontamination system utilized for transferring containerized waste from inside to outside of the work area. A series of connected rooms used for the load-out of lead-containing materials that have been properly containerized.

**Waste Bags** - Waste bags for lead-containing waste must be a minimum of six-mil thickness. In general, double bagging will be required.

Waste Containers - Waste containers are the containers into which lead-containing waste is placed. They may be bags of at least six-mil thickness, metal or fiber barrels, or other containers such as cardboard boxes approved by the Project Monitor. The Contractor is responsible for assuring that the type of container chosen is acceptable to the waste landfill to which the waste will be transported. Waste containers must be labeled according to the requirements of the California Department of Occupational Safety and Health (Cal/OSHA), Department of Toxic Substances Control (DTSC), Department of Transportation (DOT), and the Environmental Protection Agency (EPA).

**Waste Transfer Airlock** - A decontamination system utilized for transferring containerized waste from inside to outside of the work area.

**Wet Cleaning** - The process of eliminating lead contamination from building surfaces and objects by using cloths, mops, or other utensils which have been dampened with water and afterwards thoroughly decontaminated or disposed of as lead-contaminated waste.

**Work Area** - Designated rooms, spaces, or areas of the project in which the disturbance of lead is to be undertaken or which may become contaminated as a result of such action. A contained work area is a work area which has been sealed off from adjacent areas.

**Work Plan** - Contractor's written plan describing how the Contractor will perform the work in compliance with these specifications. The work plan shall include information on preparation of the work area, personal protective equipment, employee experience, training and assigned responsibilities during the project. It will also list decontamination procedures for personnel, work area and equipment, removal methods and procedures, required air monitoring program, procedures for handling and disposing of waste materials and procedures for final decontamination and cleanup.

**Worker** - A person who successfully meets the training requirements for the disturbance of lead as described in these specifications.

**8 CCR 1532.1** - Chapter 8 of the Labor Code, California Code of Regulations, Section 1532.1: Lead (Known as the Lead Standard for the Construction Industry)

**8 CCR 1544** - Chapter 8 of the Labor Code, California Code of Regulations, Section 1544: Respiratory Protection Standard.

**EXHIBIT B** 

# 1.3 Regulatory Compliance

Various agencies regulate work that disturbs lead-containing materials. The following is a summary of the most important agencies and regulations that apply during the disturbance of lead during construction work. This list is not to be considered comprehensive. The Contractor is responsible for complying with all applicable federal, state, and local regulations that may apply to the specific work they are conducting.

#### 1.3.1 Environmental Protection Agency (EPA)

Lead: Identification of Dangerous Levels of Lead; Final Rule (40 CFR Part 745 Subpart D)

The EPA defines lead-based paint as paint and coatings that contain lead in concentrations equal to or more than one milligram per square centimeter (1 mg/cm²), 5000 parts per million (5000 ppm), or one half of one percent (0.5%) by weight. EPA regulations apply to all housing and child-occupied facilities built before 1978. When the term "lead-based paint" is used in the context of these specifications, the term is used only to refer to paint that contains lead in concentrations equal to or greater than that defined by the EPA as lead-based paint. This is to differentiate lead-based paint from the term "lead-containing paint" as used for compliance with Cal/OSHA.

#### 1.3.2 Housing and Urban Development (HUD)

Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance (24 CFR Part 35)

The HUD Rule for Federal Housing (shortened name) applies to all residential properties built before 1978 that receive Federal financial assistance. This regulation uses the same definition of lead-based paint as the EPA. The work practices and procedures described in these specifications are designed to comply with occupant and worker protection regulations as mandated by OSHA and Cal/OSHA regulations for work that disturbs lead and **are not** designed to comply with all the requirements of 24 CFR Part 35. Should this project be covered by this regulation, the Owner may require additional practices and procedures in the scope of work for activities conducted in properties covered by the HUD Rule for Federal Housing.

#### 1.3.3 California Department of Public Health (CDPH)

Accreditation, Certification, and Work Practices For Lead-Based Paint And Lead Hazards (Title 17, CCR, Division 1, Chapter 8, Sections 35000-361000)

This regulation primarily applies to residential and public buildings located in California. The definition of a public building is one that is "generally accessible to the public." Some aspects of this regulation, particularly those that pertain to the definition of "presumed lead-based paint" and the containment requirements for disturbing lead-based paint **apply to all structures** in California.

This CDPH regulation definition of lead-based paint is identical to the EPA/HUD definition of 1 mg/cm², 5000 ppm, and 0.5% by weight. In addition, this regulation requires all paint on structures in California to be treated as "presumed lead-based paint" unless the paint is on a home built after 1978 or a Owner built after 1992. Therefore, the paint in all owner's buildings covered by this project that were constructed before 1993 must be treated as lead-based paint unless tested and proved otherwise as described elsewhere in these specifications.

The CDPH regulation differentiates between work that disturbs lead as part of renovation or maintenance work and work that disturbs lead as part of "abatement" work as defined in Title 17. The work practices and procedures described in these specifications are designed to comply with occupant and worker protection regulations as mandated by Cal/OSHA regulations for work that disturbs lead as part of renovation, demolition, and maintenance work. These specifications are not

**EXHIBIT B** 

designed to comply with the requirements for abatement as defined in the CDPH Title 17 regulation. Unless stated specifically otherwise in these specifications, the Owner does not anticipate any work being done as part of this project that meets the definition of abatement as used in Title 17. Therefore, unless specifically directed otherwise by this specification or by the direction of the Owner and/or Project Monitor, the Contractor and/or subcontractors shall NOT submit Form 8551, "ABATEMENT OF LEAD HAZARDS," to the CDPH since that form provides inappropriate notice for the work done on this project. The Contractor may be required to complete and submit this form should the scope of the work or the work practices change.

This regulation has significant penalties associated with the creation of "lead hazards." Lead hazards are defined as: "...disturbing lead based paint or presumed lead-based paint without containment, or any other nuisance which may result in persistent and quantifiable lead exposure." The requirements discussed in Part 3.5 Work Site Preparation & Containment Requirements are designed to meet CDPH requirements. Should a Contractor and/or subcontractor conduct work without a containment or release lead-contaminated dust or debris outside of the containment, they are in violation of this regulation. The Project Monitor will stop all work, consider the Contractor and/or subcontractor to be in violation of these specifications and the contract documents. Work will not be allowed to begin again until the Contractor and/or subcontractor takes adequate steps to correct their violation and convinces the Owner and/or Project Monitor that the violation will not occur again.

# 1.3.4 California Occupational Safety and Health Administration (Cal/OSHA)

Lead Standard for the Construction Industry (8 CCR 1532.1)

This standard regulates work done by employees who may disturb lead as part of demolition, construction, renovation or maintenance work. Painting activities that may disturb lead are covered by this standard. General construction work that disturbs lead is covered, as is the demolition of building components or entire structures.

Cal/OSHA regulates lead whenever lead is determined to exist in a material. When the term "lead-containing paint" is used in the context of these specifications, the term is used to refer to paint that contains lead in an amount equal to or above the reporting limit for the laboratory analysis or that detected by an X-ray Fluorescent Analyzer (XRF).

In addition, Cal/OSHA uses the EPA/HUD/CDPH definition of lead-based paint (1.0 mg/cm<sup>2</sup>, 5000 ppm, or 0.5% by weight) for their pre-job notification requirements discussed in Part 1.4 Lead-Work Pre-Job Notification Requirements.

The following information summarizes the significant requirements in the Cal/OSHA standard. This summary is not meant to substitute for the Contractor reading and being familiar with the Cal/OSHA requirements.

a. The Cal/OSHA lead standard is very complex. Cal/OSHA regulates lead in materials when a laboratory can quantify the amount of lead. This means materials are regulated even when they contain very small amounts of lead. The standard sets an "Action Level" for airborne lead at or above 30 µg/m³ over an eight-hour-time-weighted average. Typically, if employees are expected to be exposed to this airborne lead level, the employer must conduct air sampling, provide blood lead testing, and provide specialized training. The standard sets a "Permissible Exposure Limit" or "PEL" for airborne lead at or above 50 µg/m³ over an eight-hour-time-weighted average. The employer must continue the requirements needed at the Action Level but must now provide respirators, protective clothing, a shower decontamination system, and a written compliance program.

#### **EXHIBIT B**

- b. In 8 CCR 1532.1 (p), employers are required to notify Cal/OSHA before employees conduct a trigger task that will disturb more than 100 square or linear feet of material that contains lead in concentrations equal to or above 1.0 mg/cm², 5000 ppm, or 0.5% by weight. The notification also applies to welding or torch cutting that takes more than one hour in a shift. Trigger tasks are described in 8 CCR 1532.1 (d)(2). In brief, they include manual demolition, scraping, sanding, using HEPA-attached equipment, using heat guns to remove lead paint, welding, torch cutting, and using other more aggressive techniques. This is a summary list and does not list all task that are considered trigger tasks.
- c. The California standard defines lead-containing paint at the Consumer Product Safety Commission's (CPSC) level of 0.06% by weight or 90 ppm for non-trigger tasks. The lead standard would not apply if the paint contains less than 90 ppm and the employees do not conduct trigger tasks. However if the employees do conduct trigger tasks, the entire standard applies.
- d. Cal/OSHA requires CDPH lead training and certification for any supervisors or workers who are "shown to be exposed" to airborne lead levels above the PEL in residential or public buildings. The Owner and Project Monitor believe that there is a reasonable expectation that those workers scraping paint prior to repainting, and those demolishing ceramic tile are likely to be exposed over the PEL. Therefore, on this project, that work must be done by CDPH certified workers and supervisors.
- e. Cal/OSHA requires the supervisor to establish a "regulated area" whenever employees may be exposed to airborne lead over the PEL or if they will perform trigger tasks as defined in 8 CCR 1532.1 (d)(2). The establishment of regulated areas is discussed in Part 3.5 Work Site Preparation & Containment Requirements.

# 1.4 Lead-Work Pre-Job Notification Requirements

The Contractor is responsible for complying with the Lead-Work Pre-Job Notification as specified in 8 CCR 1532.1 (p). If notification is required for this project, the Contractor must provide the notification to Cal/OSHA and provide a copy of this notification to the Owner and/or Project Monitor as part of the Contractor's pre-work submittal package.

Unless the material is tested as described elsewhere in these specifications, the Contractor and subcontractors must anticipate notifying Cal/OSHA if they plan to manually demolish or perform another type of trigger task (such as paint scraping or sanding) on any painted surface or ceramic wall surface on this project if the amount of material to be disturbed equals or is greater than 100 square feet.

Notification to Cal/OSHA is not required if the paint on the painted surface is primarily intact (not loose and peeling) and the painted material is removed in a manner that does not disturb the paint. For example, door or window frames may be removed without providing the notification if the paint or coating on the frames is intact and the building components can be removed without significantly disturbing the coating.

Unless stated otherwise in these specifications, or directed otherwise by the Project Monitor, the Contractor and/or subcontractors shall NOT submit Form 8551, "ABATEMENT OF LEAD HAZARDS," to the CDPH since that form provides inappropriate notice for the work done on this project since no lead "abatement" as defined by CDPH will be conducted as part of this project.

**EXHIBIT B** 

# 1.5 Lead Training Requirements

At a minimum, the Contractor and subcontractors must meet the lead training requirements as specified by 8 CCR 1532.1. This will include training all employees who drill, cut, scrape, abrade, remove, clean up debris, or in any other way are exposed to lead from painted surfaces or ceramic tile found on the buildings or structures covered by this project. The different types of training are summarized below for the typical types of work that are expected to disturb lead on this project.

#### 1.5.1 Minimal Training Required For All Workers Exposed To Lead

This training will be sufficient for those who disturb lead in only minor ways. Those disturbing lead in more significant amounts will need to meet the training requirements stated in Part 1.5.2 or 1.5.3.

For example, this training applies to those workers who, for a total of less than one hour in an eighthour shift, will drill or cut through painted surfaces, remove painted components (when the paint is intact), or remove ceramic tile significantly intact. This time frame is guidance and not an official Cal/OSHA time frame. This time frame is suggested because it is thought that these tasks, done for such a short time frame, do not pose a realistic chance that workers will be exposed over the Action Level based on an eight-hour time-weighted average. In some cases, however, depending on the surface and type of work being conducted, the Project Monitor may determine that more training is needed even if the worker disturbs lead for less than an hour. In general, workers with this training conducting this type of minimal disturbance of lead will not need to wear respirators while conducting this work.

The training must comply with the training requirements as listed 8 CCR 1532.1(I)(1)(A). In summary, this training must comply with Hazard Communication Training for lead as discussed in 8 CCR 5194. This training is also known as "hazard communication," or "lead awareness" training and is usually done in less than hour depending on the work the employee will conduct.

The Contractor and subcontractors will need to provide the Owner and/or Project Monitor written proof that this training has been provided before workers will be allowed to conduct work that disturbs lead even in minimal amounts. Entek can provide this training for the Contractor and/or subcontractors or they can obtain this training from any source the employer believes is qualified.

Proof of this training is not required if the employees are trained to the levels listed in Part 1.5.2 and/or 1.5.3.

#### 1.5.2 Required Training For Those Exposed Over the Action Level Or Who Conduct Trigger Tasks

This training must be done for all those workers who conduct trigger tasks or are expected to be exposed above the Action Level. Typically, this training will be required for workers who conduct a trigger task such as paint scraping or manual demolition of painted components and the work will take more than one hour in an eight-hour shift. This is a guidance and not an Cal/OSHA time frame. The Project Monitor may determine that this training is needed for some workers who conduct tasks for even less than an hour.

The training must comply with the training requirements as listed 8 CCR 1532.1 (I)(1)(B) and (I)(2)(A-H). In summary, the standard requires the worker to be trained in series of subjects. The length of training depends on the experience and previous training of the worker, the type of work they will conduct, and whether or not they already have been trained and approved to wear respirators.

**EXHIBIT B** 

Workers receiving this training and conducting this type of work will typically need to wear respirators and protective clothing while they conduct the work.

An environmental contractor, or a contractor with environmental work experience, previous training, and a written respiratory protection program generally conducts this type of work. The Owner and Project Monitor do not recommend subcontractors attempt this type of work. However, subcontractors will be allowed to conduct this type of work on this project if they can demonstrate proof of training and carry out the work according to these specifications.

The Contractor and subcontractors will need to provide the Owner and/or Project Monitor written proof that this training has been provided all workers conducting the tasks that require this training. Entek can provide this training for the Contractor and/or subcontractors or they can obtain this training from any source the employer deems is qualified.

This training is not required if the employees are trained to the levels listed in Part 1.5.3.

# 1.5.3 Required Training For Those Who Are Reasonably Expected To Be Exposed Over The PEL And/Or Conduct Trigger Tasks On Over 100 Square Feet of Material

Workers and supervisors must be CDPH Certified Lead-Related Construction Workers or Supervisors if they will conduct trigger tasks or other work reasonably expected to exceed the PEL and/or conduct this work on over 100 square feet of material. This is a guidance amount and not a Cal/OSHA regulatory requirement. However this amount of material and type of work is reasonably expected to potentially release airborne exposures over the PEL and thus trigger the CDPH certification requirement. This includes work such as the manual demolition of painted surfaces, ceramic walls, paint preparation work (sanding and scraping), and other tasks as described in 8 CCR 1532.1 (d)(2). Proof of training will be a currently valid CDPH certification card. Workers who can show a completed course completion form and a completed application form for certification will be allowed to work pending their being fully certified.

Exception: Licensed asbestos contractors performing paint scraping work on the outside of buildings only for the purpose of removing loose and peeling paint prior to the demolition of the building, or the demolition of a structure, will not be required to have the workers or on-site supervisor be CDPH certified. They must, however, show proof of training in compliance with 8 CCR 1532.1 (I)(2) for employees who may be exposed above the Action Level. In summary they must meet the training requirements of this specification as stated in Part 1.5.2. In addition, however, the Contractor must have a CDPH certified supervisor approve the containment setup at the start of each shift that will disturb lead, approve the work practices and personal protective equipment worn by the workers, verify that proper air monitoring is being collected, must be able to return to the site within two hours if requested by the Project Monitor, and must approve the final cleanup of the work area prior to a visual inspection of the work area being conducted by the Project Monitor. The certified supervisor will always be required to approve the initial set up of the containment, personal protection, and work practices at the start of the job, but then depending on the quality of the work demonstrated, the Project Monitor may not require the certified supervisor to inspect the work site at the start of each shift. This exemption will be revoked should air sampling on this project demonstrate airborne lead levels above the Action Level on workers or supervisors.

# 1.5.4 Required Training for Projects Involving Disturbance of Lead-Based Paint in Child Occupied pre-1978 Homes, Child Care Facilities and Pre-schools

Workers and supervisors must be trained in accordance with the US EPA RRP regulations for painting activities.

**EXHIBIT B** 

# 1.6 Required Submittal Documents

While additional documents may be required by the scope of work for this project, at a minimum, the Contractor will be required to provide the Owner and/or Project Monitor with the following documents regarding the Contractor's ability to safely disturb lead-containing materials.

#### 1.6.1 Submittals Prior To The Start Of Work

All Contractors and subcontractors who will have employees disturb lead on this project must, at a minimum, provide proof of item number 1.6.1.e.1., lead hazard communication training in compliance with 8 CCR 1532.1 (I)(A)(1). This is the only submittal that must be provided by these employers as long as they do not disturb conduct more disturbance of lead than is described in Part 1.5.1.

The following submittals must be provided by all Contractors and subcontractors who will, at a minimum, have employees who will conduct trigger tasks for more than one hour per shift, will potentially be exposed above the Action Level, or will conduct other activities as determined by the Project Monitor that may result in significant exposure to lead.

- a. A written lead compliance plan in compliance with 8 CCR 1532.1 must be provided that includes the following:
  - A description of equipment and materials, controls, crew size, job responsibilities, and operations and maintenance procedures for each activity in which lead is disturbed and potentially emitted;
  - 2. A description of specific control methods (wet methods, engineering controls, etc.) that will be used to ensure workers are not exposed above the PEL;
  - 3. Technology considered in meeting the Cal/OSHA permissible exposure level (PEL);
  - 4. Air monitoring data documenting sources of lead emissions;
  - 5. A detailed implementation schedule for the compliance plan, including the schedule for inspections by a competent person;
  - A description of the lead work practice program which will be used to control worker exposures. This includes the use of protective work clothing, equipment, hygiene facilities and practices, and housekeeping practices;
  - 7. A description of the steps the Contractor or subcontractor will take to minimize the generation of hazardous waste produced on this project. This includes, but is not necessarily limited to how the contractor will separate waste streams. For example, how will the Contractor or subcontractor keep potentially hazardous waste such as paint chips and dust from being disposed of with other potentially non-hazardous construction materials and debris?

**Note:** If a Contractor or subcontractor is found conducting lead-related work not specifically mentioned and described in the compliance plan, the work will be stopped until a compliance plan including that work is submitted, reviewed, and approved by the Owner and/or Project Monitor.

#### **EXHIBIT B**

- b. Copy of the Contractor or subcontractor's written respirator program in accordance with the requirements of 8 CCR 1544.
- c. Proof that all employees expected to wear respirators on this project have medical approval to wear a respirator.
- d. Copies of respiratory fit-tests for all workers expected to wear a respirator on this project. Fit testing must be done as required by and in accordance with 8 CCR 1544.
- e. Proof of training required by Part 1.5 for type of work employee will do.
  - 1. Proof of Hazard Communication Training for Lead done within the last calendar year for those exposed to lead or who will perform trigger tasks for less than one hour. Proof may be a certificate or written statement stating training was completed and a list of names of those individuals who were trained. Proof of this training is not needed if employee provides proof of training required by items e. 2, or e 3.
  - 2. Proof of training in compliance with 8 CCR 1532.1 (I)(2) done within the last calendar year for all employees who will conduct trigger tasks as defined in 8 CCR 1532.1 (d)(2) for more than one hour or who will reasonably be expected to be exposed to lead above the Action Level. *Proof may be a certificate or written statement stating training was completed and a list of names of those individuals who were trained.*
  - 3. Proof of CDPH lead certification for those workers who will conduct trigger tasks as defined in 8 CCR 1532.1 (d)(2) or will reasonably be expected to be exposed to airborne levels of lead above the PEL on projects that will disturb more than 100 square feet of lead-containing material. Proof of certification will be a currently valid CDPH certification card as a worker or supervisor. Workers who can show proof of a valid course completion form and application being submitted to CDPH, will be allowed to work while awaiting full certification from CDPH.
  - 4. Proof of current CDPH certification as a lead supervisor for the on-site competent person for projects involving the conduction of trigger tasks or other activities reasonably expected to exceed the PEL on all projects that will disturb more than 100 square feet of lead-containing material. *Proof of valid certification will be a currently valid CDPH certification card a worker.*
  - 5. If exception to requirement for CDPH certified supervisor listed in Part 1.5.3 is requested, then provide proof of CDPH certified supervisor who will verify containment, personal protection and work practices, and will be able to respond to the project within two hours of request by the Project Monitor.
  - 6. Proof of training meeting the requirements of the US EPA RRP regulations if applicable.
- f. Copies of all current SDS for chemicals used on this project.
- g. Manufacturers' certifications that high efficiency particulate air (HEPA) vacuums, pressure differential units and other local exhaust ventilation equipment conform to ANSI Z9.2-79 for all HEPA-filtered equipment that will be used on this project. This is proof that the equipment is actually HEPA filtered. This is separate from the challenge testing requirement needed for equipment used in interior spaces.

**EXHIBIT B** 

- h. Name and contact information of independent testing company who will challenge test all vacuums and air filtration devices used on this project.
- I. Statement regarding compliance with all Cal/OSHA exposure monitoring required for this project.
- j. Name and contact information for laboratory who will analyze air samples or waste samples and documentation of their certification to conduct such analysis.
- k. Name of Waste Transporter who will transport hazardous waste on this project and documentation that the Transporter is allowed to transport lead hazardous waste.
- I. Name of Waste Landfill to which lead hazardous waste will be sent and documentation that such landfill is allowed to accept such waste.
- m. Should waste water filtration be required on this project, submit manufactures documentation pertaining to the capability of waste water filters to filter particles of, at a minimum, five micrometers in size.
- n. List of all rented equipment to be used within a lead regulated area, or a statement that no rental equipment will be used on this project.
  - If rental equipment is to be used, submit written statements from each rental company indicating the rental company's acknowledgment that the equipment is provided for and may be used in areas where airborne levels of asbestos and/or lead may be present.
- o. Submit emergency plans. At a minimum submit the following:
  - 1. Submit non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments.
  - 2. Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor.
  - 3. Submit detailed written directions from the project site to the medical facility to be used in case of an emergency. Include a map which sufficiently shows the route to be taken from the site to the designated medical facility.
  - 4. Submit written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.
- p. Local sanitation district Wastewater Discharge Permit for Surface Washers (if required).
- q. Cal OSHA Notification. This is required for this work on all projects that will disturb more than 100 square or 100 linear feet of lead in materials containing greater than 0.5%, 5,000 parts per million (weight by weight), or 1.0 mg/cm<sup>2</sup>.

The above listed documents must be provided prior to the start of work that will disturb lead. Under no circumstances will workers or supervisors be allowed to work on this project prior to the receipt, review, and acceptance of this documentation by the Owner and/or Project Monitor. In addition, documentation for rental equipment must be provided before the equipment may be used in a lead

**EXHIBIT B** 

regulated area. All delays resulting from the failure of the Contractor and/or subcontractors to provide this information in the required time frame is solely the responsibility of the Contractor and/or subcontractor.

The Contractor must use the Pre-Work Submittal Checklist provided at the end of these specifications to provide the Owner and/or Project Monitor these submittals. Failure to use the form will likely lead to the rejection of the submittal package and a delay in the project that will be the sole responsibility of the Contractor and/or subcontractor.

The Contractor is responsible for maintaining current documents and resubmitting copies to the Owner and/or Project Monitor for any worker whose documents expire during the project. Any worker observed on a job site who either is not approved to conduct work by the Owner and/or Project Monitor or has been approved but documentation pertaining to training, medical evaluation, or respiratory fit testing has expired, will be instructed to stop work until these documents are received by the Owner and/or Project Monitor and the worker is approved to perform work that disturbs lead.

#### 1.6.2 Submittals Provided During The Work Or Following Completion Of The Work If Applicable

Depending on the document, these documents must be provided the Owner and/or Project Monitor on an ongoing basis during the work, or if appropriate following completion of the physical activities associated with the project. The documents must be received and approved by the Owner and/or Project Monitor before the work is considered complete. Failure to provide these documents means the work is not complete, even though the physical activities may be completed.

- a. Daily sign-in sheet for each worker entering a lead regulated area.
- b. The Contractor must provide the results of exposure sampling done to comply with the requirements of 8 CCR 1532.1 (d) and the requirements of this specification.
- c. The Contractor must provide blood sampling and analysis results of lead (BLL) and zinc protoporphyrin (ZPP) levels for all workers who are represented by air monitoring results that exceed the Action Level. Typically, the Project Monitor will require blood lead sampling for all workers on a work shift if one or more air sampling results for that shift is above the Action Level.

The written results of the blood sampling analysis must be provided the Owner and/or Project Monitor within 21 days of the exposure over the Action Level or within 12 days of the completion of the project, whichever comes first.

- d. Copies of job progress reports and project documentation. This must include the names of all employees onsite, the hours worked and a brief description of the work completed at the site(s).
- e. The Contractor must provide all waste disposal documentation.

#### 1.7 Third-party Oversight

The Owner is utilizing the services of Entek Consulting Group, Inc. (Entek) as an independent third-party consultant to provide oversight of all work that disturbs lead on this project. The Contractor shall treat this third-party consultant as a designated representative of the Owner. The third-party consultant for this project is known as the Project Monitor. The Project Monitor is expected to perform some or all of the following activities on this project, but may also conduct other activities as needed:

**EXHIBIT B** 

- a. Visually monitor the work practices of the Contractor's employees to determine that the work is being done in compliance with these specifications. The Project Monitor may conduct this activity on a continual basis or may make unannounced random visits to the project site to check on the Contractor's performance.
- b. Visually inspect for the presence of visible emissions suspected to contain lead.
- c. Conduct personal and area air monitoring in accordance with accepted methods.
- d. Collect bulk samples of relevant materials to determine the presence or absence of lead.
- e. Visually inspect the work area for cleanliness after completion of the work.

# 1.8 Air Sampling By The Owner and/or Project Monitor

The Owner and/or Project Monitor may determine it appropriate to collect air samples to evaluate the effectiveness of the Contractor's engineering controls and work practices. The Contractor and/or subcontractors shall allow the Project Monitor to attach and collect personal air samples on the workers and shall instruct the workers to comply with the directions for that sampling as given by the Project Monitor.

Air sampling may also be used to verify the effectiveness of the Contractor's containment system. The Project Monitor may choose to collect area air samples within the work area. These samples results may be used to generate an eight-hour, time-weighted average. The result of area samples in a lead work area should normally be far below what the workers are breathing. Therefore should the Project Monitor collect area air samples within the work area that result in exposures above half the Action Level (15  $\mu$ g/m³), the Project Monitor will require the Contractor and/or subcontractors to re-evaluate their work practices, engineering controls, and containment system.

The Project Monitor may also choose to collect area samples downwind, <u>outside</u> of the regulated work area. These sample results will be compared to background air samples upwind or samples collected prior to the beginning of work. Sample results indicating airborne lead emissions at or above 5 µg/m³ above background levels will be interpreted to mean that the Contractor and/or subcontractors containment or engineering controls are inadequate. This may result in the temporary stoppage of work until the Project Monitor is assured that airborne lead levels will significantly diminish by the change in work practices or engineering controls.

#### 1.9 Notification of Employers of Employees in Adjacent Areas

The Contractor and subcontractors who will disturb lead are responsible for ensuring that employers of employees in areas adjacent to the work being conducted have been notified that work disturbing lead will take place.

Typically this notification is in addition to the posting of lead regulated area signs. In summary, this notice shall be provided to all other contractors and subcontractors in areas adjacent to the work. Those employers must be notified in advance of any upcoming work that will disturb or impact lead in a manner that may generate airborne levels of lead that could present a potential exposure to workers at or above the Permissible Exposure Limit (PEL) as defined in 8 CCR 1532.1. This notice shall also provide information on the control measures being implemented and a warning that the employer's employees are to remain outside of the posted regulated areas. The Contractor and/or subcontractors anticipating the need for such notification shall coordinate this notification with the Owner and/or Primary Contractor.

**EXHIBIT B** 

# 1.10 Suspension Of Work

The Owner and/or Project Monitor may suspend all work that disturbs lead if any controls (such as barriers) fail, if debris known or suspected to contain lead is detected outside the containment, or if work is on the exterior of a structure and wind speeds are more than fifteen miles per hour, or if in the judgement of the Project Monitor, other factors exist that determine the work must be stopped because of the potential for the creation of lead hazards. For example, the Project monitor may conduct perimeter monitoring and discover that lead is being released in concentrations at  $5 \mu g/m^3$  above background levels or work area air monitoring that is above half the Action Level. In either case, the Owner and/or Project Monitor may suspend work until more effective containment, work practices, and engineering controls are utilized.

# 1.11 Pre-Start Meeting

The Project Monitor typically recommends that there be a pre-start meeting with the Contractor or subcontractor's representative and the Project Monitor approximately five days prior to the expected start of work. The Contractor will be expected to provide the majority of pre-work submittals described in Part 1.6.1 at that meeting. This meeting is designed to answer questions about the project and address issues of concern of either the Contractor, subcontractor, or Project Monitor. Should this meeting be determined not to be necessary, the submittals must be delivered to the Owner and/or Project Monitor no later than five working days in advance of the work.

# 1.12 Testing For Lead In Paints, Coatings, Ceramic Tile, And Other Materials

The Owner believes lead is common in the paint in the buildings on this project based on age or limited testing. Therefore the Owner does not anticipate paying for additional testing of paint. However, in some cases, it may be in the interest of the contractor and/or subcontractors to determine the exact concentration of lead in the paint or coating since that will affect Cal/OSHA and CDPH compliance issues. For example, many interior surfaces will contain paint which contains less than 600 parts per million lead. Should the paint be tested and that discovered, much of the Cal/OSHA lead standard and all of the CDPH Title 17 standard won't apply.

For example, should the paint contain less than 600 parts per million lead, the contractor and/or subcontractors could drill into or conduct other non-trigger tasks on this material without extensive training. Also, the demolition of these surfaces would not trigger prior notification to Cal/OSHA.

Should the contractor and/or subcontractor wish the paint or ceramic tile to be tested, they will need to request this of the Project Monitor. This testing must be done by the Owner,'s representative. The Project Monitor will be able to assist the contractor and/or subcontractor in determining if testing the material is likely to be worthwhile for the contractor and/or subcontractor.

#### PART 2.0 MATERIALS AND EQUIPMENT

#### 2.1 Fire Resistant Plastic Sheeting (Poly)

All plastic sheeting used on this project must be fire resistant whether used inside or outside of buildings.

# 2.2 Challenge Testing Of HEPA Filtration Systems

All HEPA-equipped vacuums and air filtration units to be used on this project in interior spaces during operations that may disturb lead must be challenge tested and meet ANSI requirements using DOP or an equivalent testing agent. Except for HEPA air filtration units used to create negative pressure differentials for

**EXHIBIT B** 

the demolition of ceramic tile, this testing must take place within ten calendar days prior to their use and after replacement of any HEPA filter removed from previously tested equipment. Air filtration units used in conjunction with the demolition of ceramic walls must be challenge tested on site. They do not need to be retested as long as they remain on site. They will need to be retested if they are moved off site. Copies of all testing certifications must be provided to the Owner and Project Monitor prior to use of the equipment.

Exception: Subcontractors using HEPA vacuums for incidental cleanup of lead dust resulting from the minimal disturbance of lead as discussed in Part 1.5.1 are exempt from the challenge testing requirement unless, in the judgement of the Project Monitor, there is a reasonable expectation that the subcontractor's HEPA vacuums are leaking.

#### 2.3 Vacuum-Assisted Tools

When using power tools to disturb lead, the Contractor shall only use tools that have a HEPA-filtered-vacuum recovery system.

#### 2.4 Power Washing

No high pressure or water blasting tools may be used if the spray will contact lead-containing paint.

For the purposes of this specification, power washing is defined as: The use of a low pressure "power washer" to rinse and/or wash stable, painted or coated surfaces to remove dust, dirt, grime, and other foreign matter in preparation for re-painting." Under no circumstance may power washing be used to remove lead-containing paints or coatings from surfaces. Before using power washing, all areas of loose, peeling, cracking, or unstable coatings must first be prepared for re-painting using the appropriate methods and personnel protective equipment as specified by Cal/OSHA and CDPH regulations, and these specifications. Typically this means all loose and peeling paint must be removed by hand scraping and sanding or the use of mechanical tools equipped with HEPA filtration.

Should a Contractor or subcontractor use power washing in a manner that releases paint from the surface, and that paint also not be contained, the Contractor or subcontractor will be responsible for all costs associated with the Owner hiring and environmental contractor to clean up the area. The area to be cleaned will be determined by the Project Monitor and will extend past the point of visually apparent debris.

Prior to performing power wash operations the Contractor must determine if the local sanitation district requires a Wastewater Discharge Permit for Surface Washers. Should this permit be required, the Contractor is responsible for obtaining it, accurately completing it and adhering to the permit requirements.

# 2.5 Personal Protective Equipment

The Contractor shall use NIOSH approved respirators and personal protective equipment as required by 8 CCR 1532.1 and as appropriate based on personal air monitoring results.

Respirator fit test records and the respiratory protection program shall be retained on site as part of the project documentation if respiratory protection is used on this project. Disposable dust/mist respirators shall not be used.

At a minimum, half-face respirators with P-100 (HEPA) cartridges will be required during surface preparation where there is manual scraping or sanding that will take more than one hour to complete. Dry scraping or sanding, mechanical scraping, abrading, sanding, or similar actions will trigger the need for respirators regardless of the duration of the activity.

**EXHIBIT B** 

Regardless of the duration of the work, all workers scraping lead-containing paint or removing or demolishing ceramic tile must wear disposable protective clothing over their wear home clothes. Workers demolishing surfaces that contain ceramic tile must wear full body protective clothing including hoods and gloves.

At a minimum, the Contractor and subcontractors must ensure that no lead dust or debris is tracked out of the contained, regulated area. The Contractor and subcontractors must ensure that all those allowed into the regulated area wear adequate foot coverings that ensure that they will not track contaminated material out of the area when the leave.

# 2.6 Rental Equipment

Any equipment rented for the purpose of disturbing lead or used within a lead regulated area must be accompanied with documentation verifying that the rental agency has been notified, and acknowledges receipt of notification that the equipment being rented will be used for work inside a lead regulated area. This documentation must be submitted to the Project Monitor prior to the equipment being used on the job site.

#### PART 3.0 EXECUTION

#### 3.1 Summary

Contractors and subcontractors conducting lead related construction work will be evaluated on a performance standard which includes, but is not limited to, cleanliness of work area, work practices as verified by exposure monitoring, containment set up, and ultimately, the clean up of paint chips, dust, and debris.

Any work practice that creates paint chips, dust, glazed ceramic or painted debris must be conducted within a regulated area as defined in 8 CCR 1532.1 and within a containment at least as stringent as required by Title 17 and/or described in these specifications.

The containment system shall be designed and constructed to prevent visible dust or debris from escaping the work area as well as the escape of airborne lead emissions at or above 10  $\mu$ g/m³ above background levels. Should dust or debris generated by the work be found outside the containment, or the airborne lead outside the containment exceed background levels, the Project Monitor will determine that the containment is inadequate, in violation of Title 17 requirements, and work will be stopped until the Contractor and/or subcontractors redesign the containment to be more effective.

# 3.2 Compliance With Requirements For The PEL and Action Level

Contractors and subcontractors strictly adhering to the requirements listed in these specifications who conduct minimal disturbance of lead such as by the conduction of trigger task work amounting to less than one hour, may begin work assuming the Cal/OSHA Permissible Exposure Limit (PEL) will not be exceeded.

Contractors and subcontractors not strictly conforming to suggested work practices must start work assuming the PEL will be exceeded. This means they must comply with all OSHA requirements specified for work that results in exposures over the PEL. This will include, but is not limited to, complying with requirements for training, personal protection, regulated area development, blood testing, personal air monitoring, the development of a written compliance plan, and the notification of employers in adjacent areas.

Contractors and subcontractors must assume the PEL will be exceeded each time they conduct trigger activities that will exceed one hour in duration. This will trigger the need to wear respirators and protective clothing, meet the training requirements specified earlier in these specifications, conduct personal air

**EXHIBIT B** 

sampling, develop a written compliance plan and all other actions described as necessary by 8 CCR 1532.1 and these specifications.

#### 3.2.1 Personal Air Sampling

The Contractor and subcontractors are responsible for conducting personal air monitoring during disturbance of lead in compliance with the requirements of 8 CCR 1532.1. At a minimum, Contractors and subcontractors shall conduct representative exposure monitoring on workers on a daily basis whenever those workers will conduct trigger task activities that will take longer than one hour to complete in an eight-hour shift. In addition, air sampling must be done for any work for which the Project Monitor believes has a reasonable potential for generating airborne lead at or above the Action Level. The Project Monitor will not allow work to proceed if the Contractor is not prepared to conduct the necessary air monitoring.

Sample information must include (but is not restricted to) the name of the individuals wearing the samples, the individuals' Social Security Number or Company ID number, the date the samples were collected, identification by unique method of the area where the work is being performed, and identification of the work being performed. EXAMPLE: James Black, 000-11-222, 06/25/03, Bill Jackson Elementary Owner, Building H, Classroom 5, East covered walkway, paint surface preparation work.

Laboratory results shall be provided to the Owner and/or Project Monitor within 72 hours of sample collection. Electronic copies must be received within 14 days of the Contractor receiving the results from the laboratory. Contractor and/or subcontractor must submit proof that laboratory has the required licenses to analyze air samples for lead.

Should they wish to make use of the exceptions to air sampling stated in 8 CCR 1532.1 (d)(3)© & (D), the Contractor and/or subcontractors must submit the required information to the Owner and/or Project Monitor and receive written approval from the Owner and/or Project Monitor prior to reducing the personal protection, containment, or engineering controls stated in this specification. In general, air sampling results that are intended for use to reduce personal protection requirements must be collected on this project. Air sampling results from other projects will not be allowed to create a negative exposure assessment for use on this project.

# 3.3 Work Involving Whole Component Removal Or Demolition Of Entire Structure

Intact lead-containing paint on construction debris is generally not considered a hazardous waste in California. However, loose and peeling paint on structures may result in all construction debris from that site being considered a hazardous waste.

Therefore prior to the demolition or removal of painted material and the disposal of that material, all loose, peeling or flaking paint must be removed. This includes objects such as fences, built-in furniture or cabinets, other similar structures, as well as entire structures being demolished.

Any paint debris generated during this work must be separated into appropriate waste streams and handled as a hazardous waste, or as deemed appropriate as discussed in Part 3.11 Lead Waste Management.

#### 3.4 Prohibited Work Practices

The following work activities are prohibited on the project:

a. Open-flame burning or torching.

**EXHIBIT B** 

- b Machine sanding or grinding of lead materials or surfaces coated with lead unless the machine is equipped with a HEPA-filtered-vacuum recovery system.
- c. Un-contained hydro-blasting or high-pressure washing.
- d. The use of power washing to remove loose and peeling paint.
- e. Abrasive blasting or sandblasting without a HEPA-filtered-vacuum recovery system or done outside of a negative pressure enclosure.
- f. Heat guns operating above 1,100 °F.
- g. Dry scraping, except for limited areas where electrical hazards create a higher risk than lead or unless specifically approved by the Project Monitor.
- h. Use of methylene chloride based paint strippers.

# 3.5 Competent Person

The Contractor and/or subcontractors disturbing lead shall have a competent person (as defined by Cal/OSHA for construction activities) onsite at all times to supervise and oversee all activities which may disturb materials containing lead.

The above requirement is not required for environmental contractors conducting work limited to the removal of loose and peeling paint on structures scheduled for demolition. In those situations, the on-site supervisor must meet the lead training requirements as stated in Part 1.5.2 Required Training For Those Exposed Over the Action Level Or Who Conduct Trigger Tasks. In addition, the Contractor must have a CDPH certified supervisor approve the containment setup at the start of each shift that will disturb lead, approve the work practices and personal protective equipment worn by the workers, verify that proper air monitoring is being collected, be able to return to the site within two hours if requested by the Project Monitor, and approve the final cleanup of the work area prior to a visual inspection of the work area being conducted by the Project Monitor. The certified supervisor will always be required to approve the initial set up of the containment, personal protection, and work practices at the start of the job, but then depending on the quality of the work demonstrated, the Project Monitor may not require the certified supervisor to inspect the work site at the start of each shift. This exemption will be revoked should air sampling on this project demonstrate airborne lead exposures to workers or supervisors are above the Action Level.

# 3.6 Work Site Preparation & Containment Requirements

The Contractor and/or subcontractor is required to contain the disturbance of lead in a manner that prevents lead-contaminated dust, debris, water, or air from leaving the regulated work area in an uncontrolled fashion. The containment must be developed in compliance with the requirements of Title 17 and these specifications. The presence of lead dust, debris, or air above background levels will indicate that the containment is inadequate. Work will be stopped and the Contractor and/or subcontractor must adjust work practices, engineering controls, or the containment in a manner that convinces the Project Monitor that the material will no longer be able to escape the regulated work area.

**EXHIBIT B** 

# 3.6.1 Exterior Work Site Preparation & Containment

The Contractor and subcontractors are responsible for ensuring that building occupants and those in adjacent areas are not exposed to lead dust or debris as they enter or exit buildings. The Contractor and subcontractors shall ensure that building occupants and others in the adjacent area do not enter the lead regulated area and have a safe means of access and egress to the building. Close all doors and windows within 20 feet of the renovation. On multi-story buildings, close all doors and windows within 20 feet of the renovation on the same floor as the renovation, and close all doors and windows on all floors below that are the same horizontal distance from the renovation.

Ensure that doors within the work area that will be used while the job is being performed are covered with plastic sheeting or other impermeable material in a manner that allows workers to pass through while confining dust and debris to the work area.

Cover the ground with plastic sheeting or other disposable impermeable material extending 10 feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to collect falling paint debris, whichever is greater, unless the property line prevents 10 feet of such ground covering. Ground containment measures may stop at the edge of the vertical barrier when using a vertical containment system.

The poly must be secured to the side of the building or structure with tape, or other anchoring system, so that there is no gap between the poly and the building or structure. The poly installed to cover ground or landscaping shall be installed in a manner to ensure that it will not blow away or billow from the wind. The use of weights such as wood is acceptable as long as the poly does not billow or blow in a manner that releases lead dust or debris off of it.

If the renovation will affect surfaces within 10 feet of the property line, the renovation firm must erect vertical containment or equivalent extra precautions in containing the work area to ensure that dust and debris from the renovation does not contaminate adjacent buildings or migrate to adjacent properties. Vertical containment or equivalent extra precautions in containing the work area may also be necessary in other situations in order to prevent contamination of other buildings, other areas of the property, or adjacent buildings or properties.

The exterior of all windows located within ten feet of any disturbance of lead must be sealed by covering them with at least one layer of six-mil thick poly sheeting. All ventilation machinery within 20 feet of the disturbance should be sealed by at least one layer of six-mil thick poly sheeting. Keep all windows within 20 feet of working surfaces closed, including windows of adjacent structures.

Should the disturbance of paint involve removing paint from the exterior of a window, then the Contractor or subcontractor must seal the inside of the window with two layers of six-mil thick poly. The Project Monitor will typically waive the requirement to seal the inside of the window with two layers of poly if the disturbance of lead involves less than 5% of the painted surface area of an exterior window.

Those in adjacent areas must be kept a sufficient distance from any chance of encountering lead dust and debris. Therefore the Contractor shall erect barrier tape at a distance sufficient enough from the poly barriers to ensure that those passing by the area are not directly adjacent to the poly containment barriers. In general, the barrier tape should be at least five feet from the edge of the poly placed on ground surfaces if those surfaces are accessible to unauthorized persons. The area off the poly sheeting, but inside of the barrier tape, is still part of the regulated area however and is not allowed to have any lead dust or debris present at any time.

**EXHIBIT B** 

The Contractor and/or subcontractor must post the regulated area sign as described in 8 CCR 1532.1 (m) (WARNING, LEAD WORK AREA, POISON, NO SMOKING OR EATING.) The posting may be done by wording on the barrier tape or by suspending OSHA-approved signs with the wording on the tape barriers or on readily apparent surfaces visible to persons outside the area.

All those entering the regulated area must sign in on a roster that documents their presence in the area. This roster must be provided the Owner and/or Project Monitor on a daily or weekly basis as determined by the Project Monitor.

Work disturbing lead shall not be conducted on exterior surfaces if wind speeds are greater than 15 miles per hour or, in the judgement of the Project Monitor, pose a risk of blowing lead dust or debris out of the regulated area.

In addition, for work done on ladders or man lifts, the Project Monitor is likely to require the workers to scrape loose and peeling paint directly into a container, rather than let the loose debris float down and possibly off the containment barrier. Typically the Project Monitor will allow the workers to scrape loose and peeling paint into a cardboard box held in one hand while scraping with the other hand.

Work must stop and cleanup occur before rain begins.

The Contractor shall not leave debris or poly sheeting out overnight if work is not completed. The Contractor shall keep all debris in a secured area until final disposal.

#### 3.6.2 Interior Site Preparation & Containment

For interior work site preparation, one layer of six-mil poly sheeting must be placed on the entire floor. However, the entire floor area need not be covered by poly for large interior areas where the disturbance of lead is limited to the perimeter of the area. If the entire floor area is not covered with poly, the poly must extend out a minimum of ten feet from those areas where lead will be disturbed. The poly sheeting must be secured to the wall using tape so there is no gap between the floor and the wall. The poly must also be secured to the floor.

If individual rooms are being worked in, seal all doorways with a primitive airlock flap to prevent contamination of other areas of the building. Post the regulated area signs, as required by 8 CCR 1532.1 (m), at the entrance to the regulated area and all other entry points to the area.

All those entering the regulated area must sign in on a roster that documents their presence in the area. This roster must be provided the Owner and/or Project Monitor on a daily or weekly basis as determined by the Project Monitor.

If feasible, turn off all HVAC systems in the regulated work area. In addition, seal all ventilation systems in the regulated work area with a minimum of one layer of six-mil poly. Any exceptions to this requirement must be approved by the Project Monitor. Typically, the Project Monitor will require all ventilation system ducts and/or registers to be sealed with poly if they are within 20 feet of the disturbance of lead even if they are turned off. Seal all furniture or other equipment that must remain in place with a layer of four or six-mil poly. A minimum of six-mil poly is required for all work disturbing ceramic tile.

Small amounts of ceramic tile, such as covering less than two square feet, may be removed using this type of interior containment if the tiles are removed using hand tools and remain substantially intact during the removal process. Additional requirements for interior site preparation are required

**EXHIBIT B** 

when surfaces covered by lead-containing ceramic tile are demolished. Those requirements are discussed in Part 3.6.3.

# 3.6.3 Additional Containment Requirements For Demolition Of Ceramic Tile And/Or Mechanical Disturbance Or Blasting Of Lead-Containing Materials Without A HEPA-Filtered-Vacuum Recovery System

This part primarily addresses work that will involve the demolition of building surfaces covered by lead-containing ceramic tile. These requirements shall also apply shall the Contractor and/or subcontractors disturb lead-containing material, in an interior space, using mechanical or blasting methods without a HEPA-filtered recovery system approved by the Project Monitor.

In addition to the requirements stated in Part 3.6.2, the demolition of ceramic tile that involves the breakage or cutting of the tile must be done inside a negative air pressure containment system. The negative air pressure must be generated using an air filtration unit that has been challenge tested on site as described in Part 2.2 Challenge Testing Of HEPA Filtration Systems.

Seal all critical barriers between the work area and the adjacent areas with a minimum of six-mil thick poly. Critical barriers are any openings in the surface areas of the regulated work area through which air, dust, or water might pass. This includes, but is not necessarily limited to all windows, doors, HVAC vents and units.

All objects or equipment that cannot be removed from the area must be covered and tape sealed with a minimum of six-mil thick poly. Any exceptions to this requirement must be specifically approved by the Project Monitor.

Typical decontamination requirements for paint scraping and most manual demolition are discussed in Part 3.6.4 Decontamination Procedures. However, the decontamination procedures surrounding the demolition of ceramic tile are much more stringent and are described below.

All regulated work areas where ceramic tile will be broken, or other tasks that will, in the opinion of the Project Monitor, generate significant amounts of lead dust, must include a personal decontamination area and the supervisor must ensure that, at a minimum, the following procedures are followed.

a. Work That Disturbs Less Than 100 Square Feet Of Lead-Containing Material

Work involving the demolition of less than 100 square feet of lead-containing material, including ceramic tile, is not expected to result in airborne exposures over the PEL. Therefore the personal decontamination system may, at a minimum, be a one stage decontamination system that separates the work area from the adjacent areas.

This must, at a minimum, include an airlock chamber between the work area and the adjacent areas. Each side of the air lock must be covered by poly curtains. At no time, including during the removal of waste containers, may the poly doors be open on both sides of this chamber at the same time. This chamber must be a minimum of three feet by three feet by six feet tall. There must be a clean poly drop cloth measuring at least five feet by five feet immediately outside this air lock onto which workers will step after exiting the air lock. This poly drop cloth must be kept visually clean of dust and debris at all times. This poly drop cloth shall be removed at the end of the work shift and replaced with a new clean poly drop cloth at the start of the next shift.

#### **EXHIBIT B**

- The workers must be able to remove their protective clothing and wash off their respirator before leaving the work area. The supervisor must ensure that they do not track lead containing materials out of the work area on their feet. Footwear worn out of the work area must have been covered by protective booties if worn in the work area. Following removal of the protective covering over the footwear, all footwear worn in the work are must be HEPA vacuumed before allowing it to be worn out of the regulated area. Footwear that can be washed before leaving the work area does not need to be covered by protective booties as long as the exterior of the footwear is thoroughly washed prior to being worn outside of the regulated area.
- 3. After they leave the decontamination chamber, workers must go directly to a nearby location where they must throughly wash their hands and face. Cal/OSHA specifically states that the supervisor must ensure this washing takes place.
- 4. Special attention must be given that workers do not track lead dust out of the work area on the soles of their feet or shoes.
- 5. Following the exit of workers from the work area, whether leaving for breaks or at the end of the day, the supervisor must visually inspect the area outside the decontamination system to verify that no dust or debris is being tracked out.
- 6. The Contractor shall not permit the storage or consumption of food and/or beverages inside the containment or within any of the decontamination chambers. Food or drink consumption within containment may result in the worker(s) dismissal from the site for the duration of the project.
- 7. Work will be stopped if the Project Monitor determines that the decontamination system is not kept in acceptable condition or used properly.
- b. Work That Disturbs More Than 100 Square Feet Of Lead-Containing Material

For all work that disturbs more than 100 square feet of wall ceramic tile, the decontamination system must be a full, three-stage decontamination chamber with a shower as described below.

- 1. The three-stage decontamination unit with shower must be contiguous with the containment unless determined infeasible by the Project Monitor.
- 2. The worker decontamination enclosure system shall consist of at least a clean room, a shower room, and an equipment room, separated from the work area by airlock chambers. The airlock chambers shall be at least three feet square in size. All fabricated units shall have, at a minimum, two layers of six-mil poly sheeting.
- 3. Entry and exit from all airlock chambers and the decontamination enclosure system chambers shall be through doorways designed to restrict air movement between chambers when not in use. The dirty side shall have an extra layer of six-mil poly sheeting on the floor as a an extra drop cloth and it shall be replaced at least daily.
- 4. The clean room shall be sized and equipped to adequately accommodate the work crew. Lighting, heat and electricity shall be provided as necessary for comfort. This area must remain clean. If in the judgement of the Project Monitor, equipment storage or other activities taking place in this area affect the cleanliness of the area,

**EXHIBIT B** 

the Contractor may be required to move that storage and those activities away from the designated clean area.

- 5. The shower room shall contain one or more showers as necessary to adequately accommodate workers and shall meet OSHA requirements for temporary shower facilities. The shower enclosure shall be constructed to ensure against leakage of any kind. In addition, the shower shall be a separate unit from the decontamination unit walls. The shower unit cannot be made from poly. Metal or hard plastic is acceptable. An adequate supply of soap, shampoo and towels shall be supplied by the Contractor and available at all times.
- 6. Shower water shall be drained, collected and filtered through a system with at least a five micrometer particle size collection capability. Filtered waste water shall be disposed of into a sanitary sewage system. Under no circumstances may it be released where it might enter a storm drain.
- 7. The shower chamber shall be, at a minimum, three feet by three feet wide by a minimum of six feet in height. The shower chamber shall be constructed so that no water from the shower can spray out of the chamber, nor any water run down the sides of the poly and escape the chamber system. The Contractor must have a back-up containment system to control leaks from the shower, connections and hoses. This can be either a secondary metal pan under the shower or a series of poly barriers, separate from the construction of the chamber, that are solely for the purpose of collecting water that might leak out of the shower system.
- 8. Each decontamination chamber shall have, at least, a four inch lip of poly from the floor up the wall to prevent possible transfer of water and debris between chambers. Excess poly at the corners of this floor is to be fitted to the sides of the chamber by folding poly and taping, as opposed to cutting away excess poly and taping seams. For some projects, particularly those where the decontamination chambers are located on surfaces needing special protection from water, the Project Monitor may determine additional precautions are necessary such as requiring the shower chamber to have an overflow pan, in which the shower unit sits, that is capable of holding two inches of water. The filter system and any hose connections transferring contaminated water shall be located in a secondary containment, such as a metal pan. Any leakage shall be double-bagged or re-filtered. Should this requirement for an additional metal pan under the shower be required, it will be identified elsewhere in these specifications and discussed at the bid walk.
- 9. Unless otherwise specified in these specifications, the minimum size of the decontamination chambers shall be the following:

Clean Change Room
Shower
Showe

10. The Dirty Change Room may be part of the work area as long as a separate drop cloth is placed down before the entrance to the first airlock chamber and this drop cloth dust not contain significant quantities of debris from the work area.

**EXHIBIT B** 

- 11. There must be a clean poly drop cloth measuring at least five feet by five feet immediately outside the clean side airlock onto which workers will step after exiting the airlock. This poly drop cloth must be kept visually clean of dust and debris at all times. This poly drop cloth shall be removed at the end of the work shift and replaced with a new clean poly drop cloth at the start of the next shift.
- 12. Special attention must be given that workers do not track lead dust out of the work area on the soles of their feet or shoes. Footwear worn out of the work area must have been covered by protective booties if worn in the work area. Following removal of the protective covering over the footwear, all footwear worn in the work are must be HEPA vacuumed before allowing it to be worn out of the regulated area. Footwear that can be washed before leaving the work area does not need to be covered by protective booties as long as the exterior of the footwear is thoroughly washed prior to being worn outside of the regulated area.
- 13. Following the exit of workers from the work area, whether leaving for breaks or at the end of the day, the supervisor must visually inspect the area outside the decontamination system to verify that no dust or debris is being tracked out.
- 14. The Contractor shall not permit the storage or consumption of food and/or beverages inside the containment or within any of the decontamination chambers. Food or drink consumption within containment may result in the worker(s) dismissal from the site for the duration of the project.
- 15. Work will be stopped if the Project Monitor determines that the decontamination system is not kept in acceptable condition or used properly.

#### 3.6.4 Decontamination Procedures

Decontamination procedures shall be established by the Contractor and subcontractor depending upon the airborne concentrations of lead as well as the amount of dust and debris created by the work. At a minimum, the decontamination procedures shall be in compliance with 8 CCR 1532.1 (I)(1-5). As stated in 8 1532.1 (I)(1-5), the Contractor shall assure that these decontamination facilities are used by the supervisor and workers.

For work that does not exceed the PEL, and/or does not include the disturbance of more than 100 square feet of material, the Contractor and/or subcontractor must assure that a hand-washing station is available and used by the supervisor and workers. For work that exceeds the PEL, or involves the breakage of ceramic tile in amounts over 100 square feet, the Contractor must ensure that workers shower, at a minimum at the end of the work shift as required by 8 CCR 1532.1.

#### 3.6.5 Avoiding Contamination Of Adjacent Areas By Proper Decontamination

Should the Owner and/or Project Monitor discover that an occupant of the regulated area left the regulated area without properly decontaminating, the Contractor will be required to clean the adjacent areas that in the opinion of Project Monitor may have been exposed to lead dust or debris from this action. Failure to properly decontaminate is demonstrated by wearing protective clothing outside the regulated area that was previously worn in the area or by wearing footwear outside the regulated area that was not properly covered and/or decontaminated. The failure to adequately decontaminate will trigger the following cleaning. In all areas determined necessary by Project Monitor, the Contractor will be required to HEPA vacuum, then wet wash, then HEPA vacuum again all potentially contaminated areas and items to the satisfaction of the Project Monitor. The Project Monitor will not

**EXHIBIT B** 

need to demonstrate the need for this cleaning by the presence of visible dust and will not need to collect settled dust samples in order to require the Contractor to implement the cleaning routine.

# 3.6.6 Approval Prior To Start Of Work

The Project Monitor shall visually inspect any regulated area for compliance with this specification before the contractor and/or subcontractor may begin work that may disturb lead. The contractor and/or subcontractors may not begin work disturbing lead without approval from the Project Monitor. The contractor and/or subcontractor must contact the Project Monitor sufficiently in advance of needing the visual inspection and coordinate with the Project Monitor in order to minimize any delays resulting from the need for this visual inspection.

Typically, once the Project Monitor has reviewed the contractor and/or subcontractors regulated work area set up, the work site supervisor will be told that they may start work at future regulated work areas without prior authorization from the Project Monitor as long as they assure the Project Monitor that the containment and work practices will be implemented as approved by the Project Monitor.

#### 3.7 Wet Work Practices

Unless determined infeasible by the Project Monitor, all disturbance of lead-containing materials must utilize wet methods for dust suppression.

#### 3.8 Prompt Cleanup Of Debris

Removed lead-containing material shall be kept wet and promptly placed in the type of waste containers required by this specification. The Contractor and subcontractors are encouraged to place debris in containers shortly after it has been removed. However, at a minimum, all bulk debris must be containerized before any work stoppages such as for breaks, lunch, or the end of a shift. Bulk debris must be kept adequately wet until it is containerized. The Contractor must plan only to disturb amounts of material that can be cleaned up and containerized before the next work stoppage. Delays and additional costs incurred by the Contractor for failing to adequately calculate the amount of time needed to clean up debris will be the sole responsibility of the Contractor. For example, if a crew must work overtime to containerize debris before ending the shift, those additional costs are the sole responsibility of the Contractor.

The Contractor and/or subcontractor must not allow excessive amounts of dust and debris to gather on the floor containment barriers. If in the opinion of the Project Monitor, too much debris is being allowed to gather on the floor poly, the Project Monitor will require the Contractor or subcontractor to either assign a worker to conduct continual cleanup, or the workers scraping paint or conducting other work disturbing lead will have to contain the debris before it falls to the ground. Typically this is done by scraping paint directly into a cardboard box held by the worker as he or she scrapes off the loose and peeling paint.

#### 3.9 Final Cleanup Of The Work Area

#### 3.9.1 Exterior Work Areas

The Contractor and/or subcontractor must HEPA vacuum up all visible dust and debris off containment barriers. Then gently roll and/or fold poly barriers in on themselves in order to avoid releasing any remaining dust to adjacent areas during this process.

The final step will be to vacuum up any visible dust or debris in the work area or regulated area that is suspected to contain lead. The area must be visually clean of all lead-related dust and debris, and all poly barriers must be removed before the workers leave the job site. The regulated area barrier

**EXHIBIT B** 

tape and/or signs must be taken down. Critical barriers erected on windows and HVAC systems may be left in place if work will take place in those same areas during the next work shift. Otherwise those barriers must also be removed before the workers leave at the end of the shift.

#### 3.9.2 Cleanup Of Interior Work Areas

All cleanup of the interior work area shall be performed using a HEPA vacuum and wet washing techniques. All surface areas in the work area that reasonably could have been exposed to airborne lead must be HEPA vacuumed and/or wet washed. This includes wall surfaces when the work included ceramic tile demolition. Ceilings must also be cleaned if the ceilings are less than five feet above the area where ceramic tiles were disturbed. For example, if the ceramic tile wainscoting extended six feet up the wall, and the ceiling is at eleven feet or lower, the ceiling will need to be vacuumed. If, however, the ceiling is above eleven feet, it will not need to be cleaned. This is based on the assumption that lead dust is unlikely to migrate up more than five feet. If in the judgement of the supervisor or Project Monitor the ceiling may be contaminated, the ceiling shall be cleaned regardless of how far it is above the disturbance of the tile.

#### 3.10 Final Inspection Of The Work Area

The Project Monitor will inspect work areas for visual signs of dust and debris related to the disturbance of lead. The Project Monitor will not inspect or evaluate the quality of paint preparation work such as paint scraping. The contractor who will be painting the prepared surfaces is responsible for the quality and workmanship of the surface preparation. However, if the work involves the removal of loose and peeling paint prior to the demolition of a structure, the Project Monitor will evaluate the completeness of that work.

For exterior work, the Project Monitor will visually inspect the work area to determine that there is no visible dust or debris still in the area that is reasonably expected to have been generated by the work. All poly barriers (except for on critical barriers in areas needed for the next shift) and barrier tape and signs must be removed.

Until told otherwise by the Project Monitor, the supervisor must notify the Project Monitor in advance of the end of the shift in order for the Project Monitor to visually inspect the work area prior to the workers leaving for the day. Typically this will not be required after the workers demonstrate that they consistently properly clean the work area before leaving.

For interior work, the Project Monitor will conduct a thorough visual inspection for dust and debris that may be related to the disturbance of lead. All surface areas must be clean. Residue dust will be assumed to contain lead and must be cleaned.

Until told otherwise by the Project Monitor, the supervisor shall notify the Project Monitor when the supervisor believes the work is complete and ready for a visual inspection. Prior to calling the Project Monitor for the visual inspection, the supervisor must personally inspect the area and determine that it is clean and ready for a final inspection.

The Project Monitor typically will not collect dust wipe samples to verify the cleanliness of an area unless specifically stated otherwise elsewhere in these specifications. However, dust wipes may be collected in either of the following circumstances. In both cases the supervisor will be told of the possibility of the collection of dust wipes and encouraged to conduct extra cleaning of the areas.

a. Ceramic Tile Removal Closely Adjacent To Kindergarten Classrooms, Daycare Facilities, or Food Preparation Areas Including Kitchens and Eating Areas.

#### **EXHIBIT B**

The Project Monitor is likely to conduct dust wipe sampling on the floor in the area between the decontamination unit and occupied areas of the property where children under the age of six routinely may be present. The supervisor will be told in advance that this testing will take place and is encouraged to clean the area between the decontamination area and where the sample will be collected. This sample will be collected within 20 feet of the decontamination chambers unless the Project Monitor believes that poor work practices or decontamination procedures have contaminated the area as discussed below.

b. Failure To Comply With Work Practices, Engineering Controls, Or Decontamination Procedures

If in the judgement of the Project Monitor, the Contractor and/or subcontractor has not followed the requirements of this specification regarding work practices, engineering controls, and decontamination procedures, the Project Monitor will collect dust wipe samples in areas believed contaminated by the Contractor or subcontractors' actions. The supervisor of the project will be told in advance if such testing will be conducted and given time to clean those areas. For example, Part 3.6.5. describes actions that will lead to additional cleaning by the Contractor.

Should dust wipe sampling be necessary, the Project Monitor will conduct such testing with the specified intent of verifying whether the containment process and decontamination processes used by the Contractor and/or subcontractor were adequate in preventing the release of lead dust from the work area. The samples will be collected according to the procedures required in Title 17. The containment will be judged appropriate if the results of the samples do not indicate a dust lead hazard for floors as specified in Title 17.

#### 3.11 Power Washing of Exterior Building Surfaces

For the purposes of this procedure power washing is defined as the use of a low pressure "power washer" to rinse and/or wash stable, painted or coated surfaces to remove dust, dirt, grime, and other foreign matter in preparation for re-painting. In no circumstance is this to be construed as water blasting, and is not intended nor shall be used to remove lead-containing paints or coatings from surfaces. Loose and peeling paint must be removed by the other methods described in this specification before power washing may be conducted. Should power washing begin to release paint from the substrate, the Contractor must stop the power washing process and remove the loose material following the procedures described in these specifications.

# 3.11.1 Waste Water Discharge Permits

Many local sanitation districts require the completion and submission of a waste discharge permit prior to allowing the use of power washers. Therefore, prior to performing power- wash operations, the Contractor must obtain a Wastewater Discharge Permit for Surface Washers, if required, from the local Sanitation District, Water Quality Division; Industrial Waste Section, and adhere to the permit requirements. It is the Contractor's responsibility to obtain and properly fill out a current copy of this permit if it is required.

#### 3.11.2 Required Work Practices For Power Washing

Where power washing of exterior surfaces of buildings coated with lead-containing paint(s) or seal coats is specified, or in those areas where the Contractor opts to use power washing to prepare surfaces, all of the following conditions must be met prior to uncontrolled washing without waste water control/collection measures. The following test is conducted prior to allowing the beginning of full power washing in order to verify that measurable amounts of lead are not being released by the

**EXHIBIT B** 

washing process. Once it is determined that the washing process does not release lead, the Contractor will be allowed to proceed with power washing with only minimal additional requirements.

- a. The Contractor in coordination with the Project Monitor shall select a minimum of one test area typical of the surfaces to be power washed. This area shall be100 or more square feet in area. On some sites where the building surfaces are different, the Project Monitor may require more than one area to be tested.
- b. The Contractor shall construct a floor containment for the test areas. The containment must be designed to capture and collect all wash water and any paint chips generated during the assessment. Typically the Contractor simply needs to use poly on the ground to create a basin like effect which will capture the spray water.
- c. The Project Monitor will first collect a sample of source water such as from the hose tap. The Contractor will then be asked to power wash the test area in a similar manner as to how the building as a whole will be power washed. Work shall be halted if the washing process causes delamination of paint from the test area surfaces. Modifications to the methods and work practices shall be made prior to resumption of power washing and these modifications must be approved by the Project Monitor prior to their implementation.
- d. The Project Monitor will collect one or more samples of the water runoff that was captured by the Contractor following power washing the test area. As long as there are no visible paint chips in the water and/or the amount of water is not excessive, the Contractor may release the captured water as long as it is absorbed by landscaping or will evaporate. No waste water resulting from power washing operations may be allowed to drain into any storm drain as required by the State of California.
- e. The Project Monitor will send these samples to a laboratory for lead in water analysis. The sample results for the source water will be compared to the water runoff sample. If similar amounts of lead are present in each, the power washing process is unlikely to release lead into the water or surrounding area. The power washing process should not release lead as long as loose and peeling paint was removed prior to the start of power washing.
- f. The Owner will pay for the collection of these water samples and their laboratory analysis.
- g. The Project Monitor will notify the Contractor as soon as the results of the testing process are known. The Project Monitor and the Contractor will need to discuss alternatives to power washing in the unlikely situation that the water test shows lead contamination in the runoff water.
- h. The Contractor shall assume that the testing and water analysis process will take a total of three work days. For example, if the test is done on the morning of the first day, the water samples will arrive at the laboratory on the morning of the second day. The results of the sampling process will be available on the afternoon of the third day. Since no power washing will be allowed until this testing process shows acceptable results, the Contractor must build this testing process into the work schedule. The Contractor may choose to accelerate the testing process but this will mean that the Contractor, rather than the Owner, will pay for the transportation of the samples to the laboratory and for the rush laboratory analysis. Even under "rush" conditions, it is very unlikely that the entire process could be completed in one day. The Contractor may want to schedule the testing process prior to the completion of other paint preparation work in order to have the results by the time the paint preparation work is complete.

**EXHIBIT B** 

- I. Upon receiving approval to begin power washing, the Contractor will be allowed to proceed power washing the building. The Contractor must, however, notify the Project Monitor 24 hours in advance of the beginning of power washing in order for the Project Monitor to monitor the process should he or she feel that is appropriate.
- j. Employee protective measures such as disposable clothing and respirators will not be required as power washing is not likely to result in airborne exposures of lead above the Action Level.
- k. Waste water produced from power washing operations which does not contain chips of paint may be allowed to soak into the ground below the area being washed. If the area located below or around the surface to be washed does not allow for absorption into the ground, the water must be directed toward an area on the property that will allow for absorption into the ground or evaporation. The Contractor must take steps to ensure that no waste water enters storm drains regardless of the lead content of the water.

#### 3.12 Lead Waste Management

Proper testing and disposal of all waste material is the responsibility of the Contractor.

The Contractor must plan the work in order to minimize the generation of hazardous waste during the disturbance of lead-containing materials. The Contractor must create separate waste streams as necessary to include separation of any loose paint chips or flakes debris from other construction debris. All waste streams must be identified by the Contractor before the work begins and separated during the course of the project to minimize costs of disposal.

The Contractor is responsible for all costs associated with the testing, removal, packing, loading, shipping, and disposal of lead containing waste generated during this project. This does not include waste water testing done to determine if power washing is permitted which will be covered by the Owner.

The Contractor is required to comply with all regulations in Title 8 Section 1532.1 Lead in Construction and Cal/EPA Title 22 for waste classification and disposal.

#### 3.12.1 Lead Waste Testing

The Contractor must conduct appropriate waste stream characterization testing and/or filtering prior to disposal of waste products such as water, sand, paint chips, vacuum debris, and filters generated during surface preparation activities. Once completed, the test analysis results must be submitted to the Owner and/or Project Monitor for review. The Contractor is responsible for all costs associated with waste stream testing. Contractors may choose to avoid some waste testing by presuming that the waste is a lead hazardous waste. Waste must be tested if the Contractor wishes to treat it as a non-hazardous waste.

The Contractor may not remove or dispose of the identified materials from the job site until this review has been completed and the Contractor has been informed by the Owner and/or Project Monitor of their concurrence that the materials have been properly tested and meet the requirements allowing the materials to be classified as non-hazardous.

#### 3.12.2 Uniform Hazardous Waste Manifests

For all hazardous waste that requires an EPA manifest, the Contractor must coordinate with the Owner for signature of the manifest. In general, the Contractor must notify the Owner a minimum of

**EXHIBIT B** 

24 hours in advance of the need for a signature. Hazardous waste cannot be transported without an authorized signature so it is the responsibility of the Contractor to coordinate with the Owner the time waste transporters will need the signature. Delays resulting from the failure of the Contractor to obtain an authorized signature from the Owner will be the sole responsibility of the Contractor, unless the Owner was provided 24 hour in advance notice and the transporter arrived on time during the regular work hours of the Owner.

#### 3.12.3 Waste Containers

All debris generated in the regulated work area shall be placed in DOT approved containers. The containers shall be leak tight and meet the requirements as stated in these specifications.

If in the judgement of the Project Monitor, the Contractor's method of containerizing debris is inadequate and either results in the release of dust or debris or is reasonably expected to result in such a release, the Contractor will be forbidden to continue waste containerization or load out until the containers meet the approval of the Project Monitor. This may result in the Contractor being required to change from one type of container to another. It must be understood that the Contractor is responsible for proper containerization of waste and therefore, will be required to provide for adequate and appropriate containers regardless of cost incurred due to failure of one system of containerization being required over another.

If utilizing bags to contain lead hazardous waste, two bags at least six-mil in thickness must be used. The inner bag may be sealed with adequate amounts of tape necessary to secure the opening of the bag. Only the second or final bag must be gooseneck sealed.

Regardless of the wastes characterization or designation as construction debris or hazardous waste, all waste containers shall be stored in designated and secure areas separate from the work area prior to testing and/or disposal.

The Contractor is responsible for proper storage and labeling of all hazardous waste containers while they are being used as storage and before they leave the job site according to the requirements of DTSC and DOT.

Building components such as wood with loose and flaking paint must, at a minimum, be wrapped in one layer of six-mil poly and adequately sealed with tape to secure the containerized material.

Concentrated lead waste such as sludge from paint stripping operations, lead containing paint chips and/or dust, HEPA vacuum contents and filters must be assumed to be hazardous waste until properly tested and must, at a minimum, be placed in poly lined, DOT approved drums.

Hard edged materials such as floor tile, gypsum board, plaster, stucco, ceramic tile, and other materials that may tear bags must be assumed to be hazardous waste until properly tested and must, at a minimum, be placed in poly lined, ridged-walled containers such as fiber drums or cardboard boxes as the final container.

Sharp edged components with peeling, blistering or flaking paint (e.g., nails, screws, metal lath, tin sheeting, door frames, etc.) must, at a minimum, be wrapped in one layer of six-mil poly sheeting, or a single six-mil thick bag and adequately sealed with tape to secure the containerized material.

**EXHIBIT B** 

#### 3.13 Alternative Work Plans

The Contractor and/or subcontractors may submit alternate work plans to the suggested work practices and containment strategies as stated in these specifications. These alternate work plans or containment strategies must be approved by Owner and/or Project Monitor prior to their implementation.

#### PART 4.0 DOCUMENTATION SUBMITTAL REQUIREMENTS

#### **Pre-Start Submittal Form**

This form must be completed, signed, and submitted with the Contractor and/or subcontractors' documents required prior to the start of work. This form and these documents must be submitted to the Owner and/or Project Monitor in the time specified in the project documents prior to the start of work disturbing lead.

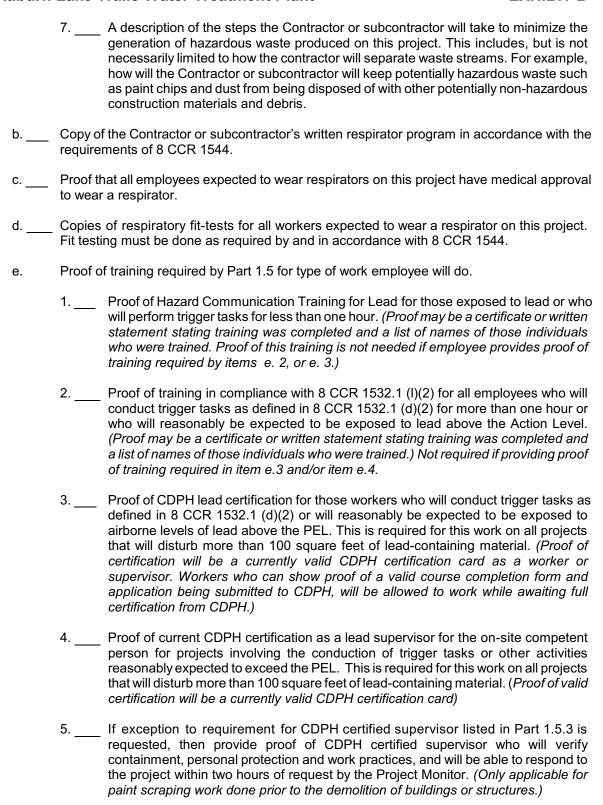
Please attach submittals in the order listed below. Please check off each item that is submitted. Write NA in spaces for which you believe the requirement is Not Applicable.

All Contractors and subcontractors who will have employees disturb lead on this project must, at a minimum provide proof of item number 1.6.1.e.1., lead hazard communication training in compliance with 8 CCR 1532.1 (L)(A)(1). This is the only submittal that must be provided by these employers as long as they do not disturb more lead than is described in Part 1.5.1.

The following submittals must be provided by all Contractors and subcontractors who will, at a minimum, have employees who will conduct trigger tasks for more than one hour per shift, will potentially be exposed above the Action Level, or will conduct other activities as determined by the Project Monitor that may result in significant exposure to lead.

_		A written lead compliance plan in compliance with 8 CCR 1532.1 must be provided that ncludes the following:		
	1	A description of equipment and materials, controls, crew size, job responsibilities, and operations and maintenance procedures for each activity in which lead is disturbed and potentially emitted;		
	2	A description of specific control methods (wet methods, engineering controls, etc.) that will be used to ensure workers are not exposed above the PEL;		
	3	Technology considered in meeting the Cal/OSHA PEL;		
	4	Air monitoring data documenting sources of lead emissions;		
	5	A detailed implementation schedule for the compliance plan, including the schedule for inspections by a competent person;		
	6	A description of the lead work practice program which will be used to control worker exposures. This includes the use of protective work clothing, equipment, hygiene facilities and practices, and housekeeping practices;		

#### **EXHIBIT B**



**EXHIBIT B** 

	regulations for painting activities.				
f	Copies of all current SDS for chemicals used on this project.				
g	Manufacturers' certifications that high efficiency particulate air (HEPA) vacuums, pressure differential units and other local exhaust ventilation equipment conform to ANSI Z9.2-79 for all HEPA-filtered equipment that will be used on this project.				
h	Name and contact information of independent testing company who will challenge test all vacuums and air filtration devices used on this project (in interior spaces).				
l	Name and contact information for laboratory who will analyze air samples or waste samples and documentation of their certification to conduct such analysis.				
j	Name of Waste Transporter who will transport hazardous waste on this project and documentation that the Transporter is allowed to transport lead hazardous waste.				
k	Name of Waste Landfill to which lead hazardous waste will be sent and documentation that such landfill is allowed to accept such waste.				
l	Should waste water filtration be required on this project, submit manufactures documentation pertaining to the capability of waste water filters to filter particles of, at a minimum, five micrometers in size.				
m	List of all rented equipment to be used within a lead regulated area, or a statement that no rental equipment will be used on this project.				
	1 If rental equipment is to be used, submit written statements from each rental company indicating the rental company's acknowledgment that the equipment is provided for and may be used in areas where airborne levels of asbestos and/or lead may be present.				
n	Submit emergency plans. At a minimum submit the following:				
	1 Submit non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments.				
	2 Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor.				
	3 Submit detailed written directions from the project site to the medical facility to be used in case of an emergency. Include a map which sufficiently shows the route to be taken from the site to the designated medical facility.				
	4 Submit written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.				
0	Local sanitation district Wastewater Discharge Permit for Surface Washers (if required).				

Old A	Auburn I	Lake T	rails \	Water	Γreatment	: Plant	ţ	

**EXHIBIT B** 

p.\_\_\_\_ Cal OSHA Notification. This is required for this work on all projects that will disturb more than 100 square feet of lead-containing material.

The above listed documents must be provided in the time specified in the project documents prior to the start of work that will disturb lead. Under no circumstances will workers or supervisors be allowed to work on this project prior to the receipt of this documentation by the Owner and/or Project Monitor. All delays resulting from the failure of the Contractor and/or subcontractors to provide this information in the required time frame is solely the responsibility of the Contractor and/or subcontractor.

Name, Signature, and Contact Information of Contractor's Personnel Completing Pre-Start Submittal Package

NAME:
(Print or Type)
SIGNATURE:
Telephone:
Fax:
Mailing Address:

# This Specification was Developed By:

Andy Roed CDPH #29001 5-25-2021 Phone: (916) 632-6800 Fax: (916) 632-6812

**EXHIBIT B** 

# PART 5.0 RESULTS OF LEAD TESTING

Paints/Coatings/ Materials Determined to be Lead Based Paint (LBP)				
Paint/Coating Color or Material	Lead Content (ppm)	Component/Location		
Blue Paint	37,000	Metal Piping		

LBP - Materials/coatings/paints meeting the definition of lead-based paint as defined by the CDPH and the US EPA, currently defined as containing lead in concentrations equal to or greater than 1.0 mg/cm², 5,000 ppm, or 0.5% by weight.

Paints/Coatings/ Materials Determined to be Lead Containing Paint (LCP)					
Paint/Coating Color or Material	Lead Content (ppm)	Component/Location			
Blue Paint	69	Interior Drywall Walls			
Gray Paint Over Multi Layers	50	Concrete Floors Throughout			
Light Blue Paint	72	Electrical Equipment			
Dark Brown Paint	130	Exterior Wood Siding			
Beige Paint	140	Metal Filter Tanks			

A lead in paint inspection was conducted by Entek Consulting Group, Inc. for the old pump house, three filter tanks and water storage tank and a report was prepared on 5-21-2021.

C:\Users\andy\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Specifications\Lead in Construction Specs 4-6-21.wpd

Other Hazardous Materials Requirements

**EXHIBIT C** 

# OTHER HAZARDOUS MATERIALS

# POLYCHLORINATED BIPHENYLS (PCB's) LIGHT BALLAST HANDLING PROCEDURES

The Contractor may be instructed to remove light fixtures which contain light ballasts during demolition/ renovation activities specified in the contract documents. These light ballasts typically contain PCBs in the oil used as coolant and lubricant. Any ballast containing PCBs is to be considered a "Hazardous Waste", and the Contractor is responsible for ensuring personnel who perform PCB related work (inspection, removal, clean-up) are trained and qualified to do so. All workers must also follow current OSHA regulations including 29 CFR 1910.120 and 8 CCR 5192, as well as other applicable federal, state and local laws and regulations.

# **PCB Light Ballasts**

All light ballasts manufactured through 1978 are magnetic ballasts which contain PCBs. Installation of ballasts manufactured prior to 1978 continued for several more years. As a result it can be expected that any building constructed before 1980 which has not had a complete lighting retrofit is likely to have PCB containing ballasts. Therefore, unless the ballast is electronic (this type is PCB free), determined by testing not to contain PCBs, or the manufacturers label on the ballast states "No PCBs", it is assumed all light ballasts on this site contain PCB's, and must therefore be handled as a hazardous waste by the Contractor. The Contractor may have other options for disposal of any light ballasts found not to contain PCB's.

# **Light Ballast Inspection**

Contractor should disconnect all power and de-energize all electrical equipment to be impacted prior to performing inspection of electrical devices scheduled for removal or replacement. This de-energizing should be performed by or under the supervision of a licensed electrician. Contractor shall inspect each ballast prior to its removal to determine if the ballast is leaking, if oily residue is present on the exterior of the ballast or the ballast has been damaged resulting in a leak. Upon discovering and prior to removal of any oil coated, leaking, or damaged ballast Contractor shall contact Owners representative to discuss work procedures, waste requirements, etc.

# **Handling Work Practices of Undamaged Light Ballasts**

Handling of ballasts shall be consistent with existing ballast conditions. While a ballast may not initially indicate any damage or leakage to be present, it may become damaged or begin to leak for any number of reasons during the removal and handling process. Any skin contact will probably constitute overexposure to PCBs since they are easily absorbed through the skin. It is recommended any personnel who will perform PCB related work should at a minimum wear protective clothing, including chemically-resistant gloves, goggles, boots, and disposable coveralls.

# **Handling Work Practices of Damaged Light Ballasts**

Handling of damaged ballasts shall be performed in a manner consistent with existing and current federal, state and local laws and regulations. Clean-up of spills, or contaminated surfaces will require the use of specifically trained and properly protected personnel utilizing state of the art work practices, removal equipment, and materials. The Owners representative must be notified prior to the performance of this type of work.

**EXHIBIT C** 

### **PCB Containing Waste**

All PCB containing light ballasts, removed by the Contractor, shall be placed in leak tight approved containers (metal barrels) until they are removed from the site by a waste transporter permitted to haul hazardous materials. Barrels must not be loaded in excess of their approved capacity. For most barrels this is 750 pounds. No other materials except, a sufficient amount of absorbent packing material, shall be included with the light ballasts.

The Contractor should contact their waste hauler prior to the start of work for information pertaining to recommendations or the waste haulers stated requirements for packing PCB containing ballasts. However, at a minimum, the absorbent packing material should be added to the bottom of the waste barrel prior to the first ballast. Absorbent packing material should then be added intermittently as necessary to encase the ballasts as the waste barrel is being filled. When the waste barrel is filled, or no more light ballasts will be added, additional absorbent packing material should be added to completely cover the ballasts and the container then sealed.

Contractor is also responsible for appropriate labeling of waste barrels and securing of lids to meet federal and/or state requirements while being stored on the site.

All leaking or damaged ballasts must be handled in accordance with federal and state disposal requirements and shall be separated from undamaged ballasts in preparation for incineration at an appropriately licensed facility.

The Contractor is responsible for all costs associated with the removal, packing, loading, shipping, and disposal of each barrel of waste generated during this project. The Contractor is also responsible for obtaining and properly completing any Uniform Hazardous Waste Manifests needed for the disposal of PCB waste. However, the Contractor **SHALL NOT** sign any Uniform Hazardous Waste Manifests for the Owner.

# **Non-PCB Light Ballasts**

Non-PCB light ballasts are considered a hazardous waste in California and the contractor is responsible for collection, packaging, labeling, and holding this waste stream for proper disposal. Non-PCB light ballasts shall be shipped for disposal or recycle by the Contractor.

# **UNIVERSAL WASTE LAMP HANDLING PROCEDURES**

The Contractor may be instructed to remove light fixtures which contain lamps which are designated as "Universal Waste" during demolition/renovation activities specified in the contract documents. If the Contractor is instructed to remove such fixtures the following handling procedures shall be followed.

# **Universal Wastes**

Universal wastes are hazardous wastes that are more common and pose a lower risk to people and the environment than other hazardous wastes. Federal and State regulations identify universal wastes. The regulations, called the "Universal Waste Rule," are in the California Code of Regulations (CCR), title 22, division 4.5, chapter 23.

**EXHIBIT C** 

### **Universal Waste Lamps**

Universal Waste Lamp, also referred to as "lamp" is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps. Any lamp which is not spent and has been designated to be reused is not classified as a waste and does not meet the requirements of a hazardous waste or a universal waste.

# **Mercury-added lamps**

Mercury-added lamps (effective February 9, 2004): Fluorescent tubes and several other types of lamps (not incandescent light bulbs) contain a small amount of mercury that is necessary for their operation. Currently, most fluorescent lamps contain enough mercury to be a hazardous waste.

# **Universal Waste Lamp Disposal**

Spent lamps typically contain concentrations of mercury exceeding the established Total Threshold Limit Concentration and/or the Soluble Threshold Limit Concentration values. Therefore, these lamps must be sent to an authorized recycle facility, or to a universal waste consolidator for shipment to an authorized recycling facility.

At a minimum the lamps must be packaged in boxes/packages/containers which are structurally sound, adequate to prevent breakage, and compatible with the content of the lamps. These packages must remain closed and be free of damage which could cause leakage under reasonably foreseeable conditions.

Each container shall be labeled or marked clearly with one of the following phrases: "Universal Waste–Lamp(s)," or "Waste Lamp(s)." or "Used Lamp(s)".

Documentation in the form of a log, invoice, manifest, bill of lading or other shipping document is required to be submitted to the Owner's Representative for each shipment of waste from the project site. This documentation shall include: name and address of generator and address of site waste is generated on, quantity of lamps to be shipped, date of shipment, name and address of hauler, and name and address of waste facility receiving the waste.

# **Hazardous Waste Designation**

Any lamp which is not designated for recycling or continued use in a different fixture for which the lamp is manufactured for use in must be handled, managed, and disposed of as a hazardous waste in accordance with Cal/EPA Title 22. Since all spent lamps are required to be recycled the Owner will not approve of the disposal of lamps as hazardous without consultation and review of the specific circumstances which warrant this change in designation.

**EXHIBIT C** 

### **MERCURY SWITCHES**

Thermostat switches that contain mercury are considered a hazardous waste if removed and disposed. Where the contract requires removal of thermostat switches, the contractor shall follow all requirements for packaging and disposal of these mercury containing wastes.

# SMOKE DETECTORS WHICH MAY CONTAIN A RADIOACTIVE ELEMENT

The Contractor shall be responsible for the removal of any and all smoke detectors which may contain a radioactive element, which may be present in any building or corridor prior to the demolition of any building included in this project. These types of detectors are easily identified by reviewing the label which is usually found on the back of the detector. Older units may display the international radiation symbol (three bladed propeller) and the radioactive content. Newer units state the radioactive content and their Nuclear Regulatory Agency (NRC) license number.

The Contractor shall be responsible for contacting the manufacturer of any smoke detector with a radioactive element present to determine their return policies. The California Department of Toxic Substance Control (DTSC) has stated that it is a condition of the manufacturers NRC license that they must accept returned units for disposal. The Contractor shall be responsible for all costs associated with removing, packaging, and shipping of the detectors in compliance with the manufacturers policies and procedures.

Contractor shall submit to the Owner a letter from the manufacturer which includes the number of units received, date received, and acceptance of the shipment for disposal by that manufacturer.

# **Additional Waste Management Requirements**

The Contractor is responsible for managing lamps in a manner which prevents release of any universal waste or component of a universal waste to the environment. The Contractor is also responsible for the immediate clean up of materials (mercury or other hazardous constituents) released by a lamp broken during removal or otherwise damaged while being handled into a container or containers designed to accommodate the resulting waste and its contents.

The Contractor is responsible for training employees in proper handling, packaging, storing and labeling the universal waste, as well as, how to respond to releases (66273.13). This may be accomplished by providing employees written instructions or posting these instructions in the area where the universal waste lamps are being stored.

The Contractor is responsible for all costs associated with the removal, packing, loading, shipping, clean up and disposal of hazardous materials removed during this project, and any waste generated due to breakage during this project. The Contractor is also responsible for obtaining and properly completing any Uniform Hazardous Waste Manifests needed for the disposal of lamp waste. However, the Contractor **SHALL NOT** sign any Uniform Hazardous Waste Manifests for the Owner.

**EXHIBIT C** 

The following information shall be used when completing a Uniform Hazardous Waste Manifest used to dispose of hazardous waste generated at this site during this project.

# **Old Auburn Lake Trails Water Treatment Plant:**

Block #1 (Generator's US EPA ID No.)

**TBD** 

Block #3 (Generator's Name and Address) and Block #4 (Generator's Phone Number)

**TBD** 

Block #15 (Special Handling Instructions and Additional Information)

**TBD** 

It **SHALL** be the responsibility of the Contractor to contact the Owner in advance of the scheduled pick up time and date so the waste materials can be visually inspected for proper packing, and to have the Uniform Hazardous Waste Manifest properly signed by a Owner representative.

# **MOLD CONTAMINATED BUILDING MATERIALS**

During the course of conducting the construction related project, the contractor may discover water damaged building components which may also have visible or suspect mold on building materials. Mold can be harmful to humans depending upon the amount of exposure and type of exposure; therefore, it is incumbent of the contractor to take precautions in the event of the discovery of mold contaminated building materials.

If mold contaminated building materials are discovered on the project, it should be brought to the attention of the project manager. In addition, any structural wood members should also be closely examined for possible dry rot and decay and brought to the attention of the project manager. Precautions should be implemented by the contractor to protect his/her employees from exposures to mold from both skin contact and inhalation exposures. Employees should be trained in accordance with the Cal/OSHA Hazard Communication Standard for mold hazards.

If this project involves asbestos related work, the work practices and worker protection for asbestos is very similar to mold related work. Workers performing asbestos related demolition of building components are required to be protected in accordance with Cal/OSHA Title 8 1529 Asbestos in Construction regulations. Workers performing asbestos related work are required to wear respirators with P-100 (HEPA) filters, and whole body disposable coveralls while removing the building materials within negative pressure HEPA filtered work enclosures. These same asbestos work practices defined in Title 8 1529 and in other specifications for this project shall apply to any mold contaminated building materials.

Any mold contaminated building materials shall be removed from the work environment in sealed bags. If the building materials have been determined to contain asbestos, the default criteria for handing, packaging, labeling, and disposal of the waste material shall be the Cal/OSHA, Federal EPA, and D.O.T. regulations for asbestos waste. If the mold impacted materials have been determined not to contain asbestos, the materials shall be placed in sealed six mil plastic bags and can be disposed as non-hazardous waste. If the mold impacted building components are painted, lead in the paint may be the determinant for disposal. Refer to the Lead in Construction specifications for handling of painted components for lead waste issues.

**EXHIBIT C** 

### **FREON**

All refrigerant systems at the buildings containing Freon and other fluorocarbon products associated with heating, ventilating, and air-conditioning (HVAC) systems, or freezers, refrigerators, etc. if removed in the planned renovation or demolition project, shall be removed from the mechanical systems and recycled in accordance with Cal/EPA requirements.

### **CRYSTALLINE SILICA**

Cal/OSHA Title 8 1532.3. Occupational Exposures to Respirable Crystalline Silica require all employers to control employee exposures to silica dust during construction related activities. The contractor is responsible for following all of the requirements in the silica regulations established by Cal/OSHA in Title 8 section 1532.3. Below are some of the key components related to engineering controls specific to different tasks. Below are excepts from the silica standards; however, the contractor shall familiarize themselves with all of the requirements in this regulation.

(C) Specified exposure control methods. (1) For each employee engaged in a task identified on Table 1, the employer shall fully and properly implement the engineering controls, work practices, and respiratory protection specified for the task on Table 1, unless the employer assesses and limits the exposure of the employee to respirable crystalline silica in accordance with subsection (d).

All employers shall refer to "Table 1 - Specified Exposure Control Methods When Working With Materials Containing Crystalline Silica" which identify the specific Equipment/Task, required Engineering and Work Practice Control Methods, and the required respiratory protection based on number of hours for the specific tasks. The contractor shall implement at least one of the work practices and control measures for the work activity they chose to implement.

- (3) Where an employee performs more than one task on Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.
- (2) When implementing the control measures specified in Table 1, each employer shall:
- (A) For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;
- (B) For tasks performed using wet methods, apply water at flow rates sufficient to minimize release of visible dust:
- (C) For measures implemented that include an enclosed cab or booth, ensure that the enclosed cab or booth:
- 1. Is maintained as free as practicable from settled dust;
- 2. Has door seals and closing mechanisms that work properly;
- 3. Has gaskets and seals that are in good condition and working properly;
- 4. Is under positive pressure maintained through continuous delivery of fresh air;
- 5. Has intake air that is filtered through a filter that is 95% efficient in the 0.3-10.0 µm range (e.g., MERV-16 or better); and
- 6. Has heating and cooling capabilities.
- (d) Alternative exposure control methods. For tasks not listed in Table 1, or where the employer does not fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1:

**EXHIBIT C** 

- (1) Permissible exposure limit (PEL). The employer shall ensure that no employee is exposed to an airborne concentration of respirable crystalline silica in excess of 50 µg/m³, calculated as an 8-hour TWA.
- (2) Exposure assessment.
- (A) General. The employer shall assess the exposure of each employee who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level in accordance with either the performance option in subsection (d)(2)(B) or the scheduled monitoring option in subsection (d)(2)(C).
- (B) Performance option. The employer shall assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to respirable crystalline silica.
- (C) Scheduled monitoring option.
- 1. The employer shall perform initial monitoring to assess the 8-hour TWA exposure for each employee on the basis of one or more personal breathing zone air samples that reflect the exposures of employees on each shift, for each job classification, in each work area. Where several employees perform the same tasks on the same shift and in the same work area, the employer may sample a representative fraction of these employees in order to meet this requirement. In representative sampling, the employer shall sample the employee(s) who are expected to have the highest exposure to respirable crystalline silica.
- 2. If initial monitoring indicates that employee exposures are below the action level, the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring.
- 3. Where the most recent exposure monitoring indicates that employee exposures are at or above the action level but at or below the PEL, the employer shall repeat such monitoring within six months of the most recent monitoring.
- 4. Where the most recent exposure monitoring indicates that employee exposures are above the PEL, the employer shall repeat such monitoring within three months of the most recent monitoring.
- 5. Where the most recent (non-initial) exposure monitoring indicates that employee exposures are below the action level, the employer shall repeat such monitoring within six months of the most recent monitoring until two consecutive measurements, taken seven or more days apart, are below the action level, at which time the employer may discontinue monitoring for those employees whose exposures are represented by such monitoring, except as otherwise provided in subsection (d)(2)(D).

# Prepared By:

Andy Roed, President Entek Consulting Group, Inc. 5-25-2021

C:\Users\andy\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Specifications\Other Haz Mat Req 7-2-19.wpd

# Exhibit D

Hazardous Materials Survey Final Report

Fax (916) 632-6812 www.entekgroup.com

# HAZARDOUS MATERIALS SURVEY FINAL REPORT

# **CLIENT**

Coastland Civil Engineering, Inc. 11641 Blocker Drive, Suite 170 Auburn, CA 95603

# **CONTACT**

Asa Utterback, PE Senior Engineer

# **SURVEY ADDRESS**

Auburn Trails WTP 3650 Sweetwater Trail Cool, CA 95614

# **BUILDINGS SURVEYED**

Old Auburn Lake Trails Water Treatment Plant
Demolition Project
Old Pump House, Filter Tanks, Water Tank

# **PREPARED BY**

Andy Roed
CAC #16-5695 & CDPH I/A #29001
Entek Consulting Group, Inc.
4200 Rocklin Road, Suite 7
Rocklin, CA 95677

Entek Project #21-5820

May 21, 2021

ASBESTOS LEAD MOLD INDOOR AIR QUALITY NOISE MONITORING TRAINING HEALTH AND SAFETY AUDITS



# TABLE OF CONTENTS

Executive Summary	3
Introduction	4
Building Description	5
Asbestos Inspection and Sample Collection Protocols	5
Asbestos Bulk Sample Results	5
Asbestos Regulatory Requirements	7
Lead Inspection and Sampling	7
Lead Regulatory Compliance	8
Fluorescent Light Tubes and Polychlorinated Biphenyls (PCBs)	9
Thermostats With Mercury Switches	10
Freon and Fluorocarbons	10
Smoke Detectors Which May Contain a Radioactive Element	10
Limitations	10

# Appendices

- A. Asbestos Related Documents
- B. Lead Related Documents
- C. Backup Documentation



# **Executive Summary**

Entek Consulting Group, Inc. (Entek) was contracted to conduct an investigation for hazardous materials specific to areas designated by the Owner or drawings provided by the Owner for the planned project. The investigation included an assessment of the following:

- Asbestos Materials
- Lead in Paint, Coatings, Ceramic Products and other Construction Components
- Fluorescent Light Tubes
- Light Ballasts
- Polychlorinated Biphenyls (PCB)
- Mercury Containing Thermostats and Switches
- Smoke Detectors with Radioactive Americium 241
- Exit Signs with Radioactive Gas Tritium
- Freon

Entek did not specifically inspect for mercury containing fluorescent light tubes or light ballast which may contain polychlorinated biphenyls (PCBs), thermostats which may contain mercury switches, equipment or systems which may contain Freon or other fluorocarbons, or smoke detectors which may contain a radioactive element. However, information pertaining to these materials is included in this report for your use and reference, since these light systems are present on the project.

The purpose of the inspection was to comply with the US EPA NESHAP and the California Air Resource Board (CARB) requirements which have jurisdiction for this project site to determine if asbestos containing materials are present which may be impacted during an upcoming demolition project.

The United States Environmental Protection Agency, National Emission Standards for Hazardous Air Pollutants (US EPA NESHAP), 40 CFR Part 61 - Nov. 20, 1990, requires an owner or operator of a demolition or renovation project to thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos-containing materials (ACM) prior to the commencement of that project.

This inspection was requested by Asa Utterback, Senior Engineer with Coastland Civil Engineering. This project includes the demolition of a water storage tank, three (3) filter tanks, and the pump house.

The attached drawing shows approximate sample locations. Materials are classified in the tables of this report as Regulated Asbestos Containing Material (RACM), Category I (CAT-I) or Category II (CAT-II) ACM, or Asbestos Containing Construction Material (ACCM).

The report must be read in its entirety prior to making any interpretations, or conclusions pertaining to the information. Any conclusions made by the reader about the information provided in the body of this report which are contradictory or not included in this report are the responsibility of the reader.



# Asbestos

On May 3, 2021, Entek conducted an investigation specific to areas designated by Asa Utterback which included a water storage tank, three (3) filter tanks, and the pump house.

The results of testing for asbestos during this survey indicate asbestos is present in the following material:

 Black/Gray Fibrous Gasket on pipe systems on the interior and exterior of the pump house. (Note: Multiple gasket types are present, however only this one was determined to contain asbestos – see photo log)

# Lead

Entek investigated existing paints, applied coatings and glazed ceramic tiles in an effort to determine if lead was present in these materials. In brief the Blue paint over on piping was determined to contain more than 5,000 ppm or 1.0 mg/cm² lead and is classified as lead-based paint (LBP). If more than 100 square feet of these paints, coatings, or glazed ceramic tiles are impacted by a "trigger task", prior notification to Cal/OSHA will be required.

All other paints were determined to contain lead in amounts less than 5,000 ppm and are classified as lead containing paint (LCP). Any work designated by California Occupational Safety Health Administration (Cal/OSHA) as a "trigger task" which will impact these paints, coatings, or materials must be done by properly trained personnel, in compliance with all lead related Cal/OSHA regulations and requirements.

# Introduction

This report presents results of an asbestos and lead survey performed by Entek which included the interior and exterior designated areas included in an upcoming demolition project. Those areas include the interior and exterior of the pump house as well as the exterior of the three (3) filter tanks and one (1) water storage tank. Entek did not enter any of the tanks during this inspection.

Fluorescent lights were observed within the pump house; therefore, this report also includes references to regulations pertaining to handling practices and waste disposal of PCB light ballasts and mercury containing light tubes and thermostats which may be impacted during this project.

The inspection was conducted by Mr. Andy Roed on May 3, 2021. Mr. Roed is a Cal/OSHA Certified Asbestos Consultant (CAC) and a State of California Department of Public Health (CDPH) certified Lead Inspector/Assessor.

This report was prepared for Asa Utterback, Senior Engineer with Coastland Civil Engineering, Inc.



# **Building Description**

The pump house is a single story structure with painted concrete floors. Interior walls were constructed of drywall with wood framing. The interior of the pump house had multiple painted metal pipe systems and pumps with various types and colors of gaskets at each connection. Exterior finishes included wood siding with an asphaltic shingle roof.

Three filter tanks were located adjacent to the pump house. They were constructed of metal with various piping and gaskets associated with it.

The water storage tank was located near the pump house and was constructed of metal sheeting. Gaskets were present at the seams and hatches. Hatches were located at two locations at the base of the tank and one location on top of the tank.

# **Asbestos Inspection and Sample Collection Protocols**

Entek included all specific designated interior and exterior areas of the buildings included in this report. Entek did not enter the tanks as part of this inspection. Entek did not use any demolition methods to look within enclosed wall or ceiling cavities during this investigation. Entek did include all suspect materials observed in, on, or associated with the areas included in this report.

Bulk samples were collected of various materials suspected to contain asbestos by utilizing a power drill and coring tube, cutting the materials with a razor knife, or use of other appropriate hand tools.

Miscellaneous materials were collected from each homogenous area in a manner sufficient to determine whether the material is or is not ACM as required in 40 CFR Part 763, Asbestos-Containing Materials in Schools; Final Rule and Notice, published October 30, 1987.

Approximate locations of all samples collected during this inspection are indicated on the "Bulk Asbestos Material Analysis Request Form for Entek", which served as the chain of custody for the samples, and on the building diagram attached to this report.

# **Asbestos Bulk Sample Results**

There were several materials observed which are considered "suspect" under US EPA guidelines. Under current US EPA guidelines for conducting building inspections for ACM, all "suspect" materials must be assumed to contain asbestos until otherwise determined by laboratory testing.

The samples of materials suspected of containing asbestos were submitted to Asbestech, a laboratory located in Rancho Cordova, California. These samples were subsequently analyzed by polarized light microscopy (PLM) with dispersion staining.

The US EPA NESHAP and SMAQMD uses the terms Regulated Asbestos Containing Material (RACM), Category I, and Category II when identifying materials which contain asbestos in amounts greater than 1%. Cal/OSHA uses the term ACCM which indicates a manufactured construction material contains greater than 0.1% asbestos by weight by the



PLM method. This definition can be found in Title 8, 1529.

A total of 25 bulk samples were collected of all the materials considered to be "suspect", and which were observed during this investigation. Some of those samples contained multiple layers which were individually analyzed to determine their asbestos content. Analysis of all samples collected was by PLM with dispersion staining. Results of the analysis are listed in the following tables:

Sı	Suspect Materials Found or Known TO Contain >1% Asbestos (CAT-I)								
Sample ID#'s	Suspect Material	Asbestos Content/Type (%) by PLM	Location	Total Estimated Quantity					
04A 06A-B	Black/Gray Fibrous Gaskets on Various Piping System	40-50% Chrysotile	Various Gaskets on Interior and Exterior Piping	50 Square Feet					
	(See Photo Log)								

All sample numbers noted in the tables above start with ECG-21-5820-

The tables above provide an estimate of the amount of materials in square feet or linear feet. Contractors are responsible for quantifying the exact quantity of materials impacted by the renovation or demolition and shall not rely on the quantities in the above tables.

US EPA AHERA uses three terms when determining the classification of a material for the purpose of sampling. These terms include miscellaneous, surfacing, and thermal system insulation (TSI).

<u>Miscellaneous materials</u> are building materials on structural components, structural members or fixtures, such as floor and ceiling tiles, and do not include surfacing material or TSI.

<u>Surfacing materials</u> are materials that are sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceiling and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

<u>TSI</u> is material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain, water condensation, or for other purposes.

The information provided in the tables of this report are for use by the Owner in determining where asbestos containing materials are located, and whether or not any future work may impact those materials. The information is also provided for use by any contractor who may perform work in areas impacting the materials listed in this report, and for use as appropriate by asbestos abatement contractors to provide costs related to work impacting ACM.

Any building materials which are considered "suspect" for containing asbestos which have not been identified in this report must be assumed to contain asbestos in amounts >1% until properly investigated and/or tested.



Materials commonly excluded from being suspected for containing asbestos include, but are not limited to: unwrapped pink and yellow fiberglass insulating materials or products, foam insulation, wood, metal, plastic, or glass. All other types of building materials or coatings on the materials listed above are commonly listed as "suspect" and must be tested prior to impact by a Contractor. Work impacting these untested or newly discovered materials must cease until an investigation can be completed.

# **Asbestos Regulatory Requirements**

# **US EPA**

The property included in this survey report is located in El Dorado County. The California Air Resource Board (CARB) has been given authority for enforcement of the NESHAP regulations by means of their own rules.

A demolition is the wrecking, taking out, or burning of any load supporting structural member. A renovation is everything else. 10 day written notification to the US EPA Region IX and CARB is required prior to the performance of any demolition project regardless of asbestos being present or not. This notification would also apply to any renovation project which involves the wrecking, taking out, or burning of any load bearing structural member during a renovation as well.

There is not a sufficient amount of ACM present to require a 10 day notification to the US EPA Region IX or CARB be submitted for asbestos purposes prior to starting work which will impact materials identified as RACM or CAT-I and CAT-II materials if they are made friable. If more than 160 square feet, 260 linear feet or 35 cubic feet of RACM is planned for removal on the project, formal written notification is required.

# Cal/OSHA

Disturbance of any ACM or ACCM could generate airborne asbestos fibers and would be regulated by Cal/OSHA. Cal/OSHA worker health and safety regulations apply during any disturbance of ACM or ACCM by a person while in the employ of another. This is true regardless of friability or quantity disturbed. Entek recommends a licensed asbestos contractor be used to remove ACCM even if less than 100 square feet of ACCM is being disturbed.

For compliance with Title 8, Section 341.9, the asbestos contractor must send written notice at least one day (24 hours) prior to start of any work which will impact any amount of asbestos to the local office for the State of California, Department of Occupational Safety and Health, and perform all work in accordance with Cal/OSHA requirements.

# **Lead Inspection, Sampling and Results**

Seven (7) bulk samples of the painted surfaces from the structures to be impacted were collected and submitted to MicroTest Laboratories, Inc. These samples were subsequently analyzed by atomic absorption spectrometry (AAS). Results of the analysis are listed in the following tables:



Paints/Coatings	Paints/Coatings/ Materials Determined to be Lead Based Paint (LBP)				
Paint/Coating Color or Material	Lead Content (ppm)	Component/Location			
Blue	37,000	Metal Piping			

LBP - Materials/coatings/paints meeting the definition of lead-based paint as defined by the CDPH and the US EPA, currently defined as containing lead in concentrations equal to or greater than 1.0 mg/cm<sup>2</sup>, 5,000 ppm, or 0.5% by weight.

Paints/Coatings/ Materials Determined to be Lead Containing Paint (LCP)					
Paint/Coating Color or Material	Lead Content (ppm)	Component/Location			
Blue Paint	69	Interior Drywall Walls			
Gray Paint over Multi Layers	50	Concrete Floor Throughout			
Light Blue Paint	72	Electrical Equipment			
Dark Brown Paint	130	Exterior Wood Siding			
Beige Paint	140	Metal Filter Tanks			

LCP - Materials/coatings/paints which contain measurable amounts of lead. The disturbance of these materials/coatings/paints is regulated by Cal/OSHA.

Paints/Coatings/Materials Determined NOT TO Contain Lead (<50 ppm)			
Paint/Coating Color or Material	Building Component		
Brown Paint	Metal Piping		

Paints determined "NOT TO" contain lead for the purposes of this report are those samples which when analyzed did not indicate lead to be present at or above the limit of detection for the analysis method used. This limit of detection was 100 parts per million (ppm). As a result, any paints shown "NOT TO" contain lead will not require any special training or work practices related to lead when impacted.

# **Lead Regulatory Compliance**

Any upcoming project which may result in the disturbance of lead containing products or surfaces, but is not intended to remediate a lead hazard or specifically designed to remove LBP to reduce or eliminate a known hazard, would be considered "lead related construction work".

Lead related construction work does not fit the classification of a "lead abatement project" under CDPH Title 17 regulations. "Abatement" is defined in Title 17, Division 1, Chapter 8, Article 1 as "any set of measures designed to reduce or eliminate lead hazards or LBP for



public and residential buildings, but does not include containment or cleaning." A *lead hazard* is defined in Title 17, Division 1, Chapter 8, Article 1 as "deteriorated LBP, lead contaminated dust, lead contaminated soil, disturbing LBP or presumed LBP without containment, or any other nuisance which may result in persistent and quantifiable lead exposure."

Lead related construction work means any "construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance of any residential or public building, including preparation and cleanup, that, by using or disturbing lead-containing material or soil, may result in significant exposure of adults or children to lead". (Title 17, California Code of Regulations, Division 1, Chapter 8, Article 1).

Currently, Cal/OSHA has not established a definition for LBP, nor have they established minimum concentrations where their regulations do not apply. Cal/OSHA regulates all construction activities involving materials containing lead, including LBP. These regulations are found in CCR, Title 8 Section 1532.1 (§1532.1) Lead in Construction.

Cal/OSHA has not established a concentration of lead in a product where their regulations do not apply, therefore, any disturbance to products containing lead come under the jurisdiction of Cal/OSHA and their regulations. Disturbance of paints/coatings or materials determined to be LBP may trigger a pre-work notification to Cal/OSHA if "trigger tasks" disturb 100 square feet or more of those paints/coatings or materials. Trigger tasks are described in Title 8 CCR 1532.1.

# Fluorescent Light Tubes and Polychlorinated Biphenyls (PCBs)

Fluorescent light tubes which contain mercury are considered a universal waste and must be packaged and recycled appropriately if they are removed from a building and not used again. The regulation, called the Universal Waste Rule, are in the California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 23.

Fluorescent light tubes are the bulb or tube portion of an electric lighting device and are commonly referred to as "lamps". Examples of other common electric lamps considered to be universal wastes include, but are not limited to, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps. Any lamp which is not spent and has been designated to be reused is not classified as a waste and does not meet the requirements of a hazardous waste or a universal waste.

Spent lamps typically contain concentrations of mercury exceeding the established Total Threshold Limit Concentration (TTLC) and/or the Soluble Threshold Limit Concentration (STLC) values. Therefore, these lamps must be sent to an authorized recycle facility or to a universal waste consolidator for shipment to an authorized recycling facility.

At a minimum, if removed lamps will not be reused they must be packaged in boxes/ packages/containers which are structurally sound, adequate to prevent breakage, and compatible with the content of the lamps. These packages must remain closed and be free of damage which could cause leakage under reasonably foreseeable conditions. Each container must be labeled or marked clearly with one of the following phrases: "Universal Waste Lamp(s)," or "Used Lamp(s)." Entek recommends shipping any lamp not designated for reuse to a universal waste recycling facility once they have



been packaged.

PCB containing light ballasts are to be considered a hazardous waste, and must be properly manifested for transport to a hazardous waste facility. Any contractor who may perform PCB related work (inspection, removal, clean-up) must be trained and qualified to do so. All workers must also follow current OSHA regulations including 29 CFR 1910.120 and 8 CCR 5192, as well as, other applicable federal, state, and local laws, and regulations. While light ballasts marked "No PCB" are not considered a hazardous waste, they are considered a universal waste. As a result, removal, packaging, and disposal/recycling of these types of ballasts must be conducted in accordance with current regulations of Title 22.

# **Thermostats with Mercury Switches**

It is possible existing thermostats may utilize switches containing mercury. The mercury in these switches would be considered a hazardous waste if removed and disposed. Any work requiring removal of thermostats containing mercury switches, must include having the switches inspected for the presence of mercury, and subsequently following all requirements for packaging and disposal of any switch found to contain mercury.

# Freon and Fluorocarbons

Freon and other fluorocarbon products associated with HVAC systems, refrigerators, etc. may be present in or on the exterior of the buildings included in this investigation. Prior to demolition of a structure or removal of existing HVAC systems, refrigerators, or any other type of equipment which typically uses these types of coolant products shall have the coolant materials investigated prior to their demolition and removed from the mechanical systems and recycled in accordance with Cal/EPA requirements.

# **Smoke Detectors Which May Contain a Radioactive Element**

It is possible existing smoke detectors may contain a radioactive element. These types of detectors are easily identified by reviewing the label which is usually found on the back of the detector. Older units may display the international radiation symbol (three bladed propeller) and the radioactive content. Newer units state the radioactive content and their Nuclear Regulatory Agency (NRC) license number.

Any work requiring the removal of smoke detectors with a radioactive element must include contacting the manufacturer of the smoke detector to determine their return policies. The California Department of Toxic Substance Control (DTSC) has stated that it is a condition of the manufacturers NRC license they must accept returned units for disposal.

# Limitations

Entek inspected only the specific designated areas identified by you to be included in the upcoming project, which did not include all areas of the building's interior and exterior components. The areas included in this survey included the interior and exterior of the pump house as well as the exterior of the three (3) filter tanks and one (1) water storage tank. Entek did not enter any of the tanks during this inspection.



As a result the information provided in this inspection report may not be used to extend the inspection results to areas not included in this report without additional review and sampling as necessary.

Entek did not perform any destructive sampling to look into ceiling and wall cavities. As a result, it may be possible for materials to be hidden in these areas which are not included in this report. Entek also did not employ any destructive measures on floors of interior spaces or exterior areas covered with asphalt, concrete, or dirt.

If any new materials not listed as having been sampled, or listed as assumed for containing asbestos in this report are discovered, the new material must be assumed to contain asbestos until properly inspected and tested for asbestos content.

Entek's policy is to retain a full copy of these written documents for three (3) years once the file is closed. At the end of the 3 year period the written files will be destroyed without further notice. It is suggested copies of the file(s) are maintained as per Coastland's policy.

Entek will be providing only this electronic copy of the report and its attachments for your use. However, if you would like a hard copy of this report please do not hesitate to ask. Entek will be happy to mail the report upon receipt of your request.

Thank you for choosing Entek for your environmental needs. Please call me at (916) 632-6800 if you have any questions regarding this report.

Prepared by: \_\_\_\_ Andy Road

Andy Roed President

Cal/OSHA CAC #16-5695 CDPH I/A Certification #2989

# **Appendices**

- A. Asbestos Related Documents
- B. Lead Related Documents
- C. Backup Documentation

# Photo Log

Job Number:	21-5820	Date:	5-3-2021
Client:	Coastland Civil Engineering, Inc.		
Site Address:	Old Auburn Lake Trails Water Treatment Plant		



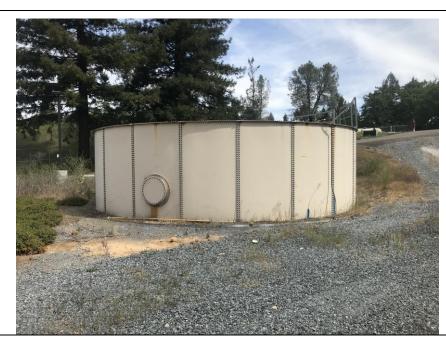
Overall View of Project Site.



View of one of three filter tanks and Pump house.

# Photo Log

Job Number:	21-5820	Date:	5-3-2021
Client:	Coastland Civil Engineering, Inc.		
Site Address:	Old Auburn Lake Trails Water Treatment Plant		



View of water storage tank.



View of asbestos containing gasket.

# Photo Log

Job Number:	21-5820	Date:	5-3-2021
Client:	Coastland Civil Engineering, Inc.		
Site Address:	Old Auburn Lake Trails Water Treatment Plant		



View of asbestos containing gasket.



View of asbestos containing gasket.



# APPENDIX A ASBESTOS RELATED DOCUMENTS

- Bulk Asbestos Analysis Report From Asbestech
- Bulk Asbestos Material Analysis Request Form for Entek
- Asbestos Bulk Sample Location Drawing

# **ASBESTECH**

11151 Sun Center Drive, Suite B Rancho Cordova, California 95670

Tel.(916) 481-8902 asbestech@sbcglobal.net

Client: Job:

Entek Consulting Group, Inc. 21-5820 Coastland Civil Engineering 4200 Rocklin Rd., Suite 7 3650 Sweetwater Trail Cool , Ca

# **BULK ASBESTOS ANALYSIS REPORT**

LAB JOB # 68457-1 NVLAP Lab Code 101442-0

Date/Time Collected: 5/3/21 CDPH # 1153
Date Received: 5/4/21 Date Analyzed: 5/5/21

Sample No.	Color/Description	% Type Asbestos	Other Materials
ECG-21-5820 01A	White drywall , office west corner	NONE DETECTED	Gypsum Fibrous Glass
	White joint compound	NONE DETECTED	Calcite
01B	White drywall , pump room south corner	NONE DETECTED	Gypsum Fibrous Glass
	White joint compound	NONE DETECTED	Calcite
01C	White drywall , pump room west corner	NONE DETECTED	Gypsum Fibrous Glass
	White joint compound	NONE DETECTED	Calcite
02A	Gray concrete , pump room center of room	NONE DETECTED	Granular Mins.
03A	Black gaskets on 6" OD brown pipes, pump room	NONE DETECTED	Opaques
03B	Black gaskets on 6" OD brown pipes, pump room	NONE DETECTED	Opaques
04A	Black gaskets on 8" OD brown pipes, pump room	40-50 CHRYSOTILE	Opaques

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A), THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.





# **ASBESTECH**

11151 Sun Center Drive, Suite B Rancho Cordova, California 95670

Tel.(916) 481-8902 asbestech@sbcglobal.net

Client: Job:

Entek Consulting Group, Inc. 4200 Rocklin Rd., Suite 7 Rocklin, CA 95677

21-5820 Coastland Civil Engineering 3650 Sweetwater Trail

Cool, Ca

# **BULK ASBESTOS ANALYSIS REPORT**

LAB JOB # 68457-2 NVLAP Lab Code 101442-0

Date/Time Collected: 5/3/21 Date Received: 5/4/21 CDPH # 1153 Date Analyzed: 5/5/21

Sample No.	Color/Description	% Type Asbestos	Other Materials
ECG-21-5820 04B	Black gaskets on 8" OD brown pipes , pump room	NONE DETECTED	Calcite Opaques
05A	Red gaskets on blue pipes , pump room	NONE DETECTED	Synthetics Granular Mins.
05B	Red gaskets on blue pipes , pump room	NONE DETECTED	Synthetics Granular Mins.
06A	Blue/ gray fibrous gaskets on dark blue pipe flanges , pump room	40-50 CHRYSOTILE	Opaques
06B	NOT ANALYZED		
07A	Black gaskets, exterior pipe flanges to filter tanks	40-50 CHRYSOTILE	Opaques
07B	NOT ANALYZED		
08A	Black gaskets, filter tank hatch seal	NONE DETECTED	Calcite Opaques
08B	Black gaskets, filter tank hatch seal	NONE DETECTED	Calcite Opaques

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A), THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.





# **ASBESTECH**

11151 Sun Center Drive, Suite B Rancho Cordova, California 95670

Tel.(916) 481-8902 asbestech@sbcglobal.net

Client:

Entek Consulting Group, Inc. 4200 Rocklin Rd., Suite 7 Rocklin, CA 95677 *Job:* 21-5820 Coastland Civil Engineering

3650 Sweetwater Trail

Cool, Ca

# **BULK ASBESTOS ANALYSIS REPORT**

LAB JOB # 68457-3 NVLAP Lab Code 101442-0

Date/Time Collected: 5/3/21 CDPH # 1153

Date Received: 5/4/21 Date Analyzed: 5/5/21

Sample No.	Color/Description	% Type Asbestos	Other Materials
ECG-21-5820 09A	Red gaskets, connecting pipes between filter tanks	NONE DETECTED	Calcite Opaques
09B	Red gaskets, connecting pipes between filter tanks	NONE DETECTED	Calcite Opaques
10A	Black asphaltic roof shingles, roof of structure	NONE DETECTED	Tar Binder Fibrous Glass
	Black felt paper	NONE DETECTED	Tar Binder Cellulose
10B	Black asphaltic roof shingles, roof of structure	NONE DETECTED	Tar Binder Fibrous Glass
	Black felt paper	NONE DETECTED	Tar Binder Cellulose
11A	White gasket seal at seam of water storage tank	NONE DETECTED	Opaques Polyethylene
11B	White gasket seal at seam of water storage tank	NONE DETECTED	Opaques Polyethylene
12A	White gasket seal at hatches & roof of water storage tank	NONE DETECTED	Opaques

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A), THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.





# ASBESTECH 11151 Sun Center Drive, Suite B Rancho Cordova, California 95670

Tel.(916) 481-8902 asbestech@sbcglobal.net

Client: Job:

Entek Consulting Group, Inc. 4200 Rocklin Rd., Suite 7 Rocklin, CA 95677

21-5820 Coastland Civil Engineering 3650 Sweetwater Trail Cool , Ca

# **BULK ASBESTOS ANALYSIS REPORT**

LAB JOB # 68457-4 NVLAP Lab Code 101442-0

Date/Time Collected: 5/3/21 CDPH # 1153

Pete Provinced: 5/4/21

Date Received: 5/4/21 Date Analyzed: 5/5/21

Sample No.	Color/Description	% Type Asbestos	Other Materials
ECG-21-5820 12B	White gasket seal at hatches & roof of water storage tank	NONE DETECTED	Opaques
	Yellow mastic	NONE DETECTED	Synthetics
12C	White gasket seal at hatches & roof of water storage tank	NONE DETECTED	Opaques

THE ANALYSIS USES POLARIZED LIGHT MICROSCOPY AND DISPERSION STAINING FOLLOWING E.P.A. METHOD 600/R-93/116. NON-FRIABLE MATERIALS WERE ANALYZED APPLYING THE SAME METHOD. THE LOWER DETECTION LIMIT IS <1 % WITH THE PROVISO THAT PLM MAY NOT DETECT FIBERS <0.25 MICRONS IN DIAMETER THAT MAY BE PRESENT IN SAMPLES SUCH AS FLOOR TILES. IN ACCORDANCE WITH TITLE 22, CCR, SECTION 66261.24(a)(2)(A), THE MCL IS 1 %. SAMPLES WERE NOT COLLECTED BY ASBESTECH. THIS REPORT MUST NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE APPROVAL OF ASBESTECH. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY N.V.L.A.P. OR ANY AGENCY OF THE U.S. GOVERNMENT. ASBESTECH ACCEPTS TECHNICAL RESPONSIBILITY FOR THIS REPORT AND DATE OF ISSUE.



Jem Jangles

ANALYST: JIM JUNGLES

68457



# BULK ASBESTOS MATERIAL Analysis Request

ENTEK CONSULTING GROUP, INC.

4200 ROCKLIN ROAD, SUITE 7 ROCKLIN, CA 95677 (916) 632-6800 PHONE (916) 632-6812 FAX mainoffice@entekgroup.com

Date of Sampling: 5-3-2021

Job Number: 21-5820

Client Name: Coastland Civil Engineering

Site Address: 3650 Sweetwater Trail

Cool, CA 95614

Asbestech Lab:

Collected by: Andy Roed

Turnaround Time: Day: Thursday

Date: 5-6-2021 Time: 3 PM

ANALYSIS REQUESTED: Asbestos by PLM

with Dispersion Staining

Special Instructions: Stop analysis upon first positive result (>1%) for sample in a series. Also stop

analysis upon first positive result (>1%) in the joint compound for sample series.

Please e-mail results at mainoffice@entekgroup.com as soon as available and include copy of submittal with those results.

SAMPLE#	MATERIAL DESCRIPTION/LOCATION	
ECG-21-5820-01A	Drywall and Joint Compound / Office, West Corner	
ECG-21-5820-01B	Drywall and Joint Compound / Pump Room, South Corner	
ECG-21-5820-01C	Drywall and Joint Compound / Pump Room, West Corner	
ECG-21-5820-02A	Concrete / Pump Room Center of Room	
ECG-21-5820-03A	Black Gaskets on 6" OD Brown Pipes / Pump Room	-
ECG-21-5820-03B	Black Gaskets on 6" OD Brown Pipes / Pump Room	
ECG-21-5820-04A	Black Gaskets on 8" OD Brown Pipes / Pump Room	
ECG-21-5820-04B	Black Gaskets on 8" OD Brown Pipes / Pump Room	

C:\Users\andy\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Bulk Asb\Bulk Asb Rqst 00-00-00.docx

Delivered by:

Received by:

Date: 5/4/21 Time: 935Date: 5/2/4 Time: 935



# BULK ASBESTOS MATERIAL Analysis Request

ENTEK CONSULTING GROUP, INC. 4200 ROCKLIN ROAD, SUITE 7 ROCKLIN, CA 95677 (916) 632-6800 PHONE (916) 632-6812 FAX mainoffice@entekgroup.com

Date of Sampling: 5-3-2021

Job Number: 21-5820

Client Name: Coastland Civil Engineering

Site Address: 3650 Sweetwater Trail

Cool, CA 95614

Lab: Asbestech

Collected by: Andy Roed

Turnaround Time: Day: Thursday

Date: 5-6-2021 Time: 3 PM

ANALYSIS REQUESTED: Asbestos by PLM

with Dispersion Staining

Special Instructions: Stop analysis upon first positive result (>1%) for sample in a series. Also stop analysis upon first positive result (>1%) in the joint compound for sample series.

Please e-mail results at mainoffice@entekgroup.com as soon as available and include copy of submittal with those results.

SAMPLE#	MATERIAL DESCRIPTION/LOCATION
ECG-21-5820-05A	Red Gaskets on Blue Pipes / Pump Room
ECG-21-5820-05B	Red Gaskets on Blue Pipes / Pump Room
ECG-21-5820-06A	Blue/Gray Fibrous Gaskets on Dark Blue pipe Flanges / Pump Room
ECG-21-5820-06B	Blue/Gray Fibrous Gaskets on Dark Blue pipe Flanges / Pump Room
ECG-21-5820-07A	Black Gaskets / Exterior pipe flanges to filter tanks
ECG-21-5820-07B	Black Gaskets / Exterior pipe flanges to filter tanks
ECG-21-5820-08A	Black Gaskets / Filter Tank Hatch Seal
ECG-21-5820-08B	Black Gaskets / Filter Tank Hatch Seal

C:\Users\andy\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Bulk Asb\Bulk Asb Rgst 00-00-00.docx

Delivered by:

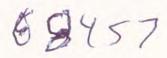
Date:

5,4,21 Time: 935 AM/PM
5,4,74 Time: 935 AM/PM

Received by:

Date:





# BULK ASBESTOS MATERIAL Analysis Request

ENTEK CONSULTING GROUP, INC.

4200 ROCKLIN ROAD, SUITE 7 ROCKLIN, CA 95677 (916) 632-6800 PHONE (916) 632-6812 FAX mainoffice@entekgroup.com

Date of Sampling: 5-3-2021

Job Number: 21-5820

Client Name: Coastland Civil Engineering

Site Address: 3650 Sweetwater Trail

Cool, CA 95614

Lab: Asbestech

Collected by: Andy Roed

Turnaround Time: Day: Thursday

Date: 5-6-2021 Time: 3 PM

ANALYSIS REQUESTED: Asbestos by PLM

with Dispersion Staining

Special Instructions: Stop analysis upon first positive result (>1%) for sample in a series. Also stop

analysis upon first positive result (>1%) in the joint compound for sample series.

Please e-mail results at mainoffice@entekgroup.com as soon as available and include copy of submittal with those results.

SAMPLE#	MATERIAL DESCRIPTION/LOCATION
ECG-21-5820-09A	Red Gaskets / Connecting pipes between filter tanks
ECG-21-5820-09B	Red Gaskets / Connecting pipes between filter tanks
ECG-21-5820-10A	Asphaltic Roof Shingles over Felt Paper / Roof of Structure
ECG-21-5820-10B	Asphaltic Roof Shingles over Felt Paper / Roof of Structure
ECG-21-5820-11A	White Gasket Seal at Seam of Water Storage Tank
ECG-21-5820-11B	White Gasket Seal at Seam of Water Storage Tank
ECG-21-5820-12A	White Gasket Seal at hatches and roof of Water Storage Tank
ECG-21-5820-12B	White Gasket Seal at hatches and roof of Water Storage Tank

C:\Users\andy\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Bulk Asb\Bulk Asb Rqst 00-00-00.docx

Delivered by:

Date: 5,4,2 Time: 935 AM/PM

Date: 5,4,4 Time: 935 AM/PM

Received by:



ENTEK CONSULTING GROUP, INC. 4200 ROCKLIN ROAD, SUITE 7 ROCKLIN, CA 95677 (916) 632-6800 PHONE (916) 632-6812 FAX mainoffice@entekgroup.com

Date of Sampling: 5-3-2021

Job Number: 21-5820

Client Name: Coastland Civil Engineering

Site Address: 3650 Sweetwater Trail

Cool, CA 95614

Lab: Asbestech

Collected by: Andy Roed

Turnaround Time: Day: Thursday

Date: 5-6-2021 Time: 3 PM

ANALYSIS REQUESTED: Asbestos by PLM

with Dispersion Staining

Special Instructions: Stop analysis upon first positive result (>1%) for sample in a series. Also stop

analysis upon first positive result (>1%) in the joint compound for sample series.

<u>Please e-mail results at mainoffice@entekgroup.com as soon as available and include copy of submittal with those results.</u>

SAMPLE#	MATERIAL DESCRIPTION/LOCATION
ECG-21-5820-12C	White Gasket Seal at hatches and roof of Water Storage Tank

C:\Users\andy\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Bulk Asb\Bulk Asb Rqst 00-00-00.docx

Delivered by:

Received by:

Date:

514121

Time: 9

AMILEN

- Jul

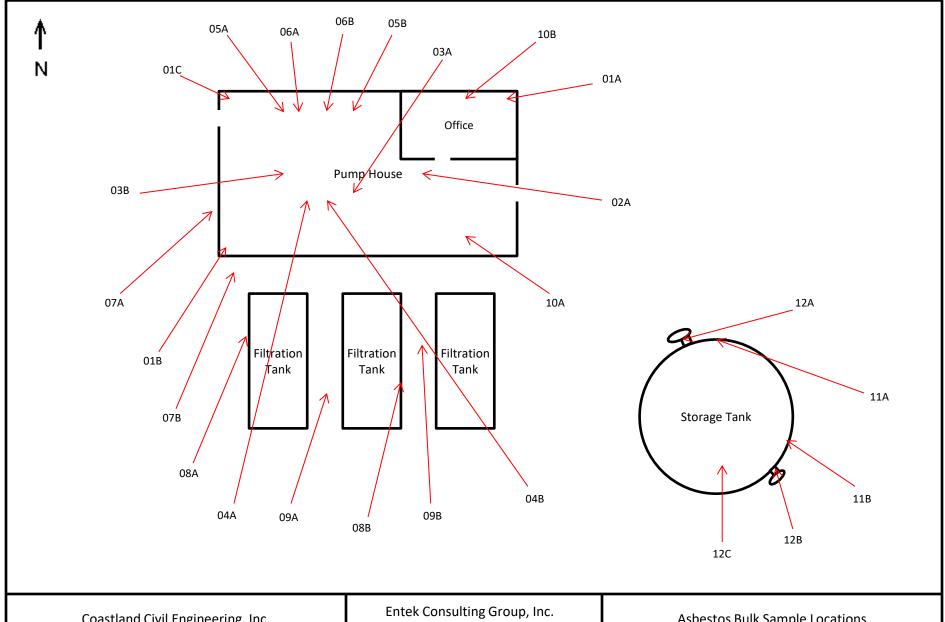
Date

SKZ

Timor

ANA/D

Yy



Coastland Civil Engineering, Inc.
Old Auburn Lake Trails Water Treatment Plant
3650 Sweetwater Trail
Cool, CA 95614

Entek Consulting Group, Inc. 4200 Rocklin Road, Suite 7 Rocklin, CA 95677 Map Not to Scale

Cloud\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Drawings

Asbestos Bulk Sample Locations Collected by Andy Roed On May 3, 2021 Project Number 21-5820



# APPENDIX B LEAD RELATED DOCUMENTS

- Lead in Paint Samples Analysis Report From Microtest
- Bulk Lead Material Analysis Request Form for Entek
- Lead Bulk Sample Location Drawing
- Lead Hazard Evaluation Report (CDPH 8552)



2033 Heritage Park Dr, Oklahoma City, OK 73120

## Environmental Chemistry Analysis Report

QuanTEM Set ID: 334452

**Date Received:** 05/05/21

Received By: Cyonne Harrod

**Date Sampled:** 

B419 Time Sampled: Acct. No.:

CR Analyst:

05/10/21 **Date of Report:** 

AIHA-LAP, LLC: 101352

Client:

Project: 21-5820 Coastland Civil Engineering **Location:** 3650 Sweetwater Trail Cool, CA 95614

Microtest Labs

3110 Gold Canal Drive, Suite A

Rancho Cordova, CA 95670

Project No.:

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	ECG-21- 5820-01Pb	Paint	Lead	0.0069	0.005	%	05/10/21 15:31	P EPA 7000B (1)
002	ECG-21- 5820-02Pb	Paint	Lead	0.0050	0.005	%	05/10/21 15:31	P EPA 7000B (1)
003	ECG-21- 5820-03Pb	Paint	Lead	< 0.0050	0.005	%	05/10/21 15:31	P EPA 7000B (1)
004	ECG-21- 5820-04Pb	Paint	Lead	3.7	0.005	%	05/10/21 15:31	P EPA 7000B (1)
005	ECG-21- 5820-05Pb	Paint	Lead	0.0072	0.005	%	05/10/21 15:31	P EPA 7000B (1)
006	ECG-21- 5820-06Pb	Paint	Lead	0.013	0.005	%	05/10/21 15:31	P EPA 7000B (1)
007	ECG-21- 5820-07Pb	Paint	Lead	0.014	0.005	%	05/10/21 15:31	P EPA 7000B (1)

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations. Customer provided data such as volumes, areas, etc., cannot be verified by QuanTEM Laboratories, LLC.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified



## **Environmental Chemistry Analysis Report**

Client:

Microtest Labs

3110 Gold Canal Drive, Suite A

Rancho Cordova, CA 95670

QuanTEM Set ID: 334452

Date Received: 05/05/21

Received By: Cyonne Harrod

**Date Sampled:** 

Time Sampled: Acct. No.: B419

Analyst: CR

Date of Report: 05/10/21

Project: 21-5820 Coastland Civil Engineering
Location: 3650 Sweetwater Trail Cool, CA 95614

AIHA-LAP, LLC: 101352 Project No.: N/A

QuanTEM Reporting Date/Time
ID Client ID Matrix Parameter Results Limits Units Analyzed Method

Authorized Signature:\_\_\_\_\_\_

Cherry Rossen, Technical Manager

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations. Customer provided data such as volumes, areas, etc., cannot be verified by QuanTEM Laboratories, LLC.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified. EPA 7082 Analysis Modified

## Supplemental Report QAQC Results

Test: Lead Matrix: Paint Approved By: Cherry Rossen

**Date Approved:** 5/10/2021

**Notes:** 

#### Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank 2	0
Matrix Blank 3	0
Matrix Blank 4	0

#### **Standards Data:**

Standard	Low Limit	Obtained	High Limit
FCV	2.2	2.5	2.8
CCV	2.2	2.7	2.8
ICV	0.9	1.1	1.1

## **Duplicate Data:**

Sample Number	Result	Duplicate	% RPD
334539-002	231.372	243.354	5.0
334452-001	0.137	0.137	0.1

### **Recovery Data:**

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
LCS-P2	0.000	2.226	2.084	93.6	2.137	96.0	2.5
LCS-P3	0.000	2.226	2.059	92.5	1.946	87.4	5.7
LCS-P4	0.000	2.226	2.154	96.7	2.174	97.7	0.9
334452-001	0.137	2.000	2.038	95.1			

Authorized Signature:



Phone

**Email** 

MicroTest Laboratories, Inc.
3110 Gold Canal Dr, Ste. A, Rancho Cordova, CA 95670
PH 916.567.9808 | FX 916.404.0302
www.microtestlabsinc.com | service@microtestlabsinc.com

\*\*\*for office use only\*\*\*

Accession Numbers

334452

Sending Laboratory

Company MicroTest Laboratories, Inc.

Sampler

Address 3110 Gold Canal Dr, Ste. A

Rancho Cordova, CA 95670

service@microtestlabsinc.com

PH 916.567.9808 | FX 916.404.0302

SAMPLE
Date Friday, April 30, 2021
Time

Receiving Laboratory

Company QuanTEM Laboratories

Sampler

Address 2033 Heritage Park Drive
Oklahoma City, OK 73120-7502

Phone 1-800-822-1650

Email loginasbestos@quantem.com

MicroTest Laboratories

Chain-Of-Custody

TURN AROUND	ASBESTOS	LEAD	MICROBI	OLOGICAL	FIRE RESIDUE
Rush (3 Hour)	PLM*	X Paint Chip Wt%	Spore Trap	Sewage Screen	Spore Trap
Same Day (6 Hour)	TTFP*	Wipe	DP-Tape	HPC*	DP-Tape
24 Hour	400 Pt. Ct.	Air	DP-Swab	HPC* with ID	Wipes
2-Day	1000 Pt. Ct.	Soil	DP-Bulk	Other	
x 3-Day	PCM*	TTLC*/STLC*	Andersen		Semi-Quantitative
7-Day	TEM*	TCLP*			Quantitative

Sample		s Per Mi		Total	Total	Wipe		<b>D</b>
Number	On	Off	Aver	Min	Vol	Area	Location	Description
ECG-21- 5820-01Pb							Blue Paint on Interior Drywall Walls	
ECG-21- 5820-02Pb							Gray over Multilayer Paint on Floor	
ECG-21- 5820-03Pb		y.					Brown Paint on Pipes	
ECG-21- 5820-04Pb							Blue Paint on Piping	
ECG-21- 5820-05Pb						45	Light Blue on Electrical Equipment	
ECG-21- 5820-06Pb							Dark Brown Paint on Exterior Wood Siding	
ECG-21- 5820-07Pb							Beige Paint on Metal Filter Tanks	
				150				13
						,		

Special Instructions: 21-5820 Coastland Civil Engineering | 3650 Sweetwater Trail Cool, CA 95614

Relinquished by (Client)	Date/Time

Received By (Lab)	Date/Time		
Chritano	5/5		

Relinquished by (Lab)	Date/Time	
111	5/4/2021	
M	4:00 PM	

Received By (Client)	Date/Time

 Total Number of Samples
 7

 COC Page # 1 of 1

PLM\* Polarized Light Microscopy | TTFP\* Test Til First Positive | PCM\* Phase Contrast Microscopy | TEM\* Transmission Electron Microscopy | TTLC\* Total Threshold Limit Concentration | STLC\* Soluble Threshold Limit Concentration | TCLP\* Toxicity Characteristic Leaching Procedure | HPC\* Heterotophic Plate Count



## BULK LEAD MATERIAL Analysis Request

ENTEK CONSULTING GROUP, INC.

4200 ROCKLIN ROAD, SUITE 7 ROCKLIN, CA 95677 (916) 632-6800 PHONE (916) 632-6812 FAX mainoffice@entekgroup.com

Date of Sampling:4-30-2021

**Job Number:** 21-5820

Client Name: Coastland Civil Engineering

Site Address: 3650 Sweetwater Trail

Cool, CA 95614

MicroTest Lab:

Collected by: Andy Roed

**Turnaround Time:** 4 Day TAT

ANALYSIS REQUESTED: Lead by Flame

**Atomic Absorption Spectroscopy** 

Special Instructions: Please report result in PPM and % by weight. Please email results as soon as

possible.

SAMPLE#	MATERIAL DESCRIPTION/LOCATION
ECG-21-5820-01Pb	Blue Paint on interior Drywall Walls
ECG-21-5820-02Pb	Gray over Multilayer Paint on Floors
ECG-21-5820-03Pb	Brown Paint on Pipes
ECG-21-5820-04Pb	Blue Paint on Piping
ECG-21-5820-05Pb	Light Blue on Electrical Equipment
ECG-21-5820-06Pb	Dark Brown Paint on Exterior Wood Siding
ECG-21-5820-07Pb	Beige Paint on Metal Filter Tanks

C:\Users\andy\Entek Consulting Group, Inc\Entekgroup - Documents\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Bulk Pb\Bulk Pb Rqst 00-00-00.docx

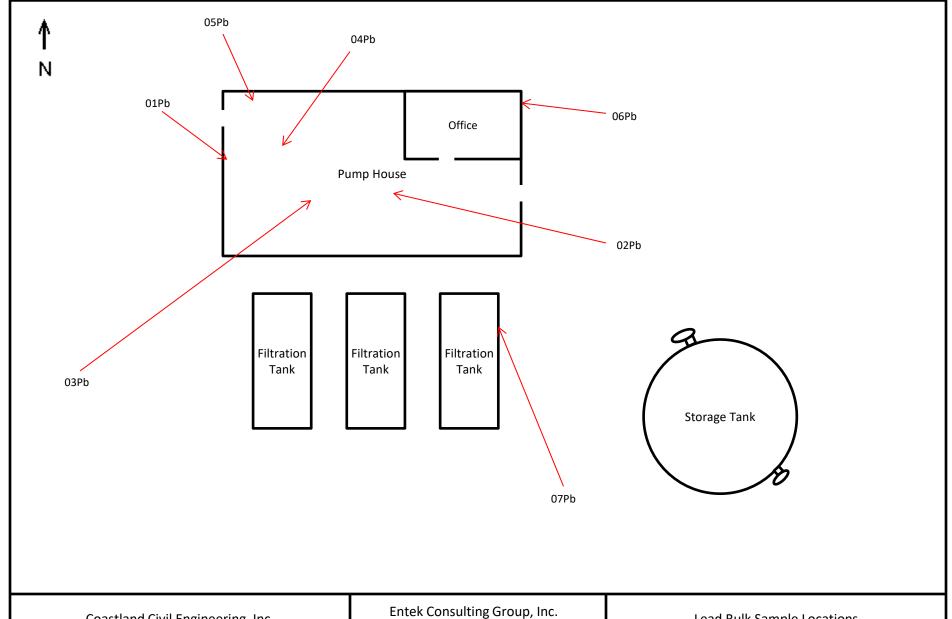
Delivered by:

Date:

5,471 Time:910

Received by:

Date:



Coastland Civil Engineering, Inc.
Old Auburn Lake Trails Water Treatment Plant
3650 Sweetwater Trail
Cool, CA 95614

Entek Consulting Group, Inc. 4200 Rocklin Road, Suite 7 Rocklin, CA 95677 Map Not to Scale

Cloud\Clients\Coastland Civil Engineering, Inc\21-5820 Georgetown Divide PUD - Lmtd Asb & Pb Demo\Drawings

Lead Bulk Sample Locations Collected by Andy Roed On May 3, 2021 Project Number 21-5820

## **LEAD HAZARD EVALUATION REPORT**

Section 1 — Date of Lead Hazard Evaluation	l				
Section 2 — Type of Lead Hazard Evaluation	ı (Check o	ne box only)			
Lead Inspection Risk assessment	Clea	arance Inspection	Other (specify)		
Section 3 — Structure Where Lead Hazard E	valuation	Was Conducted			
Address [number, street, apartment (if applicable)]		City	County	Zip Code	
Construction date (year) of structure  Type of structure  Multi-unit building  Single family dwelling		School or daycare Other	Children living in structure?  Yes No Don't Know		
Section 4 $-$ Owner of Structure (if business	/agency, li	ist contact person)			
Name			Telephone number	elephone number	
Address [number, street, apartment (if applicable)]		City	State	Zip Code	
Section 5 — Results of Lead Hazard Evaluate	ion (check	c all that apply)			
No lead-based paint detected Ir		ased paint detected t found Lead-conta		-based paint detected Other	
Section 6 — Individual Conducting Lead Ha	zard Evalu	ation			
Name			Telephone number		
Address [number, street, apartment (if applicable)]		City	State	Zip Code	
CDPH certification number	Sigr	Andy Rose	d	Date	
Name and CDPH certification number of any other in	dividuals cor				
Section 7 — Attachments					
A. A foundation diagram or sketch of the structulead-based paint; B. Each testing method, device, and sampling particles. All data collected, including quality control data.	orocedure ι	used;			
First copy and attachments retained by inspector		Third copy only (no attachments) mailed or faxed to:			
Second copy and attachments retained by owner		California Department of Public Health Childhood Lead Poisoning Prevention Branch Reports 850 Marina Bay Parkway, Building P, Third Floor Richmond, CA 94804-6403 Fax: (510) 620-5656			



## **APPENDIX C**

## **BACK UP DOCUMENTATION**

- Inspector Accreditations and Certifications
- Laboratory Accreditations for Asbestos and Lead Analysis

## State of California Division of Occupational Safety and Health Certified Asbestos Consultant

### Andrew R Roed

Name



Certification No. 16-5695

Expires on 08/17/21

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



#### STATE OF CALIFORNIA DEPARTMENT OF PUBLIC HEALTH



## LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:

CERTIFICATE TYPE:

NUMBER:

EXPIRATION DATE:

Lead Inspector/Assessor

LRC-00002989

9/11/2021



Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

United States Department of Commerce National Institute of Standards and Technology



## Certificate of Accreditation to ISO/IEC 17025:2017

**NVLAP LAB CODE: 101442-0** 

## **ASBESTECH**

Rancho Cordova, CA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

## **Asbestos Fiber Analysis**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2020-12-01 through 2021-06-30

Effective Dates



For the National Voluntary Laboratory Accreditation Program





## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

#### **ASBESTECH**

11151 Sun Center Drive, Suite B Rancho Cordova, CA 95670 Mr. Tommy Conlon

Phone: 916-481-8902 Fax: 916-481-3975 Email: asbestech@sbcglobal.net http://www.asbestechlab.com

#### ASBESTOS FIBER ANALYSIS

#### **NVLAP LAB CODE 101442-0**

### **Bulk Asbestos Analysis**

Code

Description

18/A01

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of

Asbestos in Bulk Insulation Samples

18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

## Airborne Asbestos Analysis

Code

Description

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program





#### **CALIFORNIA STATE**

### ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

## CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

MicroTest Laboratories, Inc.

3110 Gold Canal Drive

Rancho Cordova, CA 95670

Scope of the certificate is limited to the "Fields of Testing" which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of Section 100825, et seq. of the Health and Safety Code.

Certificate No.: 2974

Expiration Date: 6/30/2022

Effective Date: 7/1/2020

Sacramento, California subject to forfeiture or revocation

Christine Sotelo, Chief

**Environmental Laboratory Accreditation Program** 



## CALIFORNIA STATE ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM Accredited Fields of Testing



MicroTest Laboratories, Inc.

3110 Gold Canal Drive Rancho Cordova, CA 95670 Phone: 9165679808 Certificate No. 2974 Expiration Date 6/30/2022

Field of Testin	ng: 114 - Inorganic Chemistry of Hazardous Waste		
114.130 001	Lead	EPA 7420	
Field of Testin	g: 115 - Extraction Test of Hazardous Waste		
115.020 001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311 (TCLP)	
115.030 001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II	
Field of Testin	g: 121 - Bulk Asbestos Analysis of Hazardous Waste	•	
121.010 001	Bulk Asbestos	EPA 600/M4-82-020	

## **ATTACHMENT 5**

## **RESOLUTION**

#### RESOLUTION NO. 2021-

OF THE BOARD OF DIRECTORS OF THE
GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
AWARDING THE CONSTRUCTION CONTRACT TO JM ENVIRONMENTAL, INC.;
AUTHORIZING THE GENERAL MANAGER TO EXECUTE A CONTRACT WITH JM
ENVIRONMENTAL, INC. IN THE AMOUNT OF \$97,500 FOR THE OLD AUBURN
LAKE TRAILS WATER TREATMENT PLANT DEMOLITION PROJECT;
INCREASING THE PROJECT BUDGET BY \$8,148 TO A TOTAL OF \$123,148; AND
AUTHORIZING THE GENERAL MANAGER TO APPROVE CHANGE ORDERS NOT
TO EXCEED 10% OF THE CONTRACT AMOUNT FOR A TOTAL CONSTRUCTION
AUTHORIZATION AMOUNT OF \$107,250.00.

WHEREAS, the Old Auburn Lake Trails Water Treatment Plant Demolition Project was planned for Fiscal Year 2020/21 in the Board Adopted Five Year Capital Improvement Plan with a total project budget of \$115,000; and

**WHEREAS**, a notice inviting bids to select a contractor to perform the Project was issued on June 16, 2021, and three (3) bids were received on July 9, 2021; and

**WHEREAS**, after reviewing bids, District Staff have determined that JM Environmental, Inc.was the lowest responsive and responsible bidder; and

WHEREAS, the JM Environmental, Inc. total bid price is in the amount of \$97,500; and

**WHEREAS**, the project expenditures are projected to require a project budget increase of \$8,148 to a total of \$123,148; and

**WHEREAS**, additional funding is available from Fund 43 – Capital Reserve.

## NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT THAT:

- 1. The construction contract is awarded to JM Environmental, Inc.
- 2. The General Manager is authorized to execute a construction contract with JM Environmental, Inc. in the amount of \$97,500.00 for the Project.
- 3. The project budget is increased by \$8,148 to a total of \$123,148.
- 4. The General Manager is authorized to approve change orders not to exceed 10% of the contract amount.

<b>PASSED AND ADOPTED</b> by the board of Directors of the Georgetown Divide Public Utility District at a meeting of said Board held on the tenth day of August 2021, by the following vote:
AYES:
NOES:
ABSENT/ABSTAIN:
David Souza, President, Board of Directors GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
Attest:
Jeff Nelson, Clerk and Ex officio Secretary, Board of Directors GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT
CERTIFICATION
I hereby certify that the foregoing is a full, true and correct copy of Resolution 2021-XX duly and regularly adopted by the Board of Directors of the Georgetown Divide Public Utility District, County of El Dorado, State of California, on the 10th day of August, 2021
Jeff Nelson, Clerk and Ex officio
Secretary, Board of Directors GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT