PROJECT MANUAL

BID #B-02-2022-23

PIEDMONT MIDDLE SCHOOL

BUILDING L DEMOLITION

BERRYESSA UNION SCHOOL DISTRICT

Measure U Bond Program Berryessa Union School District 1376 Piedmont Road San Jose, CA 95132

Job Walk Date: 8/18/2022 at 2:30 PM

DUE DATE: AUGUST 30, 2022 BEFORE 2:00PM

Contract Number: B-02-2022-23

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NOTICE TO BIDDERS

BID ANNOUNCEMENT BERRYESSA UNION SCHOOL DISTRICT

Pursuant to Public Contract Code 20111 and 20112, notice is hereby given that sealed bids will be accepted by the Berryessa Union School District in the Purchasing Department, 1376 Piedmont Road, San Jose, California 95132, BEFORE the time and date indicated:

Bid #B-02-2022-23 PIEDMONT MIDDLE SCHOOL BUILDING L DEMOLITION DUE DATE: AUGUST 30, 2022 BEFORE 2:00PM

The Berryessa Union School District is seeking qualified and experienced licensed contractors to submit sealed bids for the project listed above. This is a Measure U Bond Program project.

Bid #B-02-2022-23 - The work of this project consists of the following but not limited to:

The removal of Building L in its entirety from the Piedmont Middle School Campus, to include all interior finishes, fixtures, equipment, roofing and foundation. **Engineer's Estimate: \$200,000.00**

There will be a Mandatory Pre-Bid Conference and Job Walk for this project. The Pre-Bid Conference and Job Walk will begin at **2:30PM on August 18, 2022**. Meet outside in the parking lot by the flagpole at Piedmont Middle School, 955 Piedmont Road, San Jose, CA 95132. County COVID 19 Guidelines will be enforced –social distancing is recommended. No Contractors are allowed to visit the school site without an appointment.

Last day to submit Pre-Bid RFIs: August 22, 2022 no later than 5:00PM.

Last day for Addendum: August 25, 2022, 1:00PM

This project is not subject to a labor agreement (aka PLA or PSA) or DVBE requirement. Prequalification for Prime Contractors or MEP Subcontractors is not required.

Time of completion for this project shall be: Start Date: 9/26/2022 and Completion Date: 10/28/2022

Project Bidding Documents will be available for download and print at: <u>https://www.berryessa.k12.ca.us/OUR-DISTRICT/Departments/Business-</u> <u>Services/Purchasing/Current-Bids/index.html</u>

Bid #B-02-2022-23 – Licensing requirements: B or C-21.

Contact: Kitchell CEM., Mark Casini, CCM at mcasini@kitchell.com - (408) 656-0468.

SB854: No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The District shall award the Contract, if it awards it at all, to the lowest responsive and responsible bidder based on: Lowest Base Bid.

The Board of Trustees reserves the right to waive any irregularities, accept or reject any or all bids, and be the sole judge of merit and suitability of the workmanship and materials.

For the Governing Board, Berryessa Union School District Bonny S Gregorius Purchasing and Contracts Manager 408-923-1871

DOCUMENT 00 21 13

INSTRUCTIONS TO BIDDERS

SECURING DOCUMENTS:

Project Bidding Documents will be available after August 8, 2022 at:

http://www.berryessa.k12.ca.us/OUR-DISTRICT/Departments/Business-Services/Purchasing/Current-Bids/index.html

Kitchell CEM Contact: Mark Casini: mcasini@kitchell.com

Contact the Purchasing Department and/or Kitchell CEM. for any technical questions about bidding or bid documents.

BID FORMAT:

Bids should be submitted using the District provided Bid Documents. Please include the following documents with your bid(s):

Bid #B-02-2022-23 CONDUIT RACEWAY AT PIEDMONT MIDDLE SCHOOL: 00 31 00 Site-Visit Certification 00 41 26 Bid Form 00 43 13 Bid Bond 00 43 36 Designation of Subcontractors 00 43 40 Sufficient Funds Declaration 00 45 19 Non-Collusion Affidavit 00 45 32 Fingerprinting Notice and Acknowledgement

PREQUALIFICATION:

Prequalification for Prime Contractors and MEP Subcontractors is not required.

SB854 REGISTRATION:

The Owner shall not accept any bid as of March 1, 2015, or enter into any contract as of April 1, 2015, without proof of the bidder's current registration to perform public work under Labor Code section 1725.5.

The bidder shall not accept any subbid as of March 1, 2015, or enter into any subcontract as of April 1, 2015, without proof of the subcontractor's current registration to perform public work under Labor Code section 1725.5.

BIDS:

Bids to receive consideration shall be made in accordance with the following instructions:

- 1. Bids shall be made on a form therefor, obtained from the Architect or Owner. Bids not made on the proper form shall be disregarded. Numbers must be stated in words and figures, and the signatures of all individuals must be in longhand.
- 2. No bid will be considered which makes exceptions, changes, or in any manner makes reservations to the terms of the drawings or specifications.
- 3. Questions regarding documents, discrepancies, omissions, or doubt as to meanings shall be referred immediately to the Architect who will send written instructions clarifying such questions to each bidder. Oral responses will not be binding on the Owner or Architect or any Construction Manager.
- 4. Each bid must give the full business address of the bidder and be signed by bidder with bidder's usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.
- 5. Pursuant to the provisions of Sections 4100 to 4114, inclusive, of the Public Contract Code of the State of California, which are hereby incorporated and made a part hereof and these Instructions to Bidders, every bidder shall set forth in its bid:
 - A. The name and location of the place of business and the California contractor's license number of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the bidder, specially fabricates and installs a portion of the Work or improvement according to detailed Berryessa Union School District Document 00 21 13 Piedmont Middle School Instructions to Bidders Fire Alarm Replacement Page 3 drawings contained in the plans and specifications, in an amount in excess of one-half (½) of one percent (1%) of the bidder's total bid. An inadvertent error in listing a California contractor's license number shall not be grounds for filing a bid protest or for considering the bid nonresponsive if the bidder submits the corrected contractor's license number to the Owner within 24

hours after the bid opening, or any continuation thereof, so long as the corrected contractor's license number corresponds to the submitted name and location for that subcontractor.

- B. The portion of the Work which will be done by each such subcontractor. If the bidder fails to specify a subcontractor for any portion of the Work to be performed under the Contract in excess of one-half (½) of one percent (1%) of the bidder's total bid, the bidder agrees to perform that portion itself. The successful bidder shall not, without the consent of the Owner:
 - 1) Substitute any person as subcontractor in place of the subcontractor designated in the original bid.
 - 2) Permit any subcontract to be assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the bid.
 - Sublet or subcontract any portion of the Work in excess of one-half (¹/₂) of one percent (1%) of the total bid as to which the original bid did not designate a subcontractor.
- 6. The Director of Industrial Relations of the State of California, in the manner provided by law, has ascertained the general prevailing rate of per diem wages and the rate for legal holidays and overtime work. The Contractor must pay for any labor therein described or classified in an amount not less than the rates specified. Copies of the required rates are on file at the Owner's business office and are available to any interested party on request.
- 7. All bids must be accompanied by a completed Noncollusion Declaration and Sufficient Funds Declaration (Labor Code § 2810). All bids must be accompanied by an executed Fingerprinting Notice and Acknowledgment.
- 8. Bids must be accompanied by a certified check, cashier's check, or bidder's bond, for an amount not less than ten percent (10%) of the amount of the base bid, made payable to the order of the Owner. If a bidder's bond accompanies the bid, said bond shall be secured by an Admitted Surety (an insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year). The surety insurer must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bond, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurer selected by Contractor and to require Contractor to obtain a bond from a surety insurer satisfactory to the Owner. Said check or bond shall be given as a guarantee that the bidder will enter into the Contract if awarded the Work, and in case of refusal or failure to enter into said Contract, the check or bond, as the case may be, shall be payable to the Owner and retained as liquidated damages.

9. Bids shall be sealed and filed as indicated in the Notice to Bidders. Irrespective of how a bidder chooses to deliver the bid and other documents to the Owner, the bidder is responsible for ensuring that the bid and other documents are actually received at the location designated in the Contract Documents for receipt of the bid and other documents prior to the time for the bid opening. Bids and other documents for any reason not actually received at the designated location prior to the time for the bid opening shall not be opened or considered.

10. THIS CONTRACT IS NOT SUBJECT TO THE DVBE REQUIREMENTS OF EDUCATION CODE SECTION 17076.11.

WITHDRAWAL OF BIDS:

Bids may be withdrawn by bidders prior to the time fixed for the submittal of bids or any authorized postponement thereof. A successful bidder shall not be relieved of the bid unless by consent of the Owner or bidder's recourse to Public Contract Code §5100 et seq.

OPENING OF BIDS:

Opening of bids shall be as soon after the hour set as will be possible; opening and declaration to be as set forth in the Notice to Bidders. Any and all bidders will be permitted to attend.

EXAMINATION OF CONTRACT DOCUMENTS AND SITE:

Before submitting a bid, bidders shall examine the drawings, read the specifications, the form of Agreement between Contractor and Owner, and the other Contract Documents. Bidders shall visit the site of the proposed Work; examine the building, or buildings, if any, and any work that may have been done thereon. Bidders shall fully inform themselves of all conditions, in, at, and about the site, the building or buildings, if any, and any work that may have been done thereon.

Pursuant to Public Contract Code section 1104: 1) bidders shall not be required to assume responsibility for the completeness and accuracy of architectural or engineering plans and specifications, except on clearly designated design build projects; 2) however, bidders shall be required to review architectural or engineering plans and specifications prior to submission of their bids and to report any errors and omissions to the Architect or Owner; Berryessa Union School District Document 00 21 13 Piedmont Middle School Instructions to Bidders Fire Alarm Replacement Page 5 and 3) the review shall be confined to the bidder's capacity as a bidder and not as a licensed design professional.

FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR:

The form of Agreement between Owner and Contractor which the successful bidder will be required to execute, if awarded the Work, is a part of this Bid Package.

ADDENDA OR BULLETINS:

Any addenda or bulletins, issued during the time of bidding, shall form a part of the drawings and specifications loaned to the bidder for the preparation of its bid, shall be covered in the bid, and shall be made a part of the Contract Documents. All addenda or bulletins shall be signed by the Architect and approved by the Division of State Architect.

EVIDENCE OF RESPONSIBILITY:

Upon the request of Owner, a bidder shall submit promptly to the Owner or its designee satisfactory evidence showing the bidder's financial resources, the bidder's experience in the type of work required by the Owner, the bidder's organization available for the performance of the Contract, and any other required evidence of the bidder's or its subcontractor's qualifications to perform the proposed Contract. The Owner may consider such evidence before making its decision awarding the proposed Contract. Failure to submit evidence of the bidder's or its subcontractors' responsibility to perform the proposed Contract may result in rejection of the bid.

AWARD OF CONTRACT:

Rejection of any or all bids, to contract work with whomever and in whatever manner, to abandon work entirely, and/or to waive any informality in receiving of bids is reserved as the right of the Owner. Before the Contract(s) are awarded, the Owner may at its sole discretion, require from the proposed Contractor on the Project further evidence of the reasonable qualifications of such contractor to faithfully, capably, and reasonably perform such proposed Contract and may consider such evidence before making its decision on the award of such proposed Contract. The Contract(s) shall be awarded to the lowest responsible and responsive bidder as interpreted by the Owner under California law and as specified herein and shall be entered into by the successful bidder within ten (10) days after mailing, faxing or delivery of the Notice of Award of Contract. Owner reserves the right, without any liability, to cancel the award of any bid for any reason at any time before the full execution of the Agreement between Owner and Contractor.

EXECUTION OF AGREEMENT BETWEEN OWNER AND CONTRACTOR:

The Agreement between Owner and Contractor shall be signed by the successful bidder in as many originals as the Owner deems necessary and returned, together with the required Contract bonds, insurance certificates, additional insured endorsement, declarations page, a Public Contract Code section 3006(a) Roof Project Certification, if required, and Independent Contractor Student Contact Form, within ten (10) days after the mailing, faxing or delivering of the Notice of Award of Contract. If the ten (10) day period would expire after the date for commencement of the Work, Contractor must submit the documents before the date of commencement of the Work. If the successful bidder does not comply with this paragraph, Owner may revoke and/or cancel the award to the successful bidder and award the Contract to the next lowest bidder, or may otherwise proceed as allowed by law. A Roof Project Certification is not required if (1) the Owner has ADA (average daily attendance) of 2,500 or less, or (2) the Project involves repair of 25% or less of the roof, or costs \$21,000 or less.

CONTRACT BONDS:

As required by the Contract Documents, two bonds, as itemized below and in the forms presented in these Contract Documents, shall be furnished by the successful bidder on the Project at the time of entering into the Contract and filed with the Owner before the successful bidder commences any work on the Project. They shall be in the form of surety bonds issued by Admitted Surety insurers (an insurance organization authorized by the Insurance Commissioner to transact business of insurance in the State of California during this calendar year). The surety insurers must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bond, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurers satisfactory to the Owner.

Performance Bond in the amount of one hundred percent (100%) of the Contract Sum to insure Owner during construction, and for one year after completion and during any warranty or guaranty period, against faulty or improper materials or workmanship and to assure Owner of full and prompt performance of the Contract.

Payment Bond (Labor and Material) in the amount of one hundred percent (100%) of the Contract Sum in accordance with the laws of the State of California to secure payment of any and all claims for labor and materials used or consumed in performance of this Contract.

DRAWINGS, SPECIFICATIONS AND ADDENDA OR BULLETINS:

Drawings, Project Manuals, Specifications, Addenda and Bulletins will be posted on the District website at <u>www.berryessa.k12.ca.us</u> click on Business Services > Purchasing > Current Bids for updates. Staff recommends that all vendors periodically check the Berryessa Union School District Document 00 21 13 Piedmont Middle School Instructions to Bidders Fire Alarm Replacement Page 7 District current bid section on the website for updates and addenda during the bidding process.

SUBSTITUTION OF MATERIALS:

The Contractor must ensure that the proposed substitutions by the Contractor or its subcontractors are submitted to the Architect's office a minimum of fourteen (14) calendar days prior to the Bid Opening for review and possible approval of any equipment or materials thought to be equal to or better than those specified in the drawings or specifications. An addendum will be issued seven (7) calendar days prior to Bid Opening, including all equipment and materials deemed equivalent to those specified and approved by the Architect. Submittals shall include comparative spec-data of the specified equipment or material and the proposed substitution as set forth in the Contract Documents. Submittals without this information will be automatically rejected.

PAYMENTS:

Payments to the Contractor on account of the Contract shall be made in accordance with the terms of the Contract Documents.

TAXES:

The Owner is generally exempt from payment of Federal Excise Tax on materials. The Owner will furnish exemption certificates to the Contractor to be used to obtain materials ordinarily subject to Federal Excise Tax without payment of the tax. Bidder shall deduct Federal Excise Taxes from their bid prices before submitting bids, so that such taxes will not be included in the Contract Sum.

EARLY TERMINATION:

Notwithstanding any provision herein to the contrary, if for any fiscal year of this Contract the governing body of the Owner fails to appropriate or allocate funds for future periodic payments under the Contract after exercising reasonable efforts to do so, the Owner may upon thirty (30) days' notice, order work on the Project to cease. The Owner will remain obligated to pay for the work already performed but shall not be obligated to pay the balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and for which the work has not been done.

TIME OF COMPLETION AND LIQUIDATED DAMAGES:

Time of Completion for the Project shall be as follows:

Start Date: September 26, 2022 Completion Date: September 30, 2022

Liquidated damages will accrue and may be assessed as provided in the Contract Documents. Should said Work not be Completed within the time limit as may be extended as herein provided (i.e., the Completion deadline), damages will be sustained by the Owner. It is understood and agreed that it is and will be impracticable or extremely difficult to determine the actual amount of damages which the Owner will sustain in the event of and by reason of such delay, and it is therefore agreed that the Contractor will pay the Owner the sum of **Five Hundred Dollars (\$500.00) per calendar day** for each and every day's delay beyond the Completion deadline as and for liquidated damages, during or as a result of each calendar day by which Completion of the Project is delayed beyond the Completion deadline; in case the Contractor fails to make such payment, the Owner may deduct the amount thereof from any money due or that may become due the Contractor under the Contract. Should such money not be sufficient, the Owner shall have the right to recover the balance from the Contractor or its Sureties.

BID PROTEST PROCEDURE

Any bidder may file a bid protest. The protest shall be filed in writing with the Purchasing and Contracts Manager not more than ONE (1) business day after the date of the bid opening. An e-mail address shall be provided and by filing the protest, the protesting bidder consents to receipt of e-mail notices for purposes of the protest and protest related questions and protest appeal, if applicable. The protest shall specify the reasons and facts upon which the protest is based.

<u>Resolution of Bid Controversy:</u> Once the bid protest is received, the apparent lowest responsible bidder will be notified of the protest and the evidence presented. If appropriate, the apparent low bidder will be given an opportunity to rebut the evidence and present evidence that the apparent low bidder should be allowed to perform the work. If deemed appropriate by the District, an informal hearing will be held. District will issue a written decision within fifteen (15) calendar days of receipt of the protest, unless factors beyond the District's reasonable control prevent such resolution. The decision on the bid protest will be copied to all parties involved in the protest.

<u>Appeal:</u> If the protesting bidder or the apparent low bidder is not satisfied with the decision, the matter may be appealed to the Assistant Superintendent of Business Services, or their designee, within three (3) business days after receipt of the District's written decision on the bid protest. The appeal must be in writing and sent via overnight registered mail with all accompanying information relied upon for the appeal and an email address from which questions and responses may be provided to:

Berryessa Union School District Attn: Assistant Superintendent of Business Services 1376 Piedmont Rd San Jose, CA 95132

<u>Appeal Review:</u> The Assistant Superintendent of Business Services or their designee shall review the decision on the bid protest from the Purchasing and Contracts Manager and issue a written response to the appeal, or if appropriate, appoint a Hearing Office to conduct a hearing and issue a written decision. The written decision of the Purchasing and Contracts Manager shall be rendered within fifteen (15) calendar days and shall state the basis for the decision. The decision concerning the appeal will be final and not subject to any further Appeals.

<u>Reservation of Rights to Proceed with Project Pending Appeal.</u> The District reserves the right to proceed to award the Contract for the Project and commence construction pending an Appeal. If there is State Funding or a critical completion deadline, the District may choose to shorten the time limits set forth in this Section due to the urgency of proceeding with work if written notice is provided to the protesting party. E-mailed notice with a written confirmation sent by First Class Mail shall be sufficient to constitute written notice. If there is no written response to a written notice shortening time, the District may proceed with the award.

<u>Finality</u>. Failure to comply with this Bid Protest Procedure shall constitute a waiver of the right to protest and shall constitute a failure to exhaust the protesting bidder's administrative remedies.

DOCUMENT 00 31 00

SITE-VISIT CERTIFICATION

PROJECT: <u>PIEDMONT MIDDLE SCHOOL CONDUIT RACEWAY</u>

I certify that I visited the Site of the proposed Work and became fully acquainted with the conditions relating to construction and labor. I fully understand the facilities, difficulties, and restrictions attending the execution of the Work under contract.

Bidder fully indemnifies the Berryessa Union School District, its Architect, its Engineer, its Construction Manager, and all of their respective officers, agents, employees, and consultants from any damage, or omissions, related to conditions that could have been identified during my visit and/or the Bidder's representative's visit to the Site.

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

Date:	
Proper Name of Bidder:	
Signature:	
Print Name:	
Title:	

BID FORM

Berryessa Union School District 1376 Piedmont Rd. San Jose, CA 95132

Dear Board Members:

The undersigned doing business under the firm name of:

hereby propose and agree to enter into a Contract, to furnish any and all labor, materials, applicable taxes, equipment and services for the completion of Work described hereinafter and in the Contract Documents:

PIEDMONT MIDDLE SCHOOL BUILDING L DEMOLITION Bid # B-02-2022-23

prepared by: McKim Design Group for the amount of:

1		
	Dollars	\$
	Amount in Words	
	Base Bid – Conduit Raceway at Piedmont MS	
2		
	Twelve Thousand Dollars	\$12,000.00
	Allowance for Unforeseen Conditions	
3		
	Dollars	\$
	Amount in Words	
	Base Bid + Allowance (Add 1+2)	

11.1.6.1 ALTERNATE (NA)

11.1.6.2 COURSE-OF-CONSTRUCTION INSURANCE REQUIREMENTS

Contractor, during the progress of the Work and until final acceptance of the Work by Owner upon completion of the entire Contract, shall maintain Builder's Risk/Course-of-Construction insurance satisfactory to the Owner, issued on a completed value basis on all insurable Work included under the Contract Documents. This insurance shall insure against all risks, including but not limited to the following perils: vandalism, theft, malicious mischief, fire, sprinkler leakage, civil authority, sonic boom, explosion, collapse, flood, earthquake (for projects not solely funded through revenue bonds, limited to earthquakes equivalent to or under 3.5 on the Richter Scale in magnitude), wind, hail, lightning, smoke, riot or civil commotion, debris removal (including demolition) and reasonable compensation for the Architect's services and expenses required as a result of such insured loss. This insurance shall provide coverage in an amount not less than the full cost to repair, replace or reconstruct the Work. Such insurance shall include the Owner, the Architect, and any other person or entity with an insurable interest in the Work as an additional named insured.

The Contractor shall submit to the Owner for its approval all items deemed to be uninsurable under the Builder's Risk/Course-of Construction insurance. The risk of the damage to the Work due to the perils covered by the Builder's Risk/Course-of-Construction insurance, as well as any other hazard which might result in damage to the Work, is that of the Contractor and the surety, and no claims for such loss or damage shall be recognized by the Owner, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

If written notice of the Award of Contract is mailed, faxed, or delivered to the undersigned at any time before this bid is withdrawn, the undersigned shall, within ten (10) days after the date of such mailing, faxing, or delivering of such notice, execute and deliver an agreement in the form of agreement present in these Contract Documents and give Performance and Payment Bonds in accordance with the specifications and bid as accepted.

The undersigned hereby designates as the office to which such Notice of Award of Contract may be mailed, faxed, or delivered:

Our Public Liability and Property Damage Insurance is placed with:

Our Workers' Compensation Insurance is placed with:

Circular letters, bulletins, addenda, etc., bound with the specifications or issued during the time of bidding are included in the bid, and, in completing the Contract, they are to become a part thereof.

The receipt of the following addenda to the specifications is acknowledged:

Addendum No.	Date	Addendum No.	Date
Addendum No.	Date	Addendum No.	Date

This bid may be withdrawn at any time prior to the scheduled time for the opening of bids or any authorized postponement thereof.

A bidder shall not submit a bid unless the bidder's California contractor's license number appears clearly on the bid, the license expiration date and class are stated, and the bid contains a statement that the representations made therein are made under penalty of perjury. Any bid submitted by a contractor who is not licensed pursuant to Business and Professions Code section 7028.15 shall be considered nonresponsive and shall be rejected. Any bid not containing the above information may be considered nonresponsive and may be rejected.

NOTE: Each bid must give the full business address of the bidder and be signed by bidder with bidder's usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.

The undersigned declares under penalty of perjury under the laws of the State of California that the representations made in this bid are true and correct.

Title: Name	e of Company as Licensed:
Busin	ess Address:
Telep	hone Number:
Califo	ornia Contractor License No.:
Class	and Expiration Date:
State	of Incorporation, if Applicable:
	Evidence of authority to bind corporation is attached

Signed: _____

BID BOND

Bid #B-02-2022-23 PIEDMONT MIDDLE SCHOOL BUILDING L DEMOLITION

KNOW ALL MEN BY THESE PRESENTS that we the undersigned as Principal and ______as Surety, are hereby held and firmly bound unto the Berryessa Union School District ("Owner") in the sum of ______ Dollars (\$_____) for payment of which sum, well and truly 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 Owner a certain bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing for the construction of Morrill Middle School Flexible Instructional Space Alteration and Related Modernization in strict accordance with Contract Documents.

NOW, THEREFORE,

a. If said bid shall be rejected, or, in the alternative;

b. If said bid shall be accepted and the Principal shall execute and deliver a contract in the form of agreement attached hereto and shall execute and deliver Performance and Payment Bonds in the forms attached hereto (all properly completed in accordance with said bid), and shall in all other respects perform the agreement created by the acceptance of said bid;

Then this obligation shall be void, otherwise the same shall remain in full 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.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract on the call for bids, or to the Work to be performed hereunder, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract or the call for bids, or to the Work, or to the specifications. IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under several seals this _____ day of ______, 20__, the name and corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body. In the presence of:

(Notary Seal)

	(Principal)
	(Business Address)
	(Corporate Surety)
	Business Address)
	By:
The rate or premium of this bond is amount of premium charged, \$	

(The above must be filled in by Corporate Surety).

DESIGNATION OF SUBCONTRACTORS

Bid #B-02-2022-23 PIEDMONT MIDDLE SCHOOL BUILDING L DEMOLITION

Each bidder shall set forth below the name and the location of the place of business of each subcontractor and the California contractor license number 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, or to a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent (0.5%) of the bidder's total bid, and the portion of the Work which will be done by each subcontractor. An inadvertent error in listing a California contractor's license number shall not be grounds for filing a bid protest or for considering the bid nonresponsive if the bidder submits the corrected contractor's license number to the Owner within 24 hours after the bid opening, or any continuation thereof, so long as the corrected contractor's license number corresponds to the submitted name and location for that subcontractor.

If the Contractor fails to specify a subcontractor for any portion of the Work to be performed under the Contract in excess of one-half of 1 percent (0.5%) of the Contractor's total bid, the Contractor shall be deemed to have agreed to perform such portion itself, and shall not be permitted to subcontract that portion of the Work except under the conditions hereinafter set forth.

Subletting or subcontracting of any portion of the Work 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 legislative body of the Owner.

As of March 1, 2015, for any bid proposal submitted, and as of April 1, 2015, for any contract for public work entered into, an inadvertent error in listing a subcontractor who is not registered under Labor Code section 1725.5 shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that either: the subcontractor is registered prior to the bid opening; or the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5(a)(2)(E), if applicable, within 24 hours after the bid opening; or the subcontractor is replaced by another registered subcontractor under Public Contract Code section 4107. Failure of a listed subcontractor to be registered shall be grounds under Public Contract Code section 4107 for the Contractor, with the Owner's consent, to substitute a registered subcontractor for the unregistered subcontractor.

Failure to provide this information in a legible manner may result in the rejection of an otherwise acceptable bid.

NOTE: *Reproduce page two of this section for additional listings needed beyond the length of this form.*

Portion of Work	Name of Subcontractor & Phone No.	Location of Subcontractor	California Contractor License Number

Portion of Work	Name of Subcontractor & Phone No.	Location of Subcontractor	California Contractor License Number

I am the authorized representative of the Bidder submitting this Designation of Subcontractors and I declare that each subcontractor listed holds a valid and current contractor license in good standing in California to perform the portion of work for which the subcontractor is listed.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____, 201__, at _____[*city*], ______[*state*].

Signature: _____

Print Name: _____

<u>SUFFICIENT FUNDS DECLARATION</u> (Labor Code section 2810) TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

Owner: Berryessa Union School District

Project: Bid #B-02-2022-23 PIEDMONT MIDDLE SCHOOL CONDUIT RACEWAY

I, ______, declare that I am the ______ of ______, the entity making and submitting the bid for the above Project that accompanies this Declaration, and that such bid includes sufficient funds to permit _______ *[insert name of entity]* to comply with all local, state or federal labor laws or regulations during the Project, including payment of prevailing wage, and that ______ *[the entity]* will comply with the provisions of Labor Code section 2810(d) if awarded the Contract.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and executed on _____2022, at _____[city], ____[state].

Date: _____

Signature

Print Name: ______
Print Title: _____

NON-COLLUSION DECLARATION <u>TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID</u>

Owner: Berryessa Union School District

Project: Bid #B-02-2022-23 PIEDMONT MIDDLE SCHOOL BUILDING L DEMOLITION

The undersigned declares:

I am the ______ of _____, the party making the foregoing bid.

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

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

Ι	declare under penalty	of perjury u	inder the lay	ws of the State	of California	that the
foregoin	g is true and correct a	nd that this	declaration	is executed or	n	, 20,
at	[<i>city</i>],	[state].				

Signature

Print Name

WORKERS' COMPENSATION CERTIFICATE

Labor Code Section 3700, in relevant part, provides:

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer or as one employer in a group of employers. Said certificate may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees, ... "

I am aware of the provisions of the Labor Code Section 3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract. I shall supply the Owner with certificates of insurance evidencing that Workers' Compensation Insurance is in effect and providing that the Owner will receive thirty (30) days' notice of cancellation.

Name of Contractor

Signature

Print Name

Date

(In accordance with Article 5 (commencing at Section 1860], Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under the contract.)

DRUG-FREE WORKPLACE CERTIFICATION

PROJECT/CONTRACT NO.: **<u>B-02-2022-23</u>** for the ____

between Berryessa Union School District (the "District" or the "Owner") and

(the "Contractor" or the "Bidder") for

PIEDMONT MIDDLE SCHOOL BUILDING L DEMOLITION (the "Contract" or the "Project").

This Drug-Free Workplace Certification form is required from the successful Bidder pursuant to Government Code section 8350 et seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for the procurement of any property or service from any state agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract or grant awarded by a state agency may be subject to suspension of payments or termination of the contract or grant, and the contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred.

The District is not a "state agency" as defined in the applicable section(s) of the Government Code, but the District is a local agency and public school district under California law and requires all contractors on District projects to comply with the provisions and requirements of Government Code section 8350 et seq., the Drug-Free Workplace Act of 1990.

Contractor shall certify that it will provide a drug-free workplace by doing all of the following:

- a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's or organization's workplace and specifying actions which will be taken against employees for violations of the prohibition;
- b. Establishing a drug-free awareness program to inform employees about all of the following:
 - (1) The dangers of drug abuse in the workplace.
 - (2) The person's or organization's policy of maintaining a drug-free workplace.
 - (3) The availability of drug counseling, rehabilitation, and employeeassistance programs.
 - (4) The penalties that may be imposed upon employees for drug abuse violations.
- c. Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required above, and that, as a condition of

employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of Government Code section 8355 listed above and will publish a statement notifying employees concerning (a) the prohibition of controlled substance at the workplace, (b) establishing a drug-free awareness program, and (c) requiring that each employee engaged in the performance of the contract be given a copy of the statement required by section 8355(a), and requiring that the employee agree to abide by the terms of that statement.

I also understand that if the District determines that I have either (a) made a false certification herein, or (b) violated this certification by failing to carry out the requirements of section 8355, that the Contract awarded herein is subject to termination, suspension of payments, or both. I further understand that, should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of section 8350 et seq.

I acknowledge that I am aware of the provisions of Government Code section 8350 et seq. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	

ROOF PROJECT CERTIFICATION

[Public Contract Code §3006(a,)(b)]

I, _____ [name], _____ [name], _____ [name of employer], certify that I have not offered, given, or agreed to give, received, accepted, or agreed to accept, any gift, contribution, or any financial incentive whatsoever to or from any person in connection with the roof project contract. As used in this certification, "person" means any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals. Furthermore, I, ______ [name], ______ [name of employer], certify that I do not have, and throughout the duration of the contract, I will not have, any financial relationship in connection with the performance of this contract with any architect, engineer, roofing, consultant, materials manufacturer, distributor, or vendor that is not disclosed below.

I, _____ [name], _____ [name of employer], have the following financial relationships, with an architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor, or other person in connection with the following roof project contract:

[name and address of building, contract date and number]

[name and address of building, contract date and number]

[name and address of building, contract date and number]

[name and address of building, contract date and number]

I certify that to the best of my knowledge, the contents of this disclosure are true, or are believed to be true.

_____ Signature

_____ Date

_____ Print Name

_____Print Name of Employer

FINGERPRINTING NOTICE AND ACKNOWLEDGMENT

(Education Code Section 45125.2(a))

Note: This document must be executed and submitted with the bid.

Business entities entering into contracts with the Owner for the construction, reconstruction, rehabilitation or repair of a facility must comply with Education Code sections 45125.1 and 45125.2. Such entities are responsible for ensuring full compliance with the law and should therefore review all applicable statutes and regulations. The following information is provided simply to assist such entities with compliance with the law.

- 1. If the Owner determines your employee(s) will have more than limited contact with students, then you must take one or more of the following steps:
 - a. Install a physical barrier at the worksite to limit contact with pupils.
 - b. Have an employee, who the Department of Justice has ascertained has not been convicted of a violent or serious felony, continually monitor and supervise employees. The entity shall verify in the Independent Contractor Student Contact Form to the Owner that the employee charged with monitoring and supervising its employees has no such convictions. (See attached.)
 - c. Arrange, with Owner's approval, for surveillance by Owner's personnel.

If one or more of these steps is taken, you are not required to comply with Education Code section 45125.1.

2. If you are providing the services in an emergency or exceptional situation, you are not required to comply with Education Code section 45125.2. An "emergency or exceptional" situation is one in which pupil health or safety is endangered or when repairs are needed to make a facility safe and habitable. Owner shall determine whether an emergency or exceptional situation exists.

I have read the foregoing and agree to comply with the requirements of Education Code §§ 45125.1 and 45125.2 as applicable.

Dated:

Signature

Name: ______

Title: _____

Berryessa Union School District Piedmont Middle School Bldg. L Demo

ATTACHMENT

Under Education Code section 45125.1, no employee of a contractor or subcontractor who has been convicted of or has criminal proceedings pending for a violent or serious felony may come into contact with any student. A violent felony is any felony listed in subdivision (c) of Section 667.5 of the Penal Code. Those felonies are presently defined as:

- (1) Murder or voluntary manslaughter.
- (2) Mayhem.
- (3) Rape as defined in paragraph (2) or (6) of subdivision (a) of Section 261 or paragraph (1) or (4) of subdivision (a) of Section 262.
- (4) Sodomy as defined in subdivision (c) or (d) of Section 286.
- (5) Oral copulation as defined in subdivision (c) or (d) of Section 288a.
- (6) Lewd or lascivious act as defined in subdivision (a) or (b) of Section 288.
- (7) Any felony punishable by death or imprisonment in the state prison for life.
- (8) Any felony in which the defendant inflicts great bodily injury on any person other than an accomplice which has been charged and proved as provided for in Section 12022.7, 12022.8, or 12022.9 on or after July 1, 1977, or as specified prior to July 1, 1977, in Sections 213, 264, and 461, or any felony in which the defendant uses a firearm which use has been charged and proved as provided in subdivision (a) of Section 12022.3, or Section 12022.5 or 12022.55.
- (9) Any robbery.
- (10) Arson, in violation of subdivision (a) or (b) of Section 451.
- (11) Sexual penetration as defined in subdivision (a) or (j) of Section 289.
- (12) Attempted murder.
- (13) A violation of Section 18745, 18750, or 18755.
- (14) Kidnapping.
- (15) Assault with the intent to commit a specified felony, in violation of Section 220.
- (16) Continuous sexual abuse of a child, in violation of Section 288.5.

- (17) Carjacking, as defined in subdivision (a) of Section 215.
- (18) Rape, spousal rape, or sexual penetration, in concert, in violation of Section 264.1.
- (19) Extortion, as defined in Section 518, which would constitute a felony violation of Section 186.22 of the Penal Code.
- (20) Threats to victims or witnesses, as defined in Section 136.1, which would constitute a felony violation of Section 186.22 of the Penal Code.
- (21) Any burglary of the first degree, as defined in subdivision (a) of Section 460, wherein it is charged and proved that another person, other than an accomplice, was present in the residence during the commission of the burglary.
- (22) Any violation of Section 12022.53.
- (23) A violation of subdivision (b) or (c) of Section 11418.

A serious felony is any felony listed in subdivision (c) Section 1192.7 of the Penal Code. Those felonies are presently defined as:

(1)Murder or voluntary manslaughter; (2) Mayhem; (3) Rape; (4) Sodomy by force, violence, duress, menace, threat of great bodily injury, or fear of immediate and unlawful bodily injury on the victim or another person; (5) Oral copulation by force, violence, duress, menace, threat of great bodily injury, or fear of immediate and unlawful bodily injury on the victim or another person; (6) Lewd or lascivious act on a child under the age of 14 years; (7) Any felony punishable by death or imprisonment in the state prison for life; (8) Any felony in which the defendant personally inflicts great bodily injury on any person, other than an accomplice, or any felony in which the defendant personally uses a firearm; (9) Attempted murder; (10) Assault with intent to commit rape, or robbery; (11) Assault with a deadly weapon or instrument on a peace officer; (12) Assault by a life prisoner on a non-inmate; (13) Assault with a deadly weapon by an inmate; (14) Arson; (15) Exploding a destructive device or any explosive with intent to injure; (16) Exploding a destructive device or any explosive causing bodily injury, great bodily injury, or mayhem; (17) Exploding a destructive device or any explosive with intent to murder; (18) Any burglary of the first degree; (19) Robbery or bank robbery; (20) Kidnapping; (21) Holding of a hostage by a person confined in a state prison; (22) Attempt to commit a felony punishable by death or imprisonment in the state prison for life; (23) Any felony in which the defendant personally used a dangerous or deadly weapon; (24) Selling, furnishing, administering, giving, or offering to sell, furnish, administer, or give to a minor any heroin, cocaine, phencyclidine (PCP), or any

methamphetamine-related drug, as described in paragraph (2) of subdivision (d) of Section 11055 of the Health and Safety Code, or any of the precursors of methamphetamines, as described in subparagraph (A) of paragraph (1) of subdivision (f) of Section 11055 or subdivision (a) of Section 11100 of the Health and Safety Code; (25) Any violation of subdivision (a) of Section 289 where the act is accomplished against the victim's will by force, violence, duress, menace, or fear of immediate and unlawful bodily injury on the victim or another person; (26) Grand theft involving a firearm; (27)carjacking; (28) any felony offense, which would also constitute a felony violation of Section 186.22; (29) assault with the intent to commit mayhem, rape, sodomy, or oral copulation, in violation of Section 220; (30) throwing acid or flammable substances, in violation of Section 244; (31) assault with a deadly weapon, firearm, machine gun, assault weapon, or semiautomatic firearm or assault on a peace officer or firefighter, in violation of Section 245; (32) assault with a deadly weapon against a public transit employee, custodial officer, or school employee, in violation of Sections 245.2, 245.3, or 245.5; (33) discharge of a firearm at an inhabited dwelling, vehicle, or aircraft, in violation of Section 246; (34) commission of rape or sexual penetration in concert with another person, in violation of Section 264.1; (35) continuous sexual abuse of a child, in violation of Section 288.5; (36) shooting from a vehicle, in violation of subdivision (c) or (d) of Section 26100; (37) intimidation of victims or witnesses, in violation of Section 136.1; (38) criminal threats, in violation of Section 422; (39) any attempt to commit a crime listed in this subdivision other than an assault; (40) any violation of Section 12022.53; (41) a violation of subdivision (b) or (c) of Section 11418; and (42) any conspiracy to commit an offense described in this subdivision.

INDEPENDENT CONTRACTOR STUDENT CONTACT FORM

Contractor Name:	
Supervisor/Foreman Name:	
Start Date:	
Completion Date:	
Location of Work:	
Hours of Work:	
Length of Time on Grounds:	
Number of Employees on the Job:	

Yes No

[]	[]	Employees will have more than limited contact with students as determined by
		Owner, or if by Contractor, please explain:

If yes, the following steps will be taken to ensure student safety (check):

- [] A physical barrier will be installed at the worksite to limit contact with pupils.
- [] Employees will be continually monitored and supervised by an employee who has not been convicted of a violent or serious felony.

Name of Supervising Employee:

Date of Department of Justice verification that supervising employee has not been convicted of a violent or serious felony:

Name of employee who is the custodian of the Department of Justice verification information:

[] Owner agrees: Employees will be surveilled by Owner's personnel.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Dated:

Signature

Typed Name:_____

Title:

Note: This document must be executed and submitted with the executed Agreement between Owner and Contractor.

NOTICE OF INTENT TO AWARD

DATE POSTED:

CONTRACT NUMBER: B-02-2022-23

PROJECT TITLE: PIEDMONT MIDDLE SCHOOL BUILDING L DEMOLITION

Bonny S Gregorius, the Purchasing and Contracts Manager of the Berryessa Union School District, intends to recommend to the Board of Trustees of the Berryessa Union School District the Award of the above-referenced Project to at ______ meeting of the Board of Trustees.

Deliver to the District FOUR fully executed counterparts of Document 00 52 26 (Agreement). Each copy of Document 00 52 26 (Agreement) must bear your original signature on the signature page and your initials on each page. Please print as single sided copies.

You must provide a scanned <u>signed copy</u> of the agreement before 3:00pm on ______. You must provide the original completed documents listed below by 2:00pm on ______.

FOR THE BERRYESSA UNION SCHOOL DISTRICT

By: _____

Bonny S Gregorius Purchasing and Contracts Manager 408-923-1871 ofc 408-926-8329 fax bgregorius@busd.net

NOTICE OF AWARD

Attn:

CONTRACT NO.:B-02-2022-23CONTRACT FOR:Piedmont Middle School Building L Demolition

The Contract Sum:

Dollars (\$)

1. One electronic copy of the proposed Contract Documents listed below accompanies this Notice of Intent to Award.

- 2. You must provide the original completed documents listed below by 2:00pm on_____.
 - a. Deliver to District TWO originals of Document 00 61 13.13 (Construction Performance Bond), executed by you and your surety.
 - b. Deliver to District TWO originals of Document 00 61 13.16 (Construction Labor and Material Payment Bond), executed by you and your surety.
 - c. Deliver to District TWO original sets of the insurance certificates with endorsements required under Document 00 72 00 (General Conditions).
- 3. Failure to comply with these conditions within the time specified will entitle District to consider your Bid abandoned, to annul this Notice of Award, and to declare your Bid security forfeited.
- 4. Within 10 days after you comply with the conditions in Paragraph 2 of this Document 00 51 00, District will return to you one fully signed counterpart of Document 00 52 26 (Agreement).
- 5. Before you may start any Work at the Site, you must attend a preconstruction conference. The preconstruction conference will be arranged through Kitchell CEM. Questions regarding bonds and insurance may be directed to Bonny S Gregorius, Purchasing Manager at 408-923-1871.

6. **SB 854 COMPLIANCE:** No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

7. FURNISHING OF ELECTRONIC CERTIFIED PAYROLL RECORDS TO LABOR COMMISSIONER:

All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement).

FOR THE BERRYESSA UNION SCHOOL DISTRICT

By: _____

Bonny S Gregorius Purchasing and Contracts Manager

Board Approval Date: _____

DOCUMENT 00 52 26

AGREEMENT BETWEEN OWNER AND CONTRACTOR

This Agreement effective _____, 20__, by and between Berryessa Union School District, Santa Clara County, California, hereinafter called the "Owner," and _____, hereinafter called the "Contractor."

WITNESSETH: That the Contractor and the Owner for the consideration hereinafter named agree as follows:

ARTICLE I. SCOPE OF WORK. The Contractor agrees to furnish all labor, equipment and materials, including tools, implements, and appliances required, and to perform all the work in a good and workmanlike manner, free from any and all liens and claims from mechanics, material suppliers, subcontractors, artisans, machinists, teamsters, freight carriers, and laborers required for:

PIEDMONT MIDDLE SCHOOL CONDUIT RACEWAY

all in strict compliance with the plans, drawings and specifications therefore prepared by:

McKim Design Group

and other contract documents relating thereto.

ARTICLE II. CONTRACT DOCUMENTS. The Contractor and the Owner agree that all of the documents listed in Article 1.1.1 of the General Conditions form the Contract Documents which form the Contract.

ARTICLE III. TIME TO COMPLETE AND LIQUIDATED DAMAGES.

Time is of the essence in this contract, and the time of Completion for the Project shall be as follows:

Start Construction: September 26, 2022 Complete Construction: October 26, 2022

Failure to Complete the Project within the time and in the manner provided for by the Contract Documents (i.e., by the Completion deadline) shall subject the Contractor to liquidated damages. For purposes of liquidated damages, the concept of "substantial completion" shall not constitute Completion and is not part of the Contract Documents. The actual occurrence of damages and the actual amount of the damages which the Owner would suffer if the Project were not Completed by the Completion deadline are dependent upon many circumstances and conditions which could prevail in various combinations and, from the nature of the case, it is impracticable and extremely difficult to fix the actual damages. Damages which the Owner would suffer in the event of delay include, but are not limited to, loss of the use of the Project, disruption of activities, costs of administration, supervision and the incalculable inconvenience and loss suffered by the public. Accordingly, the parties agree that the amount herein set forth shall be the amount of damages which the Owner shall directly incur upon failure of the Contractor to Complete the Project by the Completion deadline: **<u>\$500.00</u>**, for each calendar day by which Completion of the Project is delayed beyond the Completion deadline as adjusted by change orders.

If the Contractor becomes liable under this section, the Owner, in addition to all other remedies provided by law, shall have the right to withhold any and all retained percentages of payments and/or progress payments, and to collect the interest thereon, which would otherwise be or become due the Contractor until the liability of the Contractor under this section has been finally determined. If the retained percentages and withheld progress payments appear insufficient to discharge all liabilities of the Contractor incurred under this Article, the Contractor and its sureties shall continue to remain liable to the Owner for such liabilities until all such liabilities are satisfied in full.

If the Owner accepts any work or makes any payment under this Agreement after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Agreement provisions regarding time of Completion and liquidated damages.

ARTICLE IV. PAYMENT AND RETENTION. The Owner agrees to pay the Contractor in current funds ______ dollars (\$______) for work satisfactorily performed after receipt of properly documented and submitted Applications for Payment and to make payments on account thereof, as provided in the General Conditions.

The retention amount on this Project is Five Percent (5%).

ARTICLE V. CHANGES. Changes in this Agreement or in the Work to be done under this Agreement shall be made as provided in the General Conditions.

ARTICLE VI. TERMINATION. The Owner or Contractor may terminate the Contract as provided in the General Conditions.

ARTICLE VII. PREVAILING WAGES. The Project is a public work, the Work shall be performed as a public work and pursuant to the provisions of Section 1770 et seq. of the Labor Code of the State of California, which are hereby incorporated by reference and made a part hereof, the Director of Industrial Relations has determined the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which the work is to be performed, for each craft, classification or type of worker needed to execute this Contract. Per diem wages shall be deemed to include employer payments for health and welfare, pension, vacation, apprenticeship or other training programs, and similar purposes. Copies of the rates are on file at the Owner's principal office. The rate of prevailing wage for any craft, classification or type of workmanship to be employed on this Project is the rate established by the applicable collective bargaining agreement which rate so provided is hereby adopted by reference and shall be effective for the life of this Agreement or until

the Director of the Department of Industrial Relations determines that another rate be adopted. It shall be mandatory upon the Contractor and on any subcontractor to pay not less than the said specified rates to all workers employed in the execution of this Agreement.

The Contractor and any subcontractor under the Contractor as a penalty to the Owner shall forfeit not more than Two Hundred Dollars (\$200.00) for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed. The difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rates shall be paid to each worker by the Contractor.

The Contractor and each Subcontractor shall keep or cause to be kept an accurate record for work on this Project showing the names, addresses, social security numbers, work classification, straight time and overtime hours worked and occupations of all laborers, workers and mechanics employed by them in connection with the performance of this Contract or any subcontract thereunder, and showing also the actual per diem wage paid to each of such workers, which records shall be open at all reasonable hours to inspection by the Owner, its officers and agents and to the representatives of the Division of Labor Law Enforcement of the State Department of Industrial Relations. The Contractor and each subcontractor shall furnish a certified copy of all payroll records directly to the Labor Commissioner.

For public works contracts awarded on and after January 1, 2015, those public works projects shall be subject to compliance monitoring and enforcement by the Department of Industrial Relations.

As of March 1, 2015, a contractor or subcontractor shall not be qualified to submit a bid or to be listed in a bid proposal subject to the requirements of Public Contract Code section 4104 unless currently registered and qualified under Labor Code section 1725.5 to perform public work as defined by Division 2, Part 7, Chapter 1 (§§1720 et seq.) of the Labor Code.

As of April 1, 2015, a contractor or subcontractor shall not be qualified to enter into, or engage in the performance of, any contract of public work (as defined by Division 2, Part 7, Chapter 1 (§§1720 et seq.) of the Labor Code) unless currently registered and qualified under Labor Code section 1725.5 to perform public work.

ARTICLE VIII. WORKING HOURS. In accordance with the provisions of Sections 1810 to 1815, inclusive, of the Labor Code of the State of California, which are hereby incorporated and made a part hereof, the time of service of any worker employed by the Contractor or a Subcontractor doing or contracting to do any part of the Work contemplated by this Agreement is limited and restricted to eight hours during any one calendar day and forty hours during any one calendar week, provided, that work may be performed by such employee in excess of said eight hours per day or forty hours per week provided that compensation for all hours worked in excess of eight hours per day, and forty hours per week, is paid at a rate not less than one and one-half $(1\frac{1}{2})$ times the

basic rate of pay. The Contractor and every Subcontractor shall keep an accurate record showing the name of and the actual hours worked each calendar day and each calendar week by each worker employed by them in connection with the Work. The records shall be kept open at all reasonable hours to inspection by representatives of the Owner and the Division of Labor Law Enforcement. The Contractor shall as a penalty to the Owner forfeit Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Agreement by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day, and forty hours in any one calendar week, except as herein provided.

ARTICLE IX. APPRENTICES. The Contractor agrees to comply with Chapter 1, Part 7, Division 2, Sections 1777.5 and 1777.6 of the California Labor Code, which are hereby incorporated and made a part hereof. These sections require that contractors and subcontractors employ apprentices in apprenticeable occupations in a ratio of not less than one hour of apprentice's work for each five hours of work performed by a journeyman (unless an exemption is granted in accordance with Section 1777.5) and that contractors and subcontractors shall not discriminate among otherwise qualified employees as indentured apprentices on any public works solely on the ground of sex, race, religious creed, national origin, ancestry or color. Only apprentices as defined in Labor Code Section 3077, who are in training under apprenticeship standards and who have signed written apprentice agreements, will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the Contractor for all apprenticeable occupations.

ARTICLE X. DSA OVERSIGHT PROCESS. The Contractor must comply with the applicable requirements of the Division of State Architect ("DSA") Construction Oversight Process ("DSA Oversight Process"), including but not limited to (a) notifying the Owner's Inspector of Record/Project Inspector ("IOR") upon commencement and completion of each aspect of the work as required under DSA Form 156; (b) coordinating the Work with the IOR's inspection duties and requirements; (c) submitting verified reports under DSA Form 6-C; and (d) coordinating with the Owner, Owner's Architect, any Construction Manager, any laboratories, and the IOR to meet the DSA Oversight Process requirements without delay or added costs to the Project.

Contractor shall be responsible for any additional DSA fees related to review of proposed changes to the DSA-approved construction documents, to the extent the proposed changes were caused by Contractor's wrongful act or omissions. If inspected work is found to be in non-compliance with the DSA-approved construction documents or the DSA-approved testing and inspection program, then it must be removed and corrected. Any construction that covers unapproved or uninspected work is subject to removal and correction, at Contractor's expense, in order to permit inspection and approval of the covered work in accordance with the DSA Oversight Process.

ARTICLE XI. INDEMNIFICATION AND INSURANCE. The Contractor will defend, indemnify and hold harmless the Owner, its governing board, officers, agents, trustees, employees and others as provided in the General Conditions.

By this statement the Contractor represents that it has secured the payment of Workers' Compensation in compliance with the provisions of the Labor Code of the State of California and during the performance of the work contemplated herein will continue so to comply with said provisions of said Code. The Contractor shall supply the Owner with certificates of insurance evidencing that Workers' Compensation Insurance is in effect and providing that the Owner will receive thirty (30) days' notice of cancellation.

Contractor shall provide the insurance set forth in the General Conditions. The amount of general liability insurance shall be \$1,000,000.00 per occurrence for bodily injury, personal injury and property damage and a minimum of \$2,000,000.00 aggregate. The amount of automobile liability insurance shall be \$1,000,000.00 per accident for bodily injury and property damage combined single limit.

ARTICLE XII. ENTIRE AGREEMENT. The Contract constitutes the entire agreement between the parties relating to the Project, and supersedes any prior or contemporaneous agreement between the parties, oral or written, including the Owner's award of the Project to Contractor, unless such agreement is expressly incorporated herein. The Owner makes no representations or warranties, express or implied, not specified in the Contract. The Contract is intended as the complete and exclusive statement of the parties' agreement pursuant to Code of Civil Procedure section 1856.

ARTICLE XIII. EXECUTION OF OTHER DOCUMENTS. The parties to this Agreement shall cooperate fully in the execution of any and all other documents and in the completion of any additional actions that may be necessary or appropriate to give full force and effect to the terms and intent of the Contract.

ARTICLE XIV. EXECUTION IN COUNTERPARTS. This Agreement may be executed in counterparts such that the signatures may appear on separate signature pages. A copy, or an original, with all signatures appended together, shall be deemed a fully executed Agreement.

ARTICLE XV. BINDING EFFECT. Contractor, by execution of this Agreement, acknowledges that Contractor has read this Agreement and the other Contract Documents, understands them, and agrees to be bound by their terms and conditions. The Contract shall inure to the benefit of and shall be binding upon the Contractor and the Owner and their respective successors and assigns.

ARTICLE XVI. SEVERABILITY; GOVERNING LAW; CHOICE OF FORUM. If any provision of the Contract shall be held invalid or unenforceable by a court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof. The Contract shall be governed by the laws of the State of California. Any action or proceeding seeking any relief under or with respect to this Agreement shall be brought solely in the Superior Court of the State of California for the County of Santa Clara, subject to transfer of venue under applicable State law, provided that nothing in this Agreement shall constitute a waiver of immunity to suit by Owner.

ARTICLE XVII. AMENDMENTS. The terms of the Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except

by written agreement signed by the parties and approved or ratified by the Governing Board.

ARTICLE XVIII. ASSIGNMENT OF CONTRACT. The Contractor shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of the surety on the payment bond, the surety on the performance bond and the Owner.

ARTICLE XIX. COMPLIANCE WITH COVID-19 REQUIREMENTS. During the Work, the Contractor shall ensure that all Work, including but not limited to Work performed by Subcontractors, is performed in compliance with all applicable legal, contractual, and local government requirements related to the Novel Coronavirus and COVID-19, including "social distancing," face masks, and hand hygiene as may be ordered by the State or local authorities and as may be directed in the Contract Documents.

ARTICLE XX. WRITTEN NOTICE. Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified or overnight mail to the last business address known to the person who gives the notice.

(CONTRACTOR)

(OWNER)

SIGNED BY (Contractor)

(Title)

CALIFORNIA CONTRACTOR'S LICENSE NO.

LICENSE EXPIRATION DATE

NOTE: Contractor must give the full business address of the Contractor and sign with Contractor's usual signature. Partnerships must furnish the full name of all partners and the Agreement must be signed in the partnership name by a general partner with authority to bind the partnership in such matters, followed by the signature and designation of the person signing. The name of the person signing shall also be typed or printed below the signature. Corporations must sign with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the chairman of the board, president or any vice president, and then followed by a second signature by the secretary, assistant secretary, the chief financial officer or assistant treasurer. All persons signing must be authorized to bind the corporation in the matter. The name of each person signing shall also be typed or printed below the signature. Satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.

DOCUMENT 00 54 00

ESCROW BID DOCUMENTATION

1. **Requirement to Escrow Bid Documentation**

- a. Contractor shall submit, within seven (7) days after the date of the Notice of Award, one copy of all documentary information received or generated by Contractor in preparation of bid prices for this Contract, and additional documentary information about the preparation of bid prices as required herein. This material is referred to herein as "Escrow Bid Documentation." The Escrow Bid Documentation of the Contractor will be held in escrow for the duration of the Contract.
- b. Contractor agrees, as a condition of award of the Contract, that the Escrow Bid Documentation constitutes all written information used in the preparation of its bid, and that no other written bid preparation information shall be considered in resolving disputes or claims. Contractor also agrees that nothing in the Escrow Bid Documentation shall change or modify the terms or conditions of the Contract Documents.
- c. The Escrow Bid Documentation will not be opened by District except as indicated herein. The Escrow Bid Documentation will be used only for the resolution of change orders and claims disputes.
- d. Contractor's submission of the Escrow Bid Documentation, as with the bonds and insurance documents required, is considered an essential part of the Contract award. Should the Contractor fail to make the submission within the allowed time specified above, District may deem the Contractor to have failed to enter into the Contract, and the Contractor shall forfeit the amount of its bid security, accompanying the Contractor's bid, and District may award the Contract to the next lowest responsible bidder.
- e. NO PAYMENTS WILL BE MADE, NOR WILL DISTRICT ACCEPT PROPOSED CHANGE ORDERS UNTIL THE ABOVE REQUIRED INFORMATION IS SUBMITTED AND APPROVED.
- f. The Escrow Bid Documentation shall be submitted in person by an authorized representative of the Contractor to the District.

2. **Ownership of Escrow Bid Documentation**

a. The Escrow Bid Documentation is, and shall always remain, the property of Contractor, subject to review by District, as provided herein.

b. The Escrow Bid Documentation constitutes trade secrets (i) not known outside Contractor's business, (ii) known only to a limited extent and only by a limited number of employees of Contractor's business, (iii) safeguarded while in Contractor's possession, (iv) extremely valuable to Contractor, and (v) potentially extremely valuable to Contractor's competitors by virtue of it reflecting Contractor's contemplated techniques of construction. Subject to the provisions herein, District agrees to safeguard the Escrow Bid Documentation, and all information contained therein, against disclosure to the fullest extent permitted by law, except that District shall not be obligated to seek a protective order from a court, or otherwise incur any costs in relation to court proceedings, related to a request for disclosure. In the event that the District is required to participate in a court proceeding related to a request for disclosure of the Escrow Bid Documentation, or in the event that the District is requested by Contractor to participate in such a court proceeding, Contractor shall pay for any and all attorneys' fees and costs incurred by the District in connection with such proceeding.

3. Format and Contents of Escrow Bid Documentation

- a. Contractor may submit Escrow Bid Documentation in its usual cost-estimating format; a standard format is not required. The Escrow Bid Documentation shall be submitted in the language (e.g., English) of the specification.
- Escrow Bid Documentation must clearly itemize the estimated costs of b. performing the work of each bid item contained in the bid schedule, separating bid items into sub-items as required to present a detailed cost estimate and allow a The Escrow Bid Documentation shall include all detailed cost review. subcontractor bids or quotes, supplier bids or quotes, quantity takeoffs, crews, equipment, calculations of rates of production and progress, copies of quotes from subcontractors and suppliers, and memoranda, narratives, add/deduct sheets, and all other information used by the Contractor to arrive at the prices contained in the bid proposal. Estimated costs should be broken down into Contractor's usual estimate categories such as direct labor, repair labor, equipment ownership and operation, expendable materials, permanent materials, and subcontract costs as appropriate. Plant and equipment and indirect costs should be detailed in the The Contractor's allocation of indirect costs. Contractor's usual format. contingencies, markup, and other items to each bid item shall be identified.
- c. All costs shall be identified. For bid items amounting to less than \$10,000, estimated unit costs are acceptable without a detailed cost estimate, provided that labor, equipment, materials, and subcontracts, as applicable, are included and provided that indirect costs, contingencies, and markup, as applicable, are allocated.
- d. Bid Documentation provided by District should not be included in the Escrow Bid Documentation unless needed to comply with the following requirements.

4. Submittal of Escrow Bid Documentation

- a. The Escrow Bid Documentation shall be submitted by the Contractor in a sealed container within seven (7) days after the date of the Notice of Award. The container shall be clearly marked on the outside with the Contractor's name, date of submittal, project name and the words "Escrow Bid Documentation Intended to be opened in the presence of Authorized Representatives of Both District and Contractor".
- b. By submitting Escrow Bid Documentation, Contractor represents that the material in the Escrow Bid Documentation constitutes all the documentary information used in preparation of the bid and that the Contractor has personally examined the contents of the Escrow Bid Documentation container and has found that the documents in the container are complete.
- c. If Contractor's proposal is based upon subcontracting any part of the work, each subcontractor whose total subcontract price exceeds 5 percent of the total contract price proposed by Contractor, shall provide separate Escrow Documents to be included with those of Contractor. Those documents shall be opened and examined in the same manner and at the same time as the examination described above for Contractor.
- d. If Contractor wishes to subcontract any portion of the Work after award, District retains the right to require Contractor to submit Escrow Documents for the Subcontractor before the subcontract is approved.

5. Storage, Examination and Final Disposition of Escrow Bid Documentation

- a. The Escrow Bid Documentation will be placed in escrow, for the life of the Contract, in a mutually agreeable institution. The cost of storage will be paid by Contractor for the duration of the project until final Contract payment. The storage facilities shall be the appropriate size for all the Escrow Bid Documentation and located conveniently to both District's and Contractor's offices.
- b. The Escrow Bid Documentation shall be examined by both District and Contractor, at any time deemed necessary by either District or Contractor, to assist in the negotiation of price adjustments and change orders or the settlement of disputes and claims. In the case of legal proceedings between District and Contractor, Escrow Bid Documentation shall be used subject to the terms of an appropriate protective order if requested by Contractor and ordered by a court of competent jurisdiction. Examination of the Escrow Bid Documentation is subject to the following conditions:
 - (1) As trade secrets, the Escrow Bid Documentation is proprietary and confidential to the extent allowed by law.

- (2) District and Contractor shall each designate, in writing to the other party seven (7) days prior to any examination, the names of representatives who are authorized to examine the Escrow Bid Documentation. No other person shall have access to the Escrow Bid Documentation.
- (3) Access to the documents may take place only in the presence of duly designated representatives of the District and Contractor. If Contractor fails to designate a representative or appear for joint examination on seven (7) days notice, then the District representative may examine the Escrow Bid Documents alone upon an additional three (3) days notice if a representative of the Contractor does not appear at the time set.
- (4) If a subcontractor has submitted sealed information to be included in the Escrow Bid Documents, access to those documents may take place only in the presence of a duly designated representative of the District, Contractor and that subcontractor. If that subcontractor fails to designate a representative or appear for joint examination on seven (7) days notice, then the District representative and/or the Contractor may examine the Escrow Bid Documentation without that subcontractor present upon an additional three (3) days notice if a representative of that subcontractor does not appear at the time set.
- c. The Escrow Bid Documentation will be returned to Contractor at such time as the Contract has been completed and final settlement has been achieved.

DOCUMENT 00 54 26

This is a fiduciary account created by statute, Public Contract Code section 22300. The funds deposited in this account shall not be released to Contractor or any other person or entity, other than Owner, including pursuant to any purported lien or writ of attachment or execution, without the prior written, express approval of Owner.

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

 This Escrow Agreement is made and entered into by and between the Berryessa

 Union School District, whose address is 1376 Piedmont Road, San Jose, California

 95132 (hereinafter called "Owner");
 _________, whose address

 is___________, a state or federally chartered bank in California whose

 address is _________, (hereinafter called "Escrow Agent").

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

- 1. Pursuant to section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by the Owner pursuant to the Contract entered into between the Owner and Contractor in the amount of Dollars (\$_____), and dated , , (the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When Contractor deposits the securities as a substitute for retention earnings, the Escrow Agent shall notify the Owner within ten (10) calendar days of the deposit. The market value of the securities at the time of the substitution, as valued by the Owner, shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. If the Owner determines that the securities are not adequate it will notify Contractor and Escrow Agent, and Contractor shall deposit additional security as further determined by the Owner. Securities shall be held in the name of the Owner and shall designate the Contractor as the beneficial owner.
- 2. Thereafter, Owner shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.
- 3. Pursuant to Public Contract Code section 22300, as an alternative to the procedures set forth above, Contractor may request in writing that the Owner pay

retention amounts directly to Escrow Agent. When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for benefit of the Contractor until such time as the escrow created under this Escrow Agreement is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.

- 4. The Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor and Escrow Agent.
- 5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.
- 6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.
- 7. The Owner shall have the right to draw upon the securities or any amount paid directly to Escrow Agent in the event of default by the Contractor. Upon seven (7) days written notice to the Escrow Agent from the Owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash, including any amounts paid directly to Escrow Agent pursuant to Section 3 above, as instructed by Owner. Escrow Agent shall not be concerned with the validity of any notice of default given by Owner pursuant to this paragraph, and shall promptly comply with Owner's instructions to pay over said escrowed assets. Escrow Agent further agrees to not interplead the escrowed assets in response to a conflicting demand and hereby waives any present or future opportunity of interpleader.
- 8. Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payment of fees and charges.
- 9. Escrow Agent shall rely on the written notifications from the Owner and Contractor pursuant to Sections (4), (5), (6), (7) and (8) of this Agreement and the

Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

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

ON BEHALF OF OWNER:

Signature

Typewritten Name

Title

ON BEHALF OF CONTRACTOR:

Signature

Typewritten Name

Title

ON BEHALF OF ESCROW AGENT:

Signature

Typewritten Name

Title

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

OWNER:

Signature

Typewritten Name

Title

Berryessa Union School District Piedmont Middle School Bldg. L Demo

CONTRACTOR:

Signature

Typewritten Name

Title

ESCROW AGENT:

Signature

Typewritten Name

Title

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

DOCUMENT 00 55 00

NOTICE TO PROCEED

Dated: _____, 20___

TO: _____

(Contractor)

ADDRESS:

PROJECT: PIEDMONT MIDDLE SCHOOL BLDG. L DEMOLITION

PROJECT/CONTRACT NO.: B-02-2022-23 between the Berryessa Union School District and Contractor ("Contract").

You are notified that the Contract Time under the above Contract will commence to run on ______, 20____. By that date, you are to start performing your obligations under the Contract Documents. In accordance with the Agreement executed by Contractor, the date of completion is ______, 20___.

You must submit the following documents by 5:00 p.m. of the <u>**TENTH** (10TH</u>) calendar day following the date of this Notice to Proceed:

- a. Contractor's preliminary schedule of construction.
- b. Contractor's preliminary schedule of values for all of the Work.
- c. Contractor's preliminary schedule of submittals, including Shop Drawings, Product Data, and Samples submittals
- d. Contractor's Safety Plan specifically adapted for the Project.
- e. A complete subcontractors list, including the name, address, telephone number, facsimile number, California State Contractors License number, classification, and monetary value of all Subcontracts.

Thank you. We look forward to a very successful Project.

Berryessa Union School District

BY:_____

NAME: _____

TITLE: _____

DOCUMENT 00 61 13.13

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____

as Principal and as Surety, are held and firmly bound unto Berryessa Union School District, in the County of Santa Clara, State of California (""Owner") in the sum of ______ Dollars (\$_____) for the payment of which sum well and truly made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, to the Owner for the full performance of a certain contract with the Owner, the terms of which are incorporated herein by reference, dated ______, 20__, for construction of:

Bid #B-02-2022-23 PIEDMONT MIDDLE SCHOOL BLDG. L DEMOLITION 955 Piedmont Road San Jose, CA 95132

The condition of this obligation is such that, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said Contract during the original term of said Contract and any extensions thereof that may be granted by the Owner, with or without notice to the Surety, and for the period of time specified in the Contract after completion for correction of faulty or improper materials and workmanship and during the life of any guaranty or warranty required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreement of any and all duly authorized modifications of said Contract that may hereafter be made, then this obligation is to be void, otherwise to remain in full force and virtue.

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 obligation 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.

No further agreement between Surety and Owner shall be required as a prerequisite to the Surety performing its obligations under this bond.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals this _____ day of _____, 20___ hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

(To be signed by)
(Principal and Surety,)
(and acknowledged and)
(Notarial Seal attached)

(Affix Corporate Seal)

(Individual Principal)

(Business Address)

(Affix Corporate Seal)

(Affix Corporate Seal)

(Corporate Principal)

(Business Address)

(Corporate Surety)

(Business Address)

By:

The rate of premium on this bond is _____ per thousand.

The total amount of premium charged is ______.

The above must be filled in by Corporate Surety.

DOCUMENT 00 61 13.16

<u>PAYMENT BOND</u> (Labor and Material)

KNOW ALL MEN BY THESE PRESENTS:

That WHEREAS, Berryessa Union School District (the "Owner" of the public works project described below) and _______, hereinafter designated as the "Principal," have entered into a Contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to construct:

Bid #B-02-2022-23 PIEDMONT MIDDLE SCHOOL BLDG. L DEMOLITION

Which said agreement dated ______, 20__, and all of the Contract Documents are hereby referred to and made a part hereof; and

WHEREAS, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by whom the Contract is awarded to secure the claims arising under said agreement.

NOW, THEREFORE, THESE PRESENTS WITNESSETH:

The condition of this obligation is that if the said Principal or any of its subcontractors, or the heirs, executors, administrators, successors, or assigns of any, all, or either of them, shall fail to pay any of the persons named in Civil Code section 9100, or any of the amounts due, as specified in Civil Code section 9554, subdivision (b), that said Surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay costs and reasonable attorney's fees to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims so as to give a right of action to them or their assigns in any suit brought upon this bond. Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

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

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety this ______ day of ______, 20__.

(To be signed by)
(Principal and Surety,)
(and acknowledged and)
(Notarial Seal attached)

Principal

Surety

By:____

Attorney-in-Fact

The above bond is accepted and approved this _____ day of ______.

DOCUMENT 00 72 00

GENERAL CONDITIONS

for

CONTRACT OF CONSTRUCTION

BID #B-02-2022-23 PIEDMONT MIDDLE SCHOOL BLDG. L DEMOLITION

BERRYESSA UNION SCHOOL DISTRICT

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ARTICLE 1

GENERAL CONDITIONS

1.1 **BASIC DEFINITIONS**

1.1.1 **The Contract Documents**

The "Contract Documents" consist of the Agreement between Owner and Contractor (hereinafter the Agreement), Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, addenda issued prior to bid, Instructions to Bidders, Notice to Bidders, the Bid Form, Payment Bond, Performance Bond, required insurance certificates, additional insured endorsement and declarations page, Designation of Subcontractors, Noncollusion Declaration, Roof Project Certification (where applicable), Sufficient Funds Declaration (Labor Code section 2810) and the Fingerprinting Notice and Acknowledgment and Independent Contractor Student Contact Form, other documents referred to in the Agreement, and Modifications issued after execution of the Agreement. A Modification is a written amendment to the Contract signed by both parties, a Change Order, a Construction Change Directive, or a written order for a minor change in the Work issued by the Owner. The Contract Documents are complementary, and each obligation of the Contractor, Subcontractors, material or equipment suppliers in any one shall be binding as if specified in all.

1.1.2 THE CONTRACT

The Contract Documents form the Contract. The "Contract" represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Architect and Contractor, between the Owner and any Subcontractor or Sub-subcontractor, or between any persons or entities other than the Owner and the Contractor. The terms of the Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement signed by the parties and approved or ratified by the Governing Board.

1.1.3 **The Work**

The "Work" shall include all labor, materials, services and equipment necessary for the Contractor to fulfill all of its obligations pursuant to the Contract Documents, including but not limited to punch list items. It shall include the initial obligation of any Contractor or Subcontractor, who performs any portion of the Work, to visit the Site of the proposed Work with Owner's representatives, a continuing obligation after the commencement of the Work to fully acquaint and familiarize itself with the conditions as they exist and the character of the operations to be carried on under the Contract Documents, and make such investigation as it may see fit so that it shall fully understand the facilities, physical conditions, and restrictions attending the Work under the Contract Documents. Each such Contractor or Subcontractor shall also thoroughly examine and become familiar with the Drawings, Specifications, and associated

bid documents. The "Site" refers to the grounds of the Project as defined in the Contract Documents and such adjacent lands as may be directly affected by the performance of the Work. The Work shall constitute a "work of improvement" under Civil Code section 8050 and Public Contract Code section 7107.

1.1.4 THE PROJECT

The "Project" is the total construction of the Work performed in accordance with the Contract Documents in whole or in part and which may include construction by the Owner or by separate contractors.

1.1.5 **THE DRAWINGS**

The "Drawings" are graphic and pictorial portions of the Contract Documents prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, and scope of the Work, generally including plans, elevations, sections, details, schedules, and diagrams as drawn or approved by the Architect.

1.1.6 **The Specifications**

The "Specifications" are that portion of the Contract Documents consisting of the written requirements for material, equipment, construction systems, instructions, quality assurance standards, workmanship, and performance of related services.

1.1.7 **The Project Manual**

The "Project Manual" is the volume usually assembled for the Work which may include, without limitation, the bidding requirements, sample forms, Agreement, Conditions of the Contract, and Specifications.

1.1.8 **Or**

"Or" shall include "and/or."

1.1.9 **COMPLETION OR COMPLETE**

Statutory definitions of "completion" and "complete" shall apply for those statutory purposes. For accrual of liquidated damages, Claim and warranty purposes, "completion" and "complete" mean the point in the Project where (1) Contractor has fully and correctly performed all Work in all parts and requirements, including corrective and punch list work, and (2) Owner's representatives have conduced a final inspection that confirmed this performance. Substantial, or any other form of partial or non-compliant, performance of the Work shall not constitute "completion" or "complete" under the Contract Documents.

1.2 **EXECUTION, CORRELATION AND INTENT**

1.2.1 CORRELATION AND INTENT

1.2.1.1 **Documents Complementary and Inclusive.** The Contract Documents are complementary and are intended to include all items required for the proper execution and completion of the Work. Any item of work mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both.

1.2.1.2 *Coverage of the Drawings and Specifications.* The Drawings and Specifications generally describe the work to be performed by Contractor. Generally, the Specifications describe work which cannot be readily indicated on the Drawings and indicate types, qualities, and methods of installation of the various materials and equipment required for the Work. It is not intended to mention every item of Work in the Specifications, which can be adequately shown on the Drawings, or to show on the Drawings all items of Work described or required by the Specifications even if they are of such nature that they could have been shown. All materials or labor for Work, which is shown on the Drawings or the Specifications (or is reasonably inferable therefrom as being necessary to complete the Work), shall be provided by the Contractor whether or not the Work is expressly covered in the Drawings or the Specifications. It is intended that the Work be of sound, quality construction, and the Contractor shall be responsible for the inclusion of adequate amounts to cover installation of all items indicated, described, or implied in the portion of the Work to be performed by Contractor.

1.2.1.3 *Conflicts.* Without limiting Contractor's obligation to identify conflicts for resolution by the Owner, it is intended that the more stringent, higher quality, and greater quantity of Work shall apply.

1.2.1.4 *Conformance With Laws.* Each and every provision of law required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon application of either party the Contract shall be amended in writing to make such insertion or correction.

Before commencing any portion of the Work, Contractor shall check and review the Drawings and Specifications for such portion for conformance and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the physical plant of the Project, and other special requirements, if any, designated in the Contract Documents. In the event Contractor observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with any such restrictions or special requirements of the Contract Documents, Contractor shall promptly notify Architect and Owner in writing of same and shall ensure that any such violation or inconsistency shall be corrected in the manner provided hereunder prior to the construction of that portion of the Project. Where requirements of the Contract Documents

exceed those of the applicable building codes and ordinances, the Contract Documents shall govern. Contractor shall comply with all applicable Federal, State and local laws.

If, as and to the extent that Public Contract Code section 1104 is deemed to apply after the Award of the Contract, Contractor shall not be required to assume responsibility for the completeness and accuracy of architectural or engineering plans and specifications, notwithstanding any other provision in the Contract Documents, except to the extent that Contractor discovered or should have discovered and reported any errors and omissions to the Architect or Owner, including but not limited to as the result of any review of the plans and specifications by Contractor required by the Instructions to Bidders or other Contract Documents, whether or not actually performed by Contractor.

1.2.1.5 *Ambiguity*. Before commencing any portion of the Work, Contractor shall carefully examine all Drawings and Specifications and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify Architect and Owner in writing of any perceived or alleged error, inconsistency, ambiguity, or lack of detail or explanation in the Drawings and Specifications in the manner provided herein. If the Contractor or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract Documents, which it knows or should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the Contract Sum or the time for performance. If Contractor performs, permits, or causes the performance of any Work under the Contract Documents prepared by or on behalf of Contractor which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction, without increase to or adjustment in the Contract Sum or the time for performance. In no case shall any Subcontractor proceed with the Work if uncertain without the Contractor's written direction and/or approval.

1.2.1.6 *Execution.* Execution of the Agreement Between Owner and Contractor by the Contractor is a representation that the Contractor has visited the site, become familiar with the local conditions under which the Work is to be performed and has correlated personal observations with the requirements of the Contract Documents.

1.2.2 ADDENDA AND DEFERRED APPROVALS

1.2.2.1 *Addenda*. Subsequent addenda issued shall govern over prior addenda only to the extent specified. In accordance with Title 24, California Code of Regulations, addenda shall be approved by the Division of the State Architect ("DSA").

1.2.2.2 *Deferred Approvals.* The requirements approved by the DSA on any item submitted as a deferred approval in accordance with Title 24, California Code of Regulations, shall take precedence over any previously issued addenda, drawing or specification.

1.2.3 SPECIFICATION INTERPRETATION

1.2.3.1 *Titles.* The Specifications are separated into titled sections for convenience only and not to dictate or determine the trade or craft involved. Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of work to be performed by any trade.

1.2.3.2 *As Shown, Etc.* Where "as shown," "as indicated," "as detailed," or words of similar import are used, reference is made to the Drawings accompanying the Specifications unless otherwise stated. Where "as directed," "as required," "as permitted," "as authorized," "as accepted," "as selected," or words of similar import are used, the direction, requirement, permission, authorization, approval, acceptance, or selection by Architect is intended unless otherwise stated.

1.2.3.3 *Provide.* "Provide" means "provided complete in place," that is, furnished, installed, tested, and ready for operation and use.

1.2.3.4 *General Conditions.* The General Conditions and any supplementary general conditions are a part of each and every section of the Specifications.

1.2.3.5 *Abbreviations.* In the interest of brevity, the Specifications are written in an abbreviated form and may not include complete sentences. Omission of words or phrases such as "Contractor shall," "shall be," etc., are intentional. Nevertheless, the requirements of the Specifications are mandatory. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.2.3.6 *Plural.* Words in the singular shall include the plural whenever applicable or the context so indicates.

1.2.3.7 *Metric.* The Specifications may indicate metric units of measurement as a supplement to U.S. customary units. When indicated thus: 1" (25 mm), the U. S. customary unit is specific, and the metric unit is nonspecific. When not shown with parentheses, the unit is specific. The metric units correspond to the "International System of Units" (SI) and generally follow ASTM E 380, "Standard for Metric Practice."

1.2.3.8 *Standard Specifications.* Any reference to standard specifications of any society, institute, association, or governmental authority is a reference to the organization's standard specifications, which are in effect as of the date the Notice to Bidders is first published. If applicable specifications are revised prior to completion of any part of the Work, the Contractor may, if acceptable to Owner and Architect, perform such Work in accordance with the revised specifications. The standard specifications, except as modified in the Specifications for the Project, shall have full force and effect as though printed in the Specifications. Architect will furnish, upon request, information as to how copies of the standard specifications referred to may be obtained.

1.2.3.9 *Absence of Modifiers.* In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but

the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

1.3 OWNERSHIP AND USE OF ARCHITECT'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS

The Drawings, Specifications, and other documents prepared on behalf of the Owner are instruments of the services of the Architect and its consultants and are the property of the Owner. The Contractor may retain one contract record set. Neither the Contractor nor any Subcontractor, Sub-subcontractor, or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by the Architect, and unless otherwise indicated the Architect shall be deemed the author of them. All copies of them, except the Contractor's record set, shall be returned or suitably accounted for to the Owner, upon request upon completion of the Work. The Drawings, Specifications, and other documents prepared by the Architect, and copies thereof furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor or any Subcontractor, Subsubcontractor, or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner and the The Contractor, Subcontractors, Sub-subcontractors, and material or equipment Architect. suppliers are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by the Architect appropriate to and for use in the execution of their Work under the Contract Documents. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Owner's property interest or other reserved right. All copies made under this license shall bear appropriate attribution and the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents prepared by the Architect.

ARTICLE 2

OWNER

2.1 **DEFINITION**

The term "Owner" means the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Owner" means the Owner and/or the Owner's authorized representatives, including but not limited to architects and construction managers. To the extent the Contract Documents indicate that Owner has assigned duties to particular representatives of the Owner (such as the architect, or any construction manager), Owner reserves the right at all times to reassign such duties to different Owner representatives.

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

2.2.1 INTENTIONALLY LEFT BLANK

2.2.2 SITE SURVEY

When required by the scope of the Project, the Owner will furnish, at its expense, a legal description or a land survey of the Site, giving, as applicable, grades and lines of streets, alleys, pavements, adjoining property, rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries, and contours of the Site. Surveys to determine locations of construction, grading, and site work shall be provided by the Contractor.

2.2.3 Soils

2.2.3.1 *Owner Furnished Services.* When required by the scope of the Project, the Owner will furnish, at its expense, the services of geotechnical engineers or consultants when reasonably required or as required by local or state codes. Such services with reports and appropriate professional recommendations shall include test boring, test pits, soil bearing values, percolation tests, air and water pollution tests, and ground corrosion and resistivity tests, including necessary operations for determining subsoil, air, and water conditions.

2.2.3.2 *Contractor Reliance.* Test borings and soils reports for the Project have been made for the Owner to indicate the subsurface materials that might be encountered at particular locations on the Project. The Owner has made these documents available to the Contractor and the Contractor has studied the results of such test borings and information that it has as to the subsurface conditions and Site geology as set forth in the test borings and soils reports. The Owner does not assume any responsibility whatsoever with respect to the sufficiency or accuracy of the borings made, or of the logs of the test borings, or of other investigations, or of the soils reports furnished pursuant hereto, or of the interpretations to be made beyond the location or depth of the borings. There is no warranty or guarantee, either express or implied that the conditions indicated by such investigations, borings, logs, soil reports or other information are representative of those existing throughout the Site of the Project, or any part thereof, or that unforeseen developments may not occur. At the Owner's request, the Contractor shall make available to the Owner the results of any Site investigation, test borings, analyses, studies or other tests conducted by or in the possession of the Contractor of any of its agents. Nothing herein contained shall be deemed a waiver by the Contractor to pursue any available legal right or remedy it may have at any time against any third party who may have prepared any report and/or test relied upon by the Contractor.

2.2.4 UTILITY SURVEY

When required by the scope of the Project, the Owner will furnish, at its expense, all information regarding known existing utilities on or adjacent to the Site, including location, size, inverts, and depths.

2.2.5 **INFORMATION**

Upon the request of the Contractor, Owner will make available such existing information regarding utility services and Site features, including existing construction, related to the Project

as is available from Owner's records. The Contractor may not rely upon the accuracy of any such information, other than that provided under Sections 2.2.2 and 2.2.4 (except that the Contractor may not rely upon and must question in writing to the Owner and the Architect any information which appears incorrect based upon Contractor's Site inspection, knowledge of the Project, and prior experience with similar projects), unless specifically stated in writing that the Contractor may rely upon the designated information.

2.2.6 EXISTING UTILITY LINES; REMOVAL, RELOCATION

2.2.6.1 *Removal, Relocation.* Pursuant to Government Code section 4215, the Owner assumes the responsibility for removal, relocation, and protection of utilities located on the Site at the time of commencement of construction under this Contract with respect to any such utility facilities which are not identified in the drawings and specifications made part of the invitation to bid. The Contractor shall not be assessed for liquidated damages for delay in completion of the Project caused by failure of the Owner to provide for removal or relocation of such utility facilities. Owner shall compensate the Contractor for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, removing or relocating such utility facilities, and for equipment necessarily idle during such work.

2.2.6.2 *Assessment.* These subparagraphs shall not be construed to preclude assessment against the Contractor for any other delays in completion of the Work. Nothing in these subparagraphs shall be deemed to require the Owner to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred from the presence of other visible facilities, such as buildings, or meter junction boxes on or adjacent to the Site.

2.2.6.3 *Notification.* If the Contractor, while performing work under this Contract, discovers utility facilities not identified by the Owner in the Contract plans or specifications, Contractor shall immediately notify the Owner and the utility in writing.

2.2.6.4 *Underground Utility Clearance.* It shall be Contractor's sole responsibility to timely notify all public and private utilities serving the Site prior to commencing work. The Contractor shall notify and receive clearance from any cooperative agency, such as Underground Service Alert, in accordance with Government Code section 4216, et seq. Contractor shall promptly provide a copy of all such notifications to the Owner.

2.2.7 EASEMENTS

Owner shall secure and pay for easements for permanent structures or permanent changes in existing facilities, if any, unless otherwise specified in the Contract or Contract Documents.

2.2.8 **REASONABLE PROMPTNESS**

Information or services under Owner's control will be furnished by the Owner with reasonable promptness. The Owner shall not be liable for any delays caused by factors beyond the Owner's

control including but not limited to DSA's or any other local, State or federal agency's review of bids, change order requests, RFI's or any other documents.

2.2.9 **COPIES FURNISHED**

The Contractor will be furnished such copies of Drawings and Project Manuals as are stated in the Contract Documents.

2.2.10 **DUTIES CUMULATIVE**

The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein, and especially those in Article 6 (Construction by Owner or by Separate Contractors), Article 9 (Payments and Completion), and Article 11 (Insurance and Bonds).

2.3 **OWNER'S RIGHT TO STOP THE WORK**

If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents, or persistently fails to carry out Work in accordance with the Contract Documents, the Owner, after providing Notice pursuant to paragraph 2.4, may order the Contractor to stop the Work or any portion thereof, until the Contractor corrects the deficiencies. The right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Article 6.

2.4 **OWNER'S RIGHT TO CARRY OUT THE WORK**

If the Contractor fails or refuses to carry out the Work in accordance with the Contract Documents, Owner may correct such deficiencies by whatever reasonable method the Owner may deem expedient without prejudice to other remedies the Owner may have, including but not limited to having another contractor perform some or all of the Work without terminating the Contract with Contractor. Owner may exercise this right at any time during the Contractor's Work.

Owner shall first provide written notice to Contractor of Contractor's failure or refusal to perform. The notice will provide the time period within which Contractor must begin correction of the failure or refusal to perform. If the Contractor fails to begin correction within the stated time, or fails to continue correction, the Owner may proceed to correct the deficiencies. In the event the Owner bids the work, Contractor shall not be eligible for the award of the contract. The Contractor may be invoiced the cost to Owner of the work, including compensation for additional professional and internally generated services and expenses made necessary by Contractor's failure or refusal to perform. Owner may withhold that amount from the retention, or progress payments due the Contractor, pursuant to Section 9.5. If retention and payments withheld then or thereafter due the Contractor are not sufficient to cover that amount, the Contractor shall pay the difference to the Owner.

ARTICLE 3

THE CONTRACTOR

3.1 **DEFINITION**

The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative. To the extent that any portion of the Work is provided with the Contractor's own forces, any reference to Subcontractors shall be equally applicable to the Contractor.

3.2 SUPERVISION AND CONSTRUCTION PROCEDURES

3.2.1 CONTRACTOR

The Contractor shall supervise and direct the Work using the Contractor's best skill and attention, which shall meet or exceed the standards in the industry. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, procedures, and coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions concerning these matters. If any of the Work is performed by contractors retained directly by the Owner, Contractor shall be responsible for the coordination and sequencing of the Work of those other contractors so as to avoid any impact on the Project Schedule pursuant to the requirements of Article 6. Specific duties of the Contractor shall fully comply with any and all reporting requirements of Education Code sections 17309 and 81141 in the manner prescribed by Title 24.

3.2.2 CONTRACTOR RESPONSIBILITY

The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors, material and equipment suppliers, and their agents, employees, invitees, and other persons performing portions of the Work under direct or indirect contract with the Contractor or any of its Subcontractors.

3.2.3 **Obligations not Changed by Architect's Actions**

The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents by the activities or duties of the Owner's representatives, including but not limited to any construction manager and the Architect, or the Inspector of Record; or by tests, inspections, or approvals required or performed by persons other than the Contractor. 3.2.4 **CONTRACTOR RESPONSIBILITY FOR READINESS FOR WORK**

The Contractor shall be responsible for inspection of Work already performed under the Contract Documents to determine that such portions are in proper condition to receive subsequent work.

3.2.5 **PROJECT MEETINGS**

Contractor shall attend Owner's Project meetings as scheduled by the Contract Documents, or as otherwise instructed by Owner, to discuss the current status of the Project and the future progress of the Work. Contractor shall have five (5) days after receipt of Owner's Project meeting minutes to provide written objections and suggested corrections.

3.3 SUPERINTENDENT

3.3.1 FULL TIME SUPERINTENDENT

The Contractor shall provide a competent superintendent and assistants as necessary, all of whom shall be reasonably proficient in speaking, reading and writing English and, who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

3.3.2 **Staff**

The Contractor and each Subcontractor shall: furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of its portion of the Work; organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work; and keep an adequate force of skilled workers on the job to complete the Work in accordance with all requirements of the Contract Documents.

3.3.3 RIGHT TO REMOVE

Owner shall have the right, but not the obligation, to require the removal from the Project of any superintendent, staff member, agent, or employee of any Contractor, Subcontractor, material or equipment supplier, etc., for cause.

3.4 LABOR AND MATERIALS

3.4.1 **CONTRACTOR TO PROVIDE**

Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, material, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

3.4.2 QUALITY

Unless otherwise specified, all materials and equipment to be permanently installed in the Project shall be new and shall be of such quality as required to satisfy the standards of the Contract

Documents. The Contractor shall, if requested, promptly furnish satisfactory evidence as to kind and quality of all materials and equipment. All labor shall be performed by workers skilled in their respective trades, and the quality of their work shall meet whichever is the higher standard for their work: the standard in the industry or the standard in the Contract Documents.

3.4.3 **Replacement**

Any work, materials, or equipment, which does not conform to these standards may be disapproved and rejected by the Owner, in which case, they shall be removed and replaced by the Contractor at no cost to the Owner.

3.4.4 **DISCIPLINE**

The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract in accordance with paragraph 5.5.1 including, but not limited to, Subcontractors, and material or equipment suppliers retained for the Project.

3.5 WARRANTY

For the period of one (1) year after completion of the Work (see Sections 9.7.1 and 12.2.5), the Contractor warrants to the Owner that material and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty does not cover damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

3.6 TAXES

Contractor will pay all applicable Federal, State, and local taxes on all materials, labor, or services furnished by it, and all taxes arising out of its operations under the Contract Documents. Owner is exempt from Federal Excise Tax, and a Certificate of Exemption shall be provided upon request.

3.7 **PERMITS, FEES AND NOTICES**

3.7.1 **PAYMENT**

The Contractor shall secure and pay for all permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and are legally required by any authority having jurisdiction over the Project, except those required by the Division of the State Architect (DSA).

Owner shall be responsible for all testing and inspection as required by the DSA on-Site or within the distance limitations set forth in paragraph 13.5.2, unless a different mileage range is specified in the Contract Documents.

3.7.2 COMPLIANCE

The Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, and lawful order of public authorities bearing on performance of the Work.

3.7.3 CONTRACT DOCUMENTS

It is not the Contractor's responsibility to ascertain that the Contract Documents are in accordance with any applicable law, statute, ordinance, building codes, rule, or regulation. However, if the Contractor knew, or should have known, or observes that portions of the Contract Document are at variance therewith, the Contractor shall promptly notify the Architect, any construction manager, and Owner in writing, and necessary changes shall be accomplished by appropriate modification.

3.7.4 **Responsibility**

If the Contractor performs Work that it knows, or should have known, is contrary to any law, statute, ordinance, building code, rule or regulation, the Contractor shall assume full responsibility for such Work, for all delays attributable thereto, and shall bear the attributable cost of correction or Project delay.

3.8 ALLOWANCES

3.8.1 CONTRACT

The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities against whom the Contractor makes reasonable and timely objection.

3.8.2 **SCOPE**

3.8.2.1 *Prompt Selection.* Materials and equipment under an allowance shall be selected promptly by the Owner to avoid delay to the Work.

3.8.2.2 *Cost.* Allowances shall cover the cost to the Contractor of materials and equipment delivered at the Site and all required taxes, less applicable trade discounts, etc., as delineated in paragraph 7.7.4.

3.8.2.3 *Cost Included in Contract Sum.* Contractor's costs for unloading and handling at the Site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum and not in the allowances.

3.8.2.4 *Contract Sum Adjustment.* Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual cost and the allowances under paragraph 3.8.2.2 and the change in the Contractor's costs under paragraph 3.8.2.3.

3.9 CONTRACTOR'S CONSTRUCTION SCHEDULES

3.9.1 **Requirements**

Before the Contractor's commencement of Work on the Project Site or within two (2) weeks of award of the Contract, whichever is earlier, Contractor shall prepare and submit for the Owner's, and any construction manager's, information the construction schedule for the Work, which shall conform to the Contract Documents' requirements.

Contractor shall submit a monthly updated schedule that will include an accurate as-built schedule and the current as-planned schedule, both of which shall conform to the Contract Documents' requirements. Contractor shall submit its daily logs for the prior month with the updated schedule.

The schedule and updates shall conform, at a minimum, to industry standards for critical path scheduling and to facilitate Owner's Project management and evaluation of Contractor Claims for additional money or time.

The schedule and updates shall not exceed time limits (including milestone deadlines) under the Contract Documents and shall comply with the Contract Documents scheduling requirements and with any scheduling requirements the Owner provides to the Contractor at the beginning of the Work. The original schedule and all updates shall accurately reflect work performed to date, all construction tasks (including procurement), the critical path schedule for completion of the remainder of the Project, and the percentage of the Work completed. The original schedule and updates shall include all delay days for weather not unusually severe, even though that weather will not entitle Contractor to additional time or money.

The construction schedule shall be in the form of either a tabulation, chart, or graph, unless otherwise stated in Division 1 of the Specifications, and shall be in sufficient detail to show the chronological relationship of all activities of the Project including, but not limited to, estimated starting and completion dates of various activities, (including early and late dates and reasonable float for each activity), procurement of materials, the critical path, and scheduling of equipment. Float suppression techniques such as preferential sequencing, special lead/lag logic restraints, extended activity durations, or imposed dates shall be apportioned for the benefit of the Project. Whenever in the Contract Documents Contractor is required to provide a schedule and/or schedule updates, the Contractor shall provide the schedule and updates in electronic format as well as hard copy. Contractor shall be solely responsible for the accuracy, utility and reasonableness of all of its schedules. Owner's acceptance, approval or non-rejection of Contractor's schedules shall not affect Contractor's responsibility for its schedules.

The Contractor and Owner shall use any float on a "first come, first served" basis. The original schedule and updates shall reflect Contractor's and Owner's use of float. Float is not for the exclusive use or benefit of either Owner or Contractor, but it is a jointly owned expiring Project resource available to both parties as needed to meet schedule milestones. For the original schedule and updates, Contractor shall use a critical path network format with the critical paths clearly indicated. Contractor shall use an MS Project, Primavera, or an equivalent or better program. Contractor shall provide schedule conversion to MS Project or as directed by District. Contractor shall include reports that sort and list the activities in order of increasing float and by early and late start dates. Contractor shall endeavor to label ten to thirty percent (10-30%) of the tasks as critical, but shall not label less than five (5%) or more than fifty (50%) as critical. Contractor shall use calendar days.

If any change in Contractor's method of operations will cause a change in the construction schedule, Contractor shall submit to Owner, Architect and any construction manager, a revised construction schedule within seven (7) days of the change, unless a different time period is stated in Division 1 of the Specifications.

If, in the Owner's opinion, the Contractor is not prosecuting the Work at a rate sufficient to meet the Project schedule, a contractual milestone or the Project completion date (as adjusted by change orders) or if the Contractor's actual progress falls behind the Project schedule or it is apparent to Owner or Contractor that Contractor will not meet contractual milestones or the Project completion date (as adjusted by change orders), the Owner may require that the Contractor prepare and submit a recovery plan. Contractor must submit a recovery plan within seven (7) days of a demand for the plan, unless a different time period is stated in Division 1 of the Specifications. At a minimum, the recovery plan must include a revised schedule that gets the Work back on schedule and completes all Work by the contractual milestones and Project completion date (as adjusted by change orders) or by other dates Owner specifies in the demand for a recovery plan. The recovery plan shall state the corrective actions Contractor will undertake to implement it. The recovery plan shall also list any additional money that Contractor believes it should receive if Owner orders Contractor to fully or partially implement the recovery plan. If the Owner orders Contractor to implement the recovery plan, Contractor shall do so, but the order shall not act constitute an admission by Owner that Contractor is entitled to additional money. To recover additional money, Contractor must comply with General Conditions Articles 4.5, 7 and 8.

All schedules Contractor submits shall be certified as true and correct, as follows:

I, [name of declarant], declare the following:

[Contractor company name] has contracted with [public entity name] for the [name of project] Project. [Contractor company name] authorized me to prepare schedules for [public entity name] for this Project, and I prepared the attached schedule. I am the most knowledgeable person at [contractor company name] regarding the scheduling of this Project. The attached schedule does not breach the Contract between [contractor company name] and [public entity name] for this Project, does not violate any applicable law, satisfies all provisions of the Contract applicable to submission of the Claim, only contains truthful and accurate as-built and asplanned dates of work on the Project (including supporting data), and is not a false claim.

The attached schedule is submitted in compliance with all laws applicable to submission of a Claim, including but not limited to California Penal Code section 72 (Fraudulent Claims), Government Code sections 12650 et seq. (False Claims Act; for example, Government Code section 12651(a)(7)), and Business and Professions Code sections 17200 et seq. (Unfair Business Practices Act). I am aware that submission or certification of false claims, or other Claims that violate law or the Contract, may lead to fines, imprisonment, and/or other serious legal consequences for myself and/or [contractor company name].

While preparing this declaration and schedule I consulted with others (including attorneys, consultants, or others who work for [contractor company name]) when necessary to ensure that the statements were true and correct.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed _____, 20__, at ____, California.

[name of declarant]

3.9.2 **DSA OVERSIGHT PROCESS**

In connection with the DSA Construction Oversight Process which includes inspection cards and review of changes to the DSA-approved construction documents, the Contractor must (a) include specific tasks in its baseline schedule to take into account these procedures since they are critical path issues; and (b) include a reasonable amount of float in the baseline schedule to accommodate the additional time required by these DSA procedures.

3.9.3 FAILURE TO MEET REQUIREMENTS

Failure of the Contractor to provide proper schedules may, at the sole discretion of Owner, constitute either grounds to withhold, in whole or in part, progress payments to the Contractor, or a breach of contract allowing Owner to terminate the Contract.

3.10 DOCUMENTS AND SAMPLES AT THE SITE

The Contractor shall maintain at the Site for the Owner one applicable copy of Titles 19 and 24 and record copy of the Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, the Contractor shall maintain at the Site approved Shop Drawings, Product Data, Samples, and similar required submittals. These documents shall be available to the Owner and shall be delivered to the Architect for delivery to the Owner upon completion of the Work.

3.11 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

3.11.1 SUBMITTALS DEFINED

3.11.1.1 Shop Drawings. The term "shop drawings" as used herein means drawings, diagrams, schedules, and other data, which are prepared by Contractor, Subcontractors, manufacturers, suppliers, or distributors illustrating some portion of the Work, and includes: illustrations; fabrication, erection, layout and setting drawings; manufacturer's standard drawings; schedules; descriptive literature, instructions, catalogs, and brochures; performance and test data including charts; wiring and control diagrams; and all other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment, or systems and their position conform to the requirements of the Contract Documents. The Contractor shall obtain and submit with the shop drawings all seismic and other calculations and all product data from equipment manufacturers. "Product data" as used herein are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work. As used herein, the term "manufactured" applies to standard units usually massproduced, and "fabricated" means items specifically assembled or made out of selected materials to meet individual design requirements. Shop drawings shall: establish the actual detail of all manufactured or fabricated items, indicate proper relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

3.11.1.2 *Samples.* The term "samples" as used herein are physical examples furnished by Contractor to illustrate materials, equipment, or quality and includes natural materials, fabricated items, equipment, devices, appliances, or parts thereof as called for in the Specifications, and any other samples as may be required by the Owner to determine whether the kind, quality, construction, finish, color, and other characteristics of the materials, etc., proposed by the Contractor conform to the required characteristics of the various parts of the Work. All Work shall be in accordance with the approved samples.

3.11.1.3 *Contractor's Responsibility.* Contractor shall obtain and shall submit to Architect all required shop drawings and samples in accordance with Contractor's "Schedule for Submission of Shop Drawings and Samples" provisions in Division 1 of the Specifications and

in accordance with the Contractor's original and updated schedules, and with such promptness as to cause no delay in its own Work or in that of any other contractor, Owner or subcontractor but in no event later than fifteen (15) days after the execution of the Agreement. Contractor may be assessed \$100 a day for each day it is late in submitting a shop drawing or sample. No extensions of time will be granted to Contractor or any Subcontractor because of its failure to have shop drawings and samples submitted in accordance with the Schedule. Each Subcontractor shall submit all shop drawings, samples, and manufacturer's descriptive data for the review of the Owner, the Contractor, and the Architect through the Contractor. By submitting shop drawings, product data, and samples, the Contractor or submitting party (if other than Contractor) represents that it has determined and verified all materials, field measurements, field conditions, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that it has checked, verified, and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. At the time of submission, any deviation in the shop drawings, product data, or samples from the requirements of the Contract Documents shall be narratively described in a transmittal accompanying the submittal. However, submittals shall not be used as a means of requesting a substitution, the procedure for which is defined in paragraph 3.11.4, "Substitutions." Review by Owner and Architect shall not relieve the Contractor or any Subcontractor from its responsibility in preparing and submitting proper shop drawings in accordance with the Contract Documents. Contractor shall stamp, sign, and date each submittal indicating its representation that the submittal meets all of the requirements of the Contract Documents. Any submission, which in Owner's or Architect's opinion is incomplete, contains numerous errors, or has been checked only superficially by Contractor will be returned unreviewed for resubmission by the Contractor.

3.11.1.4 *Extent of Review.* In reviewing shop drawings, the Owner will not verify dimensions and field conditions. The Architect will review and approve shop drawings, product data, and samples for aesthetics and for conformance with the design concept of the Work and the information given in the Contract Documents. The Architect's review shall neither be construed as a complete check nor relieve the Contractor, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist or from any departures or deviations from the requirements of the Contract Documents unless the Contractor has, in writing, called the Architect's attention to the deviations at the time of submission and the Architect approval. The Architect's review shall not relieve the Contractor or Subcontractors from responsibility for errors of any sort in shop drawings or schedules, for proper fitting of the Work, or from the necessity of furnishing any Work required by the Contract Documents, which may not be indicated on shop drawings when reviewed. Contractor and Subcontractors shall be solely responsible for determining any quantities, whether or not shown on the shop drawings.

3.11.2 DRAWING SUBMISSION PROCEDURE

3.11.2.1 *Transmittal Letter and Other Requirements.* All shop drawings must be properly identified with the name of the Project and dated, and each lot submitted must be accompanied by a letter of transmittal referring to the name of the Project and to the Specification section number for identification of each item clearly stating in narrative form, as

well as "clouding" on the submissions, all qualifications, departures, or deviations from the Contract Documents, if any. Shop drawings, for each section of the Work, shall be numbered consecutively, and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be made through the Contractor. Each drawing shall have a clear space for the stamps of Architect and Contractor. Only shop drawings required to be submitted by the Contract Documents shall be reviewed.

3.11.2.2 *Copies Required.* Each submittal shall include one (1) legible, reproducible and five (5) legible prints and one (1) electronic copy of each drawing, including fabrication, erection, layout and setting drawings, and such other drawings as required under the various sections of the Specifications until final acceptance thereof is obtained. Subcontractor shall submit copies, in an amount as requested by the Contractor, of: manufacturers' descriptive data for materials, equipment, and fixtures, including catalog sheets showing dimensions, performance, characteristics, and capacities; wiring diagrams and controls; schedules; all seismic calculations and other calculations; and other pertinent information as required.

3.11.2.3 *Corrections.* The Contractor shall make any corrections required by Architect and shall resubmit as required by Architect the required number of corrected copies of shop drawings or new samples until approved. Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections required by the Architect on previous submissions. Professional services required for more than one (1) re-review of required submittals of shop drawings, product data, or samples are subject to charge to the Contractor pursuant to paragraph 4.4.

3.11.2.4 *Approval Prior to Commencement of Work.* No portion of the Work requiring a shop drawing or sample submission shall be commenced until the submission has been reviewed by Owner and approved by Architect unless specifically directed in writing by the Owner. All such portions of the Work shall be in accordance with approved shop drawings and samples.

3.11.3 SAMPLE SUBMISSIONS PROCEDURE

3.11.3.1 *Samples Required.* In case a considerable range of color, graining, texture, or other characteristics may be anticipated in finished products, a sufficient number of samples of the specified materials shall be furnished by the Contractor to indicate the full range of characteristics, which will be present in the finished products; and products delivered or erected without submittal and approval of full range samples shall be subject to rejection. Except for range samples, and unless otherwise called for in the various sections of the Specifications, samples shall be submitted in duplicate. All samples shall be marked, tagged, or otherwise properly identified with the name of the submitting party, the name of the Project, the purpose for which the samples are submitted, and the date and shall be accompanied by a letter of transmittal containing similar information, together with the Specification section number for identification of each item. Each tag or sticker shall have clear space for the review stamps of Contractor and Architect.

3.11.3.2 *Labels and Instructions.* Samples of materials, which are generally furnished in containers bearing the manufacturers' descriptive labels and printed application instructions,

shall, if not submitted in standard containers, be supplied with such labels and application instructions.

3.11.3.3 *Architect's Review.* The Architect will review and, if appropriate, approve submissions and will return them to the Contractor with the Architect's stamp and signature applied thereto, indicating the appropriate action in compliance with the Architect's standard procedures.

3.11.3.4 *Record Drawings and Annotated Specifications.* The Contractor will prepare and maintain on a current basis an accurate and complete set of Record Drawings showing clearly all changes, revisions, and substitutions during construction, including, without limitation, field changes and the final location of all mechanical equipment, utility lines, ducts, outlets, structural members, walls, partitions, and other significant features, and Annotated Specifications showing clearly all changes, revisions, and substitutions during construction. A copy of such Record Drawings and Annotated Specifications will be delivered to Owner in accordance with the Schedule prepared by Contractor. In the event of a specification that allows Contractor to elect one of several brands, makes, or types of material or equipment, the annotations shall show which of the allowable items the Contractor has furnished. The Contractor will update the Record Drawings and Annotated Specifications as often as necessary to keep them current but no less often than weekly. The Record Drawings and Annotated Specifications shall be kept at the Site and available for inspection by the Owner, Inspector of Record and the Architect. On completion of the Contractor's portion of the Work and prior to Application for Final Progress Payment, the Contractor will provide one complete set of Record Drawings and Annotated Specifications to the Owner, certifying them to be a complete and accurate reflection of the actual construction conditions of the Work.

3.11.3.5 *Equipment Manuals.* Contractor shall obtain and furnish three (3) complete sets of manuals containing the manufacturers' instructions for maintenance and operation of each item of equipment and apparatus furnished under the Contract Documents and any additional data specifically requested under the various sections of the Specifications for each division of the Work. The manuals shall be arranged in proper order, indexed, and placed in three-ring binders. At the completion of its Work, the Contractor shall certify, by endorsement thereon, that each of the manuals is complete, accurate, and covers all of its Work. Prior to submittal of Contractor's Application for Final Progress Payment, and as a further condition to its approval by the Architect, each Subcontractor shall deliver the manuals, arranged in proper order, indexed, endorsed, and placed in three-ring binders, to the Contractor, who shall assemble these manuals for all divisions of the Work, review them for completeness, and submit them to the Owner through the Architect.

3.11.3.6 *Owner's Property.* All shop drawings and samples submitted shall become the Owner's property.

3.11.4 SUBSTITUTIONS

3.11.4.1 **One Product Specified.** Unless the Specifications state that no substitution is permitted, whenever in the Contract Documents any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction is indicated or specified by name, make, trade name, or catalog number, with or without the words "or equal," such specification shall be deemed to be used for the purpose of facilitating description of material, process, or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer any material, process, or article, which shall be substantially equal or better in every respect to that so indicated or specified and will completely accomplish the purpose of the Contract Documents.

3.11.4.2 *Two or More Products Specified.* When two or more acceptable products are specified for an item of the Work, the choice will be up to the Contractor. Contractor shall utilize the same product throughout the Project. If a timely substitution request as set forth in Section 3.11.4.3 is not provided and an "or equal" substitution is requested, the Owner may consider the substitution if the product specified is no longer commercially available. If the Owner allows the substitution to be proposed pursuant to such an untimely request, the Contractor will be responsible for the professional fees incurred by the Architect or Architect's consultants in reviewing the proposed substitution which fees may be withheld from progress payments and/or retention.

3.11.4.3 Substitution Request Form. Requests for substitutions of products, materials, or processes other than those specified must be made on the Substitution Request form available from the Owner prior to the date of the bid opening. Any Requests submitted less than fourteen (14) days prior to the date of the bid opening will not be considered, except as noted in paragraph 3.11.4.2. A Substitution Request must be accompanied by evidence as to whether or not the proposed substitution: is equal in guality and serviceability to the specified item; will entail no changes in detail and construction of related work; will be acceptable in consideration of the required design and artistic effect; will provide no cost disadvantage to Owner; and will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts. The burden of proof of these facts shall be upon the Contractor. The Contractor shall furnish with its request sufficient information to determine whether the proposed substitution is equivalent including but not limited to all drawings, specifications, samples, performance data, calculations, and other information as may be required to assist the Architect and the Owner in determining whether the proposed substitution is acceptable. The final decision shall be the Owner's. The written approval of the Owner, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material. Owner may condition its approval of the substitution upon delivery to Owner of an extended warranty or other assurances of adequate performance of the substitution. All risks of delay due to the Division of the State Architect's, or any other governmental agency having jurisdiction, approval of a requested substitution shall be on the requesting party.

3.11.4.4 *List of Manufacturers and Products Required.* The Subcontractor shall prepare and submit to the Contractor within thirty (30) days of execution of the Subcontract comprehensive lists, in quadruplicate, of the manufacturers and products proposed for the Project, including information on materials, equipment, and fixtures required by the Contract Documents, as may be required for Contractor's or Architect's preliminary approval. Approval

of such lists of products shall not be construed as a substitute for the shop drawings, manufacturer's descriptive data, and samples, which are required by the Contract Documents, but rather as a base from which more detailed submittals shall be developed for the final review of the Contractor and the Architect.

3.11.5 **Deferred Approvals**

Deferred approvals shall be submitted and processed pursuant to the requirements of Division 1 of the Specifications. All risks of delay due to the Division of the State Architect's, or any other governmental agency having jurisdiction, approval of a deferred approval shall be on the requesting party.

3.12 CUTTING AND PATCHING

3.12.1 **SCOPE**

The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.

3.12.2 CONSENT

The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work. All cutting shall be done promptly, and all repairs shall be made as necessary.

3.12.3 STRUCTURAL MEMBERS

New or existing structural members and elements, including reinforcing bars and seismic bracing, shall not be cut, bored, or drilled except by written authority of the Architect and DSA. Work done contrary to such authority is at the Contractor's risk, subject to replacement at its own expense and without reimbursement under the Contract. Agency approvals shall be obtained by the Architect, not by the Contractor.

3.12.4 SUBSEQUENT REMOVAL

Permission to patch any areas or items of the Work shall not constitute a waiver of the Owner's or the Architect's right to require complete removal and replacement of the areas of items of the Work if, in the opinion of the Architect or the Owner, the patching does not satisfactorily restore quality and appearance of the Work or does not otherwise conform to the Contract Documents. Any costs caused by defective or ill-timed cutting or patching shall be borne by the person or entity responsible.

3.13 CLEANING UP

3.13.1 CONTRACTOR'S RESPONSIBILITY

The Contractor shall keep the Site and surrounding area free from accumulation of waste material or rubbish caused by operations under the Contract. The Site shall be maintained in a neat and orderly condition. All crates, cartons, paper, and other flammable waste materials shall be removed from Work areas and properly disposed of at the end of each day. The Contractor shall continuously remove from and about the Site the waste materials, rubbish, tools, construction equipment, machinery, and materials no longer required for the Work.

3.13.2 FAILURE TO CLEANUP

If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so, without prior notice to the Contractor and the cost thereof shall be invoiced to the Contractor and withheld from progress payments and/or retention. Each Subcontractor shall have the responsibility for the cleanup of its own Work. If the Subcontractor fails to clean up, the Contractor must do so.

3.13.3 CONSTRUCTION BUILDINGS

When directed by the Owner or the Architect, Contractor and Subcontractor shall dismantle temporary structures, if any, and remove from the Site all construction and installation equipment, fences, scaffolding, surplus materials, rubbish, and supplies belonging to Contractor or Subcontractor. If the Contractor does not remove the tools, equipment, machinery, and materials within fifteen (15) days after completion of its Work, then they shall be deemed abandoned, and the Owner can dispose of them for its own benefit in whatever way it deems appropriate. Contractor shall pay for any costs to dispose of the items.

3.14 ACCESS TO WORK

The Contractor shall provide the Owner, the Architect, and the Inspector of Record, access to the Work in preparation and progress wherever located.

3.15 ROYALTIES AND PATENTS

3.15.1 PAYMENT AND INDEMNITY

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims of infringement of patent rights and shall hold the Owner and the Architect harmless and indemnify them, to the extent not caused by the Owner's active negligence, sole negligence or willful misconduct, from loss on account thereof but shall not be responsible for such defense or loss when a particular design, process, or product of a particular manufacturer is required by the Contract Documents. However, if the Contractor has reason to believe the required design,

process, or product is an infringement of a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Owner and Architect.

3.15.2 **Review**

The review by the Owner or Architect of any method of construction, invention, appliance, process, article, device, or material of any kind shall be for its adequacy for the Work and shall not be an approval for the use by the Contractor in violation of any patent or other rights of any person or entity.

3.16 **INDEMNIFICATION**

3.16.1 SCOPE: CONTRACTOR

To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Owner, the construction manager, Architect, Architect's consultants, the Inspector of Record, the State of California, and their respective agents, employees, officers, volunteers, Boards of Trustees, members of the Boards of Trustees, and directors ("Indemnitees"), from and against claims, actions, damages, liabilities, losses (including but not limited to injury or death of persons, property damage, and compensation owed to other parties), and expenses (including but not limited to attorneys' fees and costs including fees of consultants) alleged by third parties against Indemnitees arising out of or resulting from the following: Contractor's, its Subcontractors', or its suppliers' performance of the Work, including but not limited to the Contractor's or its Subcontractors' use of the Site; the Contractor's or its Subcontractors' construction of the Project, or failure to construct the Project, or any portion thereof; the use, misuse, erection, maintenance, operation, or failure of any machinery or equipment including, but not limited to, scaffolds, derricks, ladders, hoists, and rigging supports, whether or not such machinery or equipment was furnished, rented, or loaned by any of the Indemnitees; or any act, omission, negligence, or willful misconduct of the Contractor or its Subcontractors or their respective agents, employees, material or equipment suppliers, invitees, or licensees but only to the extent caused in whole or in part by the acts or omissions of the Contractor, its Subcontractors, its suppliers, anyone directly or indirectly employed by any of them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity, which would otherwise exist as to a party, person, or entity described in this paragraph. The obligation to defend, indemnify and hold harmless includes any claims or actions by third parties arising out of or resulting from Labor Code section 2810. Contractor shall have no obligation to defend or indemnify the Indemnitees against claims, actions, damages, liabilities, losses, and expenses caused by the active negligence, sole negligence or willful misconduct of Indemnitees. This indemnification shall apply to all liability, as provided for above, regardless of whether any insurance policies are applicable, and insurance policy limits do not act as a limitation upon the amount of the indemnification to be provided by the Contractor.

3.16.2 Scope: Subcontractors

3.16.2.1 *Indemnity.* The Subcontractors shall defend, indemnify, and hold harmless the Indemnitees from and against claims, actions, damages, liabilities, and losses (including but not limited to injury or death of persons, property damage, and compensation owed to other parties), and expenses (including but not limited to attorneys' fees and costs including fees of consultants) alleged by third parties against Indemnitees arising out of or resulting from the following: Subcontractors' performance of the Work, including but not limited to the Subcontractors' use of the Site; the Subcontractors' construction of the Project or failure to construct the Project or any portion thereof; the use, misuse, erection, maintenance, operation, or failure of any machinery or equipment, including, but not limited to, scaffolds, derricks, ladders, hoists, and rigging supports, whether or not such machinery or equipment was furnished, rented, or loaned by any of the Indemnitees; or any act, omission, negligence, or willful misconduct of the Subcontractors or their respective agents, employees, material or equipment suppliers, invitees, or licensees but only to the extent caused in whole or in part by the acts or omissions of the Subcontractors, anyone directly or indirectly employed by any of them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity, which would otherwise exist as to a party, person, or entity described in this paragraph. This obligation to defend, indemnify and hold harmless includes any claims or actions by third parties arising out of or resulting from Labor Code section 2810. Subcontractors shall have no obligation to defend or indemnify the Indemnitees against claims, actions, damages, liabilities, losses, and expenses caused by the active negligence, sole negligence or willful misconduct of Indemnitees. This indemnification shall apply to all liability, as provided for above, regardless of whether any insurance policies are applicable, and insurance policy limits do not act as a limitation upon the amount of the indemnification to be provided by the Subcontractors.

3.16.2.2 *Joint and Several Liability.* In the event more than one Subcontractor is connected with an accident or occurrence covered by this indemnification, then all such Subcontractors shall be jointly and severally responsible to each of the Indemnitees for indemnification, and the ultimate responsibility among such indemnifying Subcontractors for the loss and expense of any such indemnification shall be resolved without jeopardy to any Indemnitee. The provisions of the indemnity provided for herein shall not be construed to indemnify any Indemnitee for its own negligence if not permitted by law or to eliminate or reduce any other indemnification or right which any Indemnitee has by law or equity.

3.16.3 NO LIMITATION

The Contractor's and the Subcontractor's obligation to indemnify and defend the Indemnitees hereunder shall include, without limitation, any and all claims, damages, and costs: for injury to persons and property (including loss of use), and sickness, disease or death of any person; for breach of any warranty, express or implied; for failure of the Contractor or the Subcontractor to comply with any applicable governmental law, rule, regulation, or other requirement; and for products installed in or used in connection with the Work.

3.17 **OWNER AS INTENDED BENEFICIARY**

The Owner is an intended beneficiary of any architectural or engineering work secured by, or performed by, the Contractor to fulfill its obligations under the Contract. Contractor shall state in its contracts with architectural or engineering consultants that their work is for the intended benefit of the Owner.

3.18 NOTICE OF EXCUSE FOR NONPERFORMANCE

If Contractor believes that acts or omissions of Owner (including but not limited to Owner caused delay) have prevented Contractor from performing the Work as required by the Contract Documents and Contractor intends to rely on Owner's acts or omissions and Civil Code section 1511(1) as reasons to excuse Contractor's nonperformance or to support, among other things, Contractor's requests for time extensions under General Conditions section 4.5, Contractor shall provide written notice of the excuse within five (5) days of the Owner's acts or omissions. If Contractor fails to timely submit the written notice Contractor's nonperformance, regardless of the merits of the defense. Contractor will not have satisfied a condition precedent or exhausted administrative remedies. Contractor acknowledges that these written notices are of critical importance to the Owner's Project management and the mitigation of Project costs and delays.

ARTICLE 4

ADMINISTRATION OF THE CONTRACT

4.1 **ARCHITECT**

4.1.1 **DEFINITION**

The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Architect" means the Architect or the Architect's authorized representative, and shall also refer to all consultants under the Architect's direction and control.

4.1.2 **MODIFICATION**

To the extent the Contract Documents indicate that Owner has assigned duties or responsibilities to the Architect, Owner reserves the right at all times to reassign such duties or responsibilities to different Owner representatives.

4.1.3 **TERMINATION**

In the case of the termination of the Architect, the Owner may appoint an architect or another construction professional or may perform such functions with its own licensed professional

personnel. The status of the replacement Architect under the Contract Documents shall be that of the former architect.

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

4.2.1 **Status**

The Architect will provide administration of the Contract and may be one of several Owner's representatives during construction, through release of all retention, and during the one (1) year period following the commencement of any warranties. The Architect will advise and consult with the Owner. The Architect will have authority to act on behalf of the Owner only to the extent set forth in the Owner/Architect agreement. The Architect will have all responsibilities and power established by law, including California Code of Regulations, Title 24, to the extent set forth in the Owner/Architect agreement.

4.2.2 SITE VISITS

The Architect will visit the Site at intervals necessary in the judgment of the Architect or as otherwise agreed by the Owner and the Architect in writing to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents.

4.2.3 LIMITATIONS OF CONSTRUCTION RESPONSIBILITY

The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract Documents, or by tests, inspections, or approvals required or performed by persons other than the Contractor.

4.2.4 COMMUNICATIONS FACILITATING CONTRACT ADMINISTRATION

The Owner and the Contractor shall communicate through the Architect, unless there is a construction manager for the Project or the Owner directs otherwise. Communications between Owner and Subcontractors or material or equipment suppliers shall be through the Contractor.

4.2.5 **PAYMENT APPLICATIONS**

The Contractor shall submit payment applications to the Architect, unless there is a construction manager for the Project or the Owner directs otherwise.

4.2.6 **Rejection of Work**

The Architect, Inspector of Record, any construction manager and others may recommend to the Owner that the Owner reject Work which does not conform to the Contract Documents or that the Owner require additional inspection or testing of the Work in accordance with paragraph 13.5.5, whether or not the Work is fabricated, installed, or completed. However, no recommendation shall create a duty or responsibility to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

4.2.7 CHANGE ORDERS

The Architect will prepare change orders and construction change directives and may authorize minor changes in the Work.

4.2.8 WARRANTIES UPON COMPLETION

The Architect in conjunction with the Inspector of Record, or as otherwise directed by Owner, will conduct field reviews of the Work to determine the date of completion, shall receive and forward to the Owner for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor. The handling by the Architect of such warranties, maintenance manuals, or similar documents shall not diminish or transfer to the Architect any responsibilities or liabilities required by the Contract Documents of the Contractor or other entities, parties, or persons performing or supplying the Work.

Except as may be otherwise directed by Owner, the Architect will conduct a field review of the Contractor's comprehensive list of items to be completed or corrected for development of a punch list and one (1) follow-up field review if required. The cost incurred by the Owner for further field reviews or the preparation of further punch lists by the Architect shall be invoiced to the Contractor and withheld from payment and/or retention.

4.2.9 INTERPRETATION

The Architect, Inspector of Record, any construction manager, the Owner or any independent consultant of Owner, as Owner deems appropriate, will interpret and decide matters concerning performance under and requirements of the Contract Documents on written request of the Contractor. The Owner's response to such requests will be made with reasonable promptness, while allowing sufficient time to permit adequate review and evaluation of the request.

4.2.10 Additional Instructions

4.2.10.1 *Architect's Interpretations and Decisions.* Interpretations and decisions of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations of and decisions regarding the Contract Documents, the Architect will endeavor to secure faithful performance under the Contract Documents by both the Owner and the Contractor and will not show partiality to either. The Work shall be executed in conformity with, and the Contractor shall do no work without, approved drawings, Architect's clarifying instructions, and/or submittals.

4.2.10.2 *Typical Parts and Sections.* Whenever typical parts or sections of the Work are completely detailed on the Drawings, and other parts or sections which are essentially of the

same construction are shown in outline only, the complete details shall apply to the Work which is shown in outline.

4.2.10.3 *Dimensions*. Dimensions of Work shall not be determined by scale or rule. Figured dimensions shall be followed at all times. If figured dimensions are lacking on Drawings, Architect shall supply them on request. The Owner's decisions on matters relating to aesthetic effect will be final if consistent with the Contract Documents.

4.3 **INSPECTOR OF RECORD**

4.3.1 GENERAL

One or more Project inspectors ("Inspector of Record") employed by the Owner and approved by the Division of the State Architect will be assigned to the Work in accordance with the requirements of Title 24 of the California Code of Regulations. The Inspector of Record's duties will be as specifically defined in Title 24.

4.3.2 **INSPECTOR OF RECORD'S DUTIES**

All Work shall be under the observation of or with the knowledge of the Inspector of Record. The Inspector of Record shall have free access to any or all parts of the Work at any time. The Contractor shall furnish the Inspector of Record such information as may be necessary to keep the Inspector of Record fully informed regarding progress and manner of work and character of materials. Such observations shall not, in any way, relieve the Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Contractor's responsibility for providing efficient and capable superintendence. The Inspector of Record is not authorized to make changes in the drawings or specifications nor shall the Inspector of Record's approval of the Work and methods relieve the Contractor of responsibility for the correction of subsequently discovered defects, or from its obligation to comply with the Contract Documents.

4.3.3 INSPECTOR OF RECORD'S AUTHORITY TO REJECT OR STOP WORK

The Inspector of Record shall have the authority to reject work that does not comply with the provisions of the Contract Documents. In addition, the Inspector of Record may stop any work which poses a probable risk of harm to persons or property. The Contractor shall instruct its employees, Subcontractors, material and equipment suppliers, etc., accordingly. The absence of any Stop Work order or rejection of any portion of the Work shall not relieve the Contractor from any of its obligations pursuant to the Contract Documents.

4.3.4 INSPECTOR OF RECORD'S FACILITIES

Within seven (7) days after notice to proceed, the Contractor shall provide the Inspector of Record with the temporary facilities as required under Division 1 of the Specifications.

4.4 **RESPONSIBILITY FOR ADDITIONAL CHARGES INCURRED BY THE OWNER FOR PROFESSIONAL SERVICES**

If at any time prior to the completion of the requirements under the Contract Documents, through no fault of its own, the Owner is required to provide or secure additional professional services for any reason by any act or omission of the Contractor, the Contractor shall be invoiced by the Owner for any actual costs incurred for any such additional services, which costs may, among other remedies, be withheld from the progress payments and/or retention. Such invoicing shall be independent from any other Owner remedies, including but not limited to liquidated damages. If payments then or thereafter due to the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. Additional services shall include, but shall not be limited to, the following:

- A. Services made necessary by the default of the Contractor.
- B. Services made necessary due to the defects or deficiencies in the Work of the Contractor.
- C. Services required by failure of the Contractor to perform according to any provision of the Contract Documents.
- D. Services in connection with evaluating substitutions of products, materials, equipment, Subcontractors proposed by the Contractor, and making subsequent revisions to drawings, specifications, and providing other documentation required (except for the situation where the specified item is no longer manufactured or available).
- E. Services for evaluating and processing Claims submitted by the Contractor in connection with the Work outside the established Change Order process.
- F. Services required by the failure of the Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion.
- G. Services in conjunction with the testing, adjusting, balancing and start-up of equipment other than the normal amount customarily associated for the type of Work involved.
- H. Services in conjunction with more than one (1) re-review of required submittals of shop drawings, product data, and samples.

4.5 NOTICES OF POTENTIAL CHANGE, CHANGE ORDER REQUESTS, AND CLAIMS

If the Contractor identifies the potential for extra work, delay in the critical path schedule, or the need for additional money or time, or if the Contractor requests additional money or time, or if the Contractor believes that Owner has failed to pay amounts due or otherwise breached the Contract, or otherwise believes that it is entitled to a modification of the Contract terms and conditions, then Contractor shall follow the procedures in this Section 4.5 and Article 7,

otherwise Contractor shall have waived its rights to pursue those issues and any later attempts to recover money or obtain a modification shall be barred. Contractor specifically acknowledges the Owner's and public's interest in, and need to know of, potential changes and disputes as early as possible so Owner can investigate, mitigate and resolve adverse cost and time impacts, if any. It is Contractor's obligation to know and comply with the requirements of Section 4.5 and Article 7, and Owner has no obligation to notify Contractor of any failure to comply with those requirements.

4.5.1 NOTICE OF POTENTIAL CHANGE

Contractor shall submit a written Notice of Potential Change for extra work, critical path delay, or additional money or time. Contractor shall submit written Notices of Potential Change to Owner within five (5) days of Contractor becoming aware of the issues creating the potential for change, unless the issues are, or may soon be, adversely affecting the costs or critical path of the Work, in which case the Contractor must submit the written notice without delay so the Owner may take immediate action to mitigate cost and schedule impacts of the change, if any. The written notice shall explain the nature of the potential change so the Owner may take action to mitigate costs and schedule impacts, if necessary.

When submitting a written Notice of Potential Change based on extra work, Contractor shall not perform the extra work until directed in writing to do so by Owner. When submitting a written Notice of Potential Change for an issue of critical path delay, Contractor shall proactively mitigate the effects of the alleged delay as much as reasonably possible so as to minimize any impact to the schedule, until otherwise directed by Owner.

Failure to timely submit a written Notice of Potential Change shall constitute a complete waiver by Contractor of any right to later submit a change order request or pursue a Claim on that issue, or to later pursue any additional money or time extensions in any manner related to that issue, regardless of the merits. Contractor will not have satisfied a condition precedent or exhausted administrative remedies. Contractor acknowledges that these written notices are of critical importance to the Owner's Project management and the mitigation of Project costs and delays.

4.5.2 CHANGE ORDERS REQUESTS

If, after submitting a written Notice of Potential Change pursuant to Section 4.5.1, Contractor continues to believes that it is entitled to additional money or time (including but not limited to grant of a time extension; payment of money or damages arising from work done by, or on behalf of, the Contractor, payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to; or an amount the payment of which is disputed by the Owner) based on an issue, then Contractor shall submit a Change Order Request ("COR") to Owner within twenty (20) days of (i) becoming aware of the issues creating a potential change, or (ii) the date by which it should have become aware of the issues creating a potential change. A rejection at any time or a lack of a rejection by Owner of a Notice of Potential Change does not affect the timeline for submitting a COR.

Failure to timely submit a COR related to an issue, or failure to comply with any of the COR requirements in the Contract shall constitute a complete waiver by Contractor of any right to later submit a COR or Claim on that issue, or to later pursue any additional money (including time extensions) in any manner related to that issue, regardless of the merits. Contractor will not have satisfied a condition precedent or exhausted administrative remedies.

The COR shall state the grounds for the additional money or time requested and the amount of money or time requested, and Contractor shall include all information supporting the COR.

Contractor shall certify the COR using the form set forth in Section 4.5.5.1, except that every reference to "Claim" shall be changed to "COR." If a COR is submitted without certification, a certification can still be submitted within the timelines set forth in the first paragraph of section 4.5.2. If the COR is not timely certified, Contractor will have completely waived its rights to any money or time for that issue. Contractor will not have satisfied a condition precedent or exhausted administrative remedies.

The Owner may accept the entire COR, accept part of the COR and reject the remainder, reject the entire COR, or request additional information. If the Owner does not respond within thirty (30) days by accepting the entire COR, accepting part of the COR and rejecting the remainder, or requesting additional information, the entire COR shall be deemed rejected as of the thirtieth (30th) day. If the Owner requests additional information, then the Contractor shall submit the information within fifteen (15) days of the date of the request and the Owner shall have fifteen (15) days after the receipt of the additional information to accept or reject (in whole or in part) the COR. If the Owner fails to respond within fifteen (15) days after the submission of additional information, the entire COR shall be deemed rejected as of the fifteenth (15th) day.

4.5.3 **DEFINITION OF CLAIM**

A "Claim" is 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, 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 Owner. A claim includes any claim within the scope of Public Contract Code section 20104 et seq. Resubmittal in any manner of a COR which was previously rejected under Section 4.5.2 constitutes a Claim, whether the COR was rejected in whole or in part, and whether the COR was rejected expressly or deemed rejected by Owner inaction. A Claim includes any dispute Contractor may have with the Owner, including one which does not require a Notice of Potential Change or COR under Sections 4.5.1 and 4.5.2, and includes an alleged breach of contract by the Owner. A Claim under this Article 4.5 shall also constitute a claim for purposes of the California False Claims Act. In the event of a conflict between a Claims provision in Division 1 of the Specifications and Section 4.5, Section 4.5 shall take precedence.

The Notice of Potential Change and COR procedures above are less formal procedures which precede the more formal Claim. A Notice of Potential Change does not constitute a Claim. A COR does not constitute a Claim; <u>except that</u> if insufficient time remains before the Claim deadline (see Article 4.5.4) for Contractor to submit a COR and for Owner to process and reject

the COR under Article 4.5.2, then either (1) Contractor may submit a COR which Owner shall treat as a Claim, but only if the COR complies with all requirements in this Article 4.5 and Article 7 for COR's and Claims, or (2) a COR is not required so long as a Claim complying with this Article 4.5 is timely submitted.

A Claim does not include vouchers, invoices, progress payment applications, or other routine or authorized forms of requests for progress payments on the Contract; however, those documents remain "claims" for purposes of the California False Claims Act. A Claim does not include a Government Code Claim. ("Government Code Claim" means a claim under Government Code sections 900 et seq. and 910 et seq.)

4.5.4 TIME FOR SUBMITTING CLAIM; WAIVER

Contractor shall submit a Claim to the Owner's construction manager (or in the absence of a construction manager, to Architect and Owner) on or before the date of the Final Progress Payment. Owner's rejection, or lack of rejection, of a COR at any time does not affect the deadline for filing a Claim.

In addition, on or before submitting its request for a final progress payment based on 100% completion of the work, Contractor shall submit to Owner, in writing, a summary of all Claims for money or time extensions under or arising out of this Contract which were timely filed and which were fully compliant with the Contract's requirements for Claims. The submission of an Application for Payment for the Final Progress Payment shall constitute a complete waiver of all Claims against Owner under or arising out of this Contract, except those identified in the above summary. Contractor will not have satisfied a condition precedent or exhausted administrative remedies. This Claim summary requirement shall not extend the time for submitting a Claim.

Failure to timely submit a Claim, failure to include a Claim in the Claim summary, or failure to comply with any of the Claim requirements in the Contract, including but not limited to this Article 4, will act as a complete waiver of Contractor's rights to (a) recover money or time on the issues for which a Claim was required, (b) submit a Government Code Claim for the money or time (see Section 4.5.6.4), and (c) initiate any action, proceeding or litigation for the money or time, regardless of the merits. Contractor will not have satisfied a condition precedent or exhausted administrative remedies. Owner does not have an obligation to reject the Claim for a failure to comply with any of the Claim requirements in the Contract, including the lack of certification, and any failure by Owner to reject, or any delay in rejecting, a Claim on that basis does not waive the Owner's right to reject the Claim for a time extension or additional money beyond the timelines set forth in this provision unless the Owner agrees in writing to allow the reservation.

4.5.5 CONTENT OF CLAIM

4.5.5.1 *Claim Format; Waiver*. Every Claim shall be in writing. All money or time extensions sought must be stated and itemized in the Claim at the time submitted. The

responsibility to substantiate Claims shall rest with the Contractor. In addition, the Contractor shall include a certification with each and every Claim at the time of submission, as follows:

I, [name of declarant], declare the following:

[Contractor company name] has contracted with Berryessa Union School District for the Northwood Elementary School Flexible Instructional Space Alteration and Related Modernization Project. ([Contractor company name]) authorized me to prepare the attached Claim for money and/or time extension) for Berryessa Union School District regarding this Project (dated ______, 20___, entitled ______, and requesting \$______ and/or _____ additional days), and I prepared the attached Claim. I am the most knowledgeable person at [contractor company name] regarding this Claim.

The attached Claim complies with all laws applicable to submission of a Claim, including but not limited to California Penal Code section 72, Government Code sections 12650 et seq. (False Claims Act), and Business and Professions Code sections 17200 et seq. (Unfair Business Practices Act). I am aware that submission or certification of false claims, or other claims that violate law or the Contract, may lead to fines, imprisonment, and/or other serious legal consequences for myself or [contractor company name].

The attached Claim does not breach the Contract between [contractor company name] and Berryessa Union School District for this Project, is not a false claim, does not violate any applicable law, satisfies all provisions of the Contract applicable to submission of the Claim, only contains truthful and accurate supporting data, and only requests money and/or time extensions that accurately reflect the adjustments to money and time for which I believe that Berryessa Union School District is responsible under its Contract with [contractor company name].

While preparing this declaration and Claim I consulted with others (including attorneys, consultants, or others who work for [Contractor company name]) when necessary to ensure that the statements were true and correct.

Contractor understands and agrees that any Claim submitted without this certification does not meet the terms of the Contract Documents; that Owner, or Owner's representatives, may reject the Claim on that basis; and that unless Contractor properly and timely files the Claim with the certification, Contractor cannot further pursue the Claim in any forum and all rights to additional money or time for the issues covered by the Claim are waived due to a condition precedent not having been satisfied.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed _____, 2___, at ____, California.

[name of declarant]

Contractor's failure to timely submit a certification will constitute a complete waiver of Contractor's rights to (a) recover money or time on the issues for which a Claim was required, (b) submit a Government Code Claim (see Section 4.5.6.4) for the money or time, and (c) initiate any action, proceeding or litigation for the money or time. Contractor will not have satisfied a condition precedent or exhausted administrative remedies.

4.5.5.2 *Claims for Additional Money.* Each Claim for additional money (including but not limited to those described in (b) and (c) of the first paragraph of Section 4.5.3) must include all facts supporting the Claim, including but not limited to all supporting documentation plus a written analysis as to (a) why the claimed cost was incurred, (b) why Contractor could not mitigate its costs, (c) why the claimed cost is the responsibility of the Owner, and (d) why the claimed cost is a reasonable amount. In no event will the Contractor be allowed to reserve its rights to assert a Claim for money at a later time, unless the Owner expressly agrees in writing to allow the reservation. Any costs, direct or indirect, not asserted shall be waived. A Claim may not include any costs incurred in preparation of the Claim or in preparation of any underlying COR, including but not limited to costs of delay analysis.

4.5.5.3 Claims for Additional Time

4.5.5.3.1 *Notice of Extent of Claim.* If the Contractor wishes to make a Claim for an increase in the Contract Time (including but not limited to Section 4.5.3(a)), the Claim shall include, but not be limited to, all facts supporting the Claim, all documentation of such facts, all information required by the Contract Documents, and a current schedule and delay analysis explaining (a) the nature of the delay, (b) the Owner's responsibility for the claimed delay, (c) the claimed delay's impact on the critical path, (d) the claimed delay's impact on completion date (including an analysis of any float still remaining and whether the alleged delay in work exceeds such remaining float), and (e) why Contractor could not mitigate the delay impacts.

In the case of a continuing delay, only one (1) initial Claim is necessary that is based on estimates of when the continuing delay will end, but within thirty (30) days of the end of the continuing delay an updated final Claim must be submitted, which shall also be certified. In no event will the Contractor be allowed to reserve its rights to assert a Claim for a time extension, unless the Owner expressly agrees in writing to allow the reservation. Any time extension not asserted shall be waived.

4.5.5.3.2 *Unusually Severe Weather Claims.* If unusually severe weather is the basis for a Claim for additional time, Contractor must provide Owner data and facts showing that the weather conditions were abnormal for the period of time, could not have been reasonably

anticipated or mitigated, and had an adverse effect on the critical path of the scheduled construction.

4.5.5.4 "*Pass Through*" *Claims.* A Subcontractor or supplier to Contractor may not submit a request for additional time or money directly to the Owner. If a subcontractor or supplier submits a request for additional money or time to Contractor and Contractor wishes to pass it through to Owner, then Contractor must comply with all requirements of Section 4.5, including Notices of Potential Change, Change Order Requests, and Claims. Contractor must prepare and submit its own analysis of the Subcontractor's request, and the Claim must include a copy of the Subcontractor's request along with any other necessary supporting documentation.

The Contractor's analysis of the Subcontractor's request must include Contractor's detailed explanation as to why the Subcontractor or supplier's request is the Owner's responsibility, including Contractor's analysis of (a) why the amount of damages the Subcontractor or supplier requests is justified and appropriate, (b) how Contractor's breach of the subcontract caused the Subcontractor or supplier to incur these damages, and (c) how the Owner's breach of the Contract caused the Contractor's breach of the subcontract. Any Contractor Claim that fails to include the above information, or that states that Owner is responsible for the Subcontractor's request only in the event that Contractor is found to owe money to Subcontractor, shall act as a complete waiver of Contractor's rights to (a) recover money or time on the issues for which a Claim was required, (b) submit a Government Code Claim (see Section 4.5.6.4) for the money or time, and (c) initiate any action, proceeding or litigation for the money or time. Contractor will not have satisfied a condition precedent or exhausted administrative remedies.

4.5.6 PROCEDURES FOR CLAIMS LESS THAN OR EQUAL TO \$375,000 (PUBLIC CONTRACT CODE SECTION 20104.2)

Claims less than or equal to \$375,000 are subject to this section 4.5.6, as well as the separate procedures and substantive provisions of Sections 4.5.1 through 4.5.5.

4.5.6.1 *Claims for Less Than \$50,000.* For Claims of less than fifty thousand dollars (\$50,000), the Owner shall respond in writing to any written Claim within 45 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 Owner may have against the Contractor.

If additional information is thereafter required, it shall be requested and provided pursuant to this subsection, upon mutual agreement of the Owner and Contractor. If Owner and Contractor cannot reach mutual agreement, Contractor's failure to provide any reasonably-requested information within fifteen (15) days after the request, shall act as a complete waiver of Contractor's rights to (a) recover money or time on the issues for which a Claim was required, (b) submit a Government Code Claim (see Section 4.5.6.4) for the money or time, and (c) initiate any action, proceeding or litigation for such money or time. Contractor will not have satisfied a condition precedent or exhausted administrative remedies.

The Owner'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.

4.5.6.2 *Claims Over \$50,000 and Less Than or equal to \$375,000.* For claims over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the Owner 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 Owner may have against the Contractor.

If additional information is thereafter required, it shall be requested and provided pursuant to this subsection, upon mutual agreement of the Owner and Contractor. If Owner and Contract cannot reach mutual agreement, Contractor's failure to provide any reasonably-requested information within thirty (30) days after the request, shall act as a complete waiver of Contractor's rights to (a) recover money or time on the issues for which a Claim was required, (b) submit a Government Code Claim (see Section 4.5.6.4) for such money or time, and (c) initiate any action, proceeding or litigation for such money or time. Contractor will not have satisfied a condition precedent or exhausted administrative remedies.

The Owner'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.

4.5.6.3 *Meet and Confer.* If the Contractor disputes the Owner's written response, or the Owner fails to respond within the time prescribed, the Contractor may so notify the Owner, in writing, either within 15 days of receipt of the Owner's response or within 15 days of the Owner'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 Owner shall schedule a meet and confer conference for settlement of the dispute, which shall take place within 30 days of the demand. Upon written agreement of the Owner and Contractor, the conference may take place during regularly scheduled Project meetings.

If Contractor fails to timely notify the Owner that it wishes to meet and confer pursuant to the previous paragraph, then Contractor will have waived all rights to (a) recover money or time on the issues for which a Claim was required, (b) submit a Government Code Claim (see Section 4.5.6) for such money or time, and (c) initiate any action, proceeding or litigation for such money or time. Contractor will not have satisfied a condition precedent or exhausted administrative remedies.

If a Claim, or any portion of a Claim, over \$100,000 remains in dispute after the meet and confer and Contractor wishes to pursue it, Contractor must demand non-binding mediation in writing within fifteen (15) days. If Contractor fails to timely notify the Owner in writing that it wishes to mediate pursuant to this paragraph, Contractor will have waived all right to further pursue the Claim pursuant to section 4.5.4. The parties shall reasonably cooperate to schedule and attend a mediation as soon as reasonably possible.

4.5.6.4 *Government Code Claim.* If the Claim or any portion remains in dispute after the meet and confer conference and Contractor wishes to pursue it, the Contractor **must** file a timely and proper Government Code Claim. The filing of a Government Code Claim is specifically required in addition to all contractual procedures described in Sections 4.5 through 4.5.6.3. The above contractual procedures do not act as a substitute for the Government Code Claim procedures, and the two sets of procedures shall be sequential with the contractual procedures coming first.

Failure to timely file a Government Code Claim shall act as complete waiver of Contractor's rights to (a) recover money or time on the issues for which a Government Code Claim was required, and (b) initiate any action, proceeding or litigation for such money or time. Contractor will not have satisfied a condition precedent or exhausted administrative remedies.

Owner and Contractor shall proceed with the Government Code Claim according to Government Code, Section 900 et seq., and as otherwise permitted by law. For purposes of the applicable Government Code provisions, and as provided in Public Contract Code section 20104.2(e), the running of the time period within which a Contractor must file a Government Code Claim shall be tolled from the time the Contractor submits a written Claim under Article 4.5 until the time that the Claim is denied, in whole or in part, as a result of the meet and confer process in Section 4.5.6.3, including any period of time utilized by the meet and confer process.

4.5.7 **PROCEDURES FOR CLAIMS OVER \$375,000**

Contractor and Owner shall proceed with Claims over \$375,000 pursuant to Section 4.5.6, except as follows: (a) Section 4.5.6.1, shall not be applicable; (b) for Section 4.5.6.2, Owner shall respond in writing to all written Claims within 90 days of receipt of the Claim, or may request, in writing, within 45 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim the Owner may have against the Contractor; (c) for Section 4.5.6.2, Owner shall respond within 45 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 documentation, whichever is greater; and (d) for Section 4.5.6.3, following the meet and confer conference, if the Claim or any portion of it remains in dispute and Contractor wishes to pursue it, Contractor must demand in writing within fifteen (15) days that the parties mediate (non-binding). If Contractor fails to timely notify the Owner in writing that it wishes to mediate pursuant to Section 4.5.4. The parties shall reasonably cooperate to schedule and attend a mediation as soon as reasonably possible.

4.5.8 **CONTINUING CONTRACT PERFORMANCE**

Despite submission or rejection of a Notice of Potential Change, COR or Claim, the Contractor shall proceed diligently with performance of the Contract as directed by Owner, and the Owner shall continue to make any undisputed payments in accordance with the Contract.

4.5.9 CLAIMS FOR CONCEALED OR UNKNOWN CONDITIONS

4.5.9.1 **Trenches or Excavations Less Than Four Feet Below the Surface.** If Contractor encounters conditions at the Site which are subsurface or otherwise concealed physical conditions, which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall give notice to the Owner promptly before conditions. If Contractor believes that such conditions differ materially and will cause an increase in the Contractor's cost of, time required for, or performance of any part of the Work, Contractor must comply with the provisions above for Notice of Potential Change, Change Order Request, and Claims (beginning with Section 4.5.1).

4.5.9.2 *Trenches or Excavations Greater Than Four Feet Below the Surface.* Pursuant to Public Contract Code section 7104, when any excavation or trenching extends greater than four feet below the surface:

4.5.9.2.1 The Contractor shall promptly, and before the following conditions are disturbed, notify the public entity, in writing, of any:

(1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 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 the provisions of existing law.

(2) 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.

(3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

4.5.9.2.2 The public entity 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.

4.5.9.2.3 In the event that a dispute arises between the public entity and the Contractor whether 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.

4.5.10 INJURY OR DAMAGE TO PERSON OR PROPERTY

If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, any of the other party's employees or agents, or others for whose acts such party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding ten (10) days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. For a Notice of Potential Change, COR and Claim for additional cost or time related to this injury or damage, Contractor shall follow Section 4.5.

ARTICLE 5

SUBCONTRACTORS

5.1 **DEFINITIONS**

5.1.1 SUBCONTRACTOR

A Subcontractor is a person or entity, who has a contract with the Contractor to perform a portion of the Work at the Site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor. To the extent that the term Trade Contractor is utilized in the Contract Documents, it shall have the same meaning as the term "Subcontractor."

5.1.2 **Sub-Subcontractor**

A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the Site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

5.1.3 SPECIALTY CONTRACTORS

If a Subcontractor is designated as a "Specialty Contractor" as defined in section 7058 of the Business and Professions Code, all of the Work outside of that Subcontractor's specialty shall be performed in compliance with the Subletting and Subcontracting Fair Practices Act, Public Contract Code sections 4100, et seq.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

5.2.1 Assignment or Substitution - Consent of Owner

In accordance with Public Contract Code sections 4107 and 4107.5, no Contractor whose bid is accepted shall, without the written consent of the Owner: substitute any person or entity as a Subcontractor in place of the Subcontractor designated in the original bid; permit any such Subcontract to be assigned or transferred, or allow it to be performed by any person or entity other than the original Subcontractor listed in the original bid; sublet or subcontract any portion of the Work in excess of one-half of one percent (0.5%) of the Contractor's total bid as to which its original bid did not designate a Subcontractor. Any assignment or substitution made without the prior written consent of the awarding authority shall be void, and the assignees shall acquire no rights in the Contract. Any consent, if given, shall not relieve Contractor or its Subcontractors from their obligations under the terms of the Contract Documents.

5.2.2 **GROUNDS FOR SUBSTITUTION**

Pursuant to Public Contract Code section 4107 and the procedure set forth therein, no Contractor whose bid is accepted may request to substitute any person or entity as a Subcontractor in place of a Subcontractor listed in the original bid except in the following instances:

- A. When the Subcontractor listed in the bid after having a reasonable opportunity to do so, fails or refuses to execute a written Contract for the scope of work specified in the subcontractor's bid and at the price specified in the subcontractor's bid, when that written Contract, based upon the general terms, conditions, plans and specifications for the Project involved or the terms of that Subcontractor's written bid, is presented to the Subcontractor by the prime contractor;
- B. When the listed Subcontractor becomes insolvent or the subject of an order for relief in bankruptcy;
- C. When the listed Subcontractor fails or refuses to perform his or her Subcontract;
- D. When the listed Subcontractor fails or refuses to meet the bond requirements of the prime contractor set forth in Public Contract Code section 4108.
- E. When the Contractor demonstrates to the awarding authority, or its duly authorized officer, subject to the further provisions of Public Contract Code section 4107.5, that the name of the Subcontractor was listed as the result of inadvertent clerical error;
- F. When the listed Subcontractor is not licensed pursuant to the Contractors License Law; or
- G. When the awarding authority, or its duly authorized officer, determines that the Work being performed by the listed Subcontractor is substantially unsatisfactory and not in substantial accordance with the plans and specifications, or the Subcontractor is substantially delaying or disrupting the progress of the Work.

- H. When the listed Subcontractor is ineligible to work on a public works project pursuant to Section 1777.1 of the Labor Code.
- I. When the awarding authority determines that a listed Subcontractor is not a responsible contractor.

5.2.2.1 *No Change in Contract.* Any substitutions of Subcontractors shall not result in any increase in the Contract Sum or result in the granting of any extension of time for the completion of the Project.

5.2.2.2 **Substitution Due to Clerical Error.** The Contractor, as a condition of asserting a claim of inadvertent clerical error in the listing of a Subcontractor, shall, pursuant to Public Contract Code section 4107.5, within two (2) working days after the time of the prime bid opening by the awarding authority, give written notice to the awarding authority and copies of such notice to both the Subcontractor it claims to have listed in error, and the intended Subcontractor who had bid to the Contractor prior to bid opening. Any listed Subcontractor who has been notified by the Contractor in accordance with the provisions of this section as to an inadvertent clerical error, shall be allowed six (6) working days from the time of the prime bid opening within which to submit to the awarding authority and to the Contractor written objection to the Contractor's claim of inadvertent clerical error.

In all other cases, the Contractor must make a request in writing to the awarding authority for the substitution of a subcontractor, giving reasons therefore. The awarding authority shall mail a written notice to the listed Subcontractor giving reasons for the proposed substitution. The listed Subcontractor shall have five (5) working days from the date of such notice within which to file with the awarding authority written objections to the substitution.

Failure to file written objections pursuant to the provisions of this section within the times specified herein shall constitute a complete waiver of objection to the substitution by the listed Subcontractor and, where the ground for substitution is an inadvertent clerical error, an agreement by the listed Subcontractor that an inadvertent clerical error was made.

If written objections are filed, the awarding authority shall give five (5) days notice to the Contractor and to the listed Subcontractor of a hearing by the awarding authority on the Contractor's request for substitution as provided in Public Contract Code section 4107. The determination by the awarding authority shall be final.

5.3 SUBCONTRACTUAL RELATIONS

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all obligations and responsibilities, which the Contractor, by the Contract Documents, assumes toward the Owner. Each subcontract agreement shall preserve and protect the rights of the Owner under the Contract Documents with respect to the Work to be performed by the

Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound. Upon written request of the Subcontractor, the Contractor shall identify to the Subcontractor the terms and conditions of the proposed subcontract agreement, which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner provided that:

- A. Assignment is effective only after termination of the Contract with the Contractor by the Owner for cause pursuant to Article 14 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor in writing; and
- B. Assignment is subject to the prior rights of the surety, if any, obligated under any bond relating to the Contract.

5.5 SUBCONTRACTOR'S RESPONSIBILITIES

Every Subcontractor is bound to the following provisions, unless specifically noted to the contrary in the Subcontractor's contract subject to the limitations of section 5.3.

5.5.1 SUPERVISION BY SUBCONTRACTORS

Subcontractors shall efficiently supervise their Work, using their best skill and attention. Each of them shall carefully study and compare all Drawings, Specifications, and other instructions, shall at once report to Contractor any error or omission which any of them may discover, and shall subsequently proceed with the Work in accordance with instructions from the Contractor concerning such error or omission. Each Subcontractor shall be fully responsible for and shall bear the full risk of loss of all of its property.

5.5.2 **DISCIPLINE AND ORDER**

Each Subcontractor shall at all times enforce strict discipline and good order among its Subcontractors, material or equipment suppliers, or their agents, employees, and invitees, and shall establish and maintain surveillance over the activities of each of the foregoing to minimize any disturbance, damage, pollution, or unsightly conditions relative to property areas adjacent to or in the vicinity of the Site. The Contractor shall have the right to remove from the Work any

employee of a Subcontractor for any reason including, without limitation, incompetence or carelessness.

5.5.3 **DEFECTS DISCOVERED**

Should the proper and accurate performance of the Work depend upon the proper and accurate performance of other work not included in its Contract, each Subcontractor shall use all necessary means to discover any defect in such other work and shall allow the Contractor, the Owner and Architect, or other Subcontractors as Contractor elects, a reasonable amount of time to remedy such defects. If the Subcontractor should proceed with its Work, it shall be considered to have accepted such other work, unless the Subcontractor shall have proceeded pursuant to instructions in writing by the Contractor over its written objection.

5.5.4 SUBCONTRACTOR INFORMATION

Each Subcontractor shall submit to the Owner, the Contractor, or the Architect, as the case may be, promptly when requested by any of the foregoing, information with respect to the names, responsibilities, and titles of the principal members of its staff, the adequacy of the Subcontractor's equipment and the availability of necessary materials and supplies. Subcontractor shall fully cooperate with Contractor in its periodic review of the adequacy of Subcontractor's supervision, personnel, and equipment, and the availability of necessary materials and supplies and shall promptly comply with the requirements of the Contractor with respect thereto.

5.5.5 **TEMPORARY STRUCTURES**

Each Subcontractor shall furnish at its expense its own temporary facilities and storage except those specifically agreed to be furnished to it by the Contractor in the Subcontract Agreement. Subcontractor's material storage rooms and field offices, etc., will be placed in locations designated by the Contractor. When it becomes necessary due to the progress of the Project for the Subcontractor to relocate its field operations, it will do so in an expeditious manner and at no additional cost to Contractor or Owner. The construction of material storage rooms and field offices, etc., will be of fire resistive material only, such as concrete or gypsum block, rated drywall, or sheet metal.

5.5.6 CHARGES TO SUBCONTRACTOR

Each Subcontractor may be subject to the Contractor's reasonable charges for hoisting, repair to other work caused by the fault or negligence of Subcontractor, removal of Subcontractor's rubbish, and clean-up occasioned by Subcontractor.

5.5.7 FINES IMPOSED

Subcontractor shall comply with and pay any fines or penalties imposed for violation of any applicable law, ordinance, rule, regulation, Environmental Impact Report mitigation requirement, and lawful order of any public authority, including, without limitation, all OSHA and California OSHA requirements and those of other authorities having jurisdiction of the safety of persons or property.

5.5.8 **PROJECT SIGNS**

Each Subcontractor shall not display on or about the Project any sign, trademark, or other advertisement. The Owner will permit a single Project sign, which shall be subject to the Owner's prior and sole discretion and approval, as to all matters including, without limitation, size, location, material, colors, style and size of printing, logos and trademarks (if any), text, and selection of names to be displayed.

5.5.9 **Remedies for Failure to Perform**

Without limitation of any other right or remedy available to Contractor under the Contract Documents or at law, should: the Subcontractor fail to perform its portion of the Work in a skilled and expeditious manner in accordance with the terms of the Contract Documents with sufficient labor, materials, equipment, and facilities; delays the progress of the job or otherwise fail in any of its obligations; or either a receiver is appointed for the Subcontractor or the Subcontractor is declared to be bankrupt or insolvent, and such appointment, bankruptcy, or insolvency proceedings or declaration is not set aside within thirty (30) days, then the Contractor, upon three (3) days notice to the Subcontractor (subject to the requirements of Pub. Contracts Code, § 4107), may provide such labor, materials, or perform such work and recover the cost plus profit and overhead from monies due or to become due thereafter to the Subcontractor. The Contractor may terminate the employment of the Subcontractor, taking possession of its tools, materials, and equipment related to the Work and cause the entire portion of the Subcontractor's Work to be finished either by another Subcontractor or through the Contractor's own forces.

5.5.10 DISPUTES NOT TO AFFECT WORK

In the event of any dispute as to whether or not any portion of the Work is within the scope of the Work to be performed by a Subcontractor, or any dispute as to whether or not the Subcontractor is entitled to a Change Order for any Work requested of it or entitled to payment, the Subcontractor shall continue to proceed diligently with the performance of the Work. Regardless of the size or nature of the dispute, the Subcontractor shall not under any circumstances cease or delay performance of its portion of the Work during the existence of the dispute. The Contractor shall continue to pay the undisputed amounts called for under the Subcontract Agreement during the existence of the dispute. Any party stopping or delaying the progress of the Work because of a dispute shall be responsible in damages to the Owner, the Architect, and the Contractor for any losses suffered as a result of the delay.

5.5.11 APPLICATION FOR PAYMENT

Contractor agrees to advise the Subcontractor if any documentation in connection with the Subcontractor's application for payment has not been accepted or is in any way unsatisfactory.

5.5.12 COMPLIANCE WITH PROCEDURES

Each Subcontractor shall comply with all procedures established by the Contractor for coordination among the Owner, the Owner's consultants, Architect, Contractor, and the various Subcontractors for coordination of the Work with all local municipal authorities, government agencies, utility companies, and any other agencies with jurisdiction over all or any portion of the Work. The Subcontractor shall cooperate fully with all of the foregoing parties and authorities.

5.5.13 **ON-SITE RECORD KEEPING**

Subcontractor shall comply with all on-Site record keeping systems established by the Contractor and shall, upon the request of the Contractor, provide the Contractor with such information and reports as the Contractor may deem appropriate. Without limitation of the foregoing, the Subcontractor shall assemble all required permits and certificates so that they are readily accessible at the Site.

5.5.14 NON-EXCLUSIVE OBLIGATIONS

The specific requirements of Article 5 are not intended to exclude the obligation of the Subcontractor to comply with any of the other provisions of the General Conditions and the other Contract Documents which are relevant to the proper performance of its portion of the Work.

ARTICLE 6

CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.1 **OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS**

6.1.1 **OWNER'S RIGHTS**

The Owner reserves the right to perform work related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the Site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance. Upon the election to perform work with its own forces or by separate contracts, the Owner shall notify the Contractor. If the

Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall proceed pursuant to Section 4.5 in the Contract Documents.

6.1.2 **DESIGNATION AS CONTRACTOR**

When separate contracts are awarded for different portions of the Project or other construction or operations on the Site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner/Contractor Agreement.

6.1.3 **CONTRACTOR DUTIES**

The Contractor shall have overall responsibility for coordination and scheduling of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors, and the Owner until subsequently revised.

6.1.4 **OWNER OBLIGATIONS**

Unless otherwise provided in the Contract Documents, when the Owner performs work related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations, and to have the same rights, which apply to the Contractor under the General Conditions, including, without excluding others, those stated in Article 3, this Article 6 and Articles 10 and 12.

6.2 **MUTUAL RESPONSIBILITY**

6.2.1 **DELIVERY AND STORAGE**

The Contractor shall afford the Owner and separate contractor's reasonable opportunity for delivery and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the separate contractors' construction and operations with theirs as required by the Contract Documents.

6.2.2 NOTICE BY CONTRACTOR

If part of the Contractor's Work depends upon proper execution or results from work by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Owner patent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acknowledgment that the Owner's or separate contractors'

completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

6.2.3 COSTS INCURRED

Costs, expenses, and damages caused by delays, improperly timed activities, defective construction, or damages to another's work/Work or property shall be borne by the party responsible. Should Contractor/any contractor cause damage to the work/Work or property of any separate contractor on the Project, or cause any delay to any such contractor, the Contractor shall defend, indemnify and hold Owner harmless for such damage or delay under section 3.16. Owner may withhold from progress payments and/or retention the cost of delay or damage to another contractor's work or damage to another contractor's property caused by Contractor.

6.2.4 **CORRECTION OF DAMAGE**

The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the Owner or separate contractors.

6.3 **OWNER'S RIGHT TO CLEAN UP**

If a dispute arises among the Contractor, separate contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Section 3.13, the Owner may clean up and allocate the cost among those responsible as the Owner determines to be just.

ARTICLE 7

CHANGES IN THE WORK

7.1 CHANGES

7.1.1 NO CHANGES WITHOUT AUTHORIZATION

The Owner reserves the right to change the Work by making such alterations, deviations, additions to, or deletions from the plans and specifications, as may be deemed by the Owner to be necessary or advisable for the proper completion or construction of the Work contemplated, and Owner reserves the right to require Contractor to perform such work. No adjustment will be made in the Contract unit price of any Contract item regardless of the quantity ultimately required.

Owner shall compensate Contractor with money or grant extra time for any extra work ordered by the Owner to be performed. Contractor shall follow the provisions of 7.6 and 7.7 when requesting additional money or additional time. Contractor shall expeditiously perform all extra work upon direction, even if no agreement has been reached on extra time or money. For all such changes resulting in a credit to Owner, Contractor shall follow 7.5 and 7.7 in providing the credit to Owner. Contractor shall bring all potential credits to the Owner's attention.

There shall be no change whatsoever in the drawings, specifications, or in the Work or payments under the Contract Documents without an executed Change Order, Construction Change Directive, or order by the Owner pursuant to Section 7.1.2. Owner shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless the same shall have been properly requested under Section 4.5 and authorized by, and the cost thereof approved in writing by, Change Order or Construction Change Directive. No extension of time for performance of the Work shall be allowed hereunder unless request for such extension is properly made under Section 4.5 and such time is thereof approved in writing by Change Order or Construction Change Directive. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications.

7.1.2 AUTHORITY TO ORDER MINOR CHANGES

The Owner has authority to order minor changes in the Work not involving any adjustment in the Contract Sum, an extension of the Contract Time, or a change which is inconsistent with the intent of the Contract Documents. Such changes shall be effected by written Construction Change Directive and shall be binding on the Contractor. The Contractor shall carry out such written orders promptly.

7.2 CHANGE ORDERS ("CO")

A CO is a written instrument signed by the Owner and the Contractor, stamped (or sealed) and signed by Architect, and approved by the Owner's Governing Board and DSA where required, stating the agreement of Owner and Contractor upon all of the following:

- A. A change in the Work;
- B. The amount of the adjustment in the Contract Sum, if any; and
- C. The extent of the adjustment in the Contract Time, if any.

Unless expressly stated otherwise in the CO, any CO executed by Owner and Contractor constitutes and includes full and complete money and time (including but not limited to, adjustments to money and time) for all costs and effects caused by any of the changes described within it. Unless expressly stated otherwise in the CO, in consideration for the money received for the changes described in the CO, Contractor waives all Claims for all costs and effects caused by any of the changes, including but not limited to labor, equipment, materials, delay, extra work, overhead (home and field), profit, direct costs, indirect costs, acceleration, disruption, impaired productivity, time extensions, and any the costs and effects on Subcontractors and suppliers of any tier.

7.3 CONSTRUCTION CHANGE DIRECTIVES ("CCD")

7.3.1 **DEFINITION**

A CCD is a written unilateral order signed by the Owner, and if necessary by the Architect, directing a change in the Work and stating an adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by CCD, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions pursuant to Section 7.1.1.

7.3.2 USE TO DIRECT CHANGE

A CCD shall be used in the absence of agreement on the terms of a CO. If Contractor disagrees with the terms of a CCD, it shall nevertheless perform the work directed by the CCD, but it may pursue the Notice of Potential Change, COR and Claim procedures of Section 4.5 if Contractor believes it is entitled to changes in the Contract Sum or Contract Time.

7.4 **REQUEST FOR INFORMATION ("RFI")**

7.4.1 **DEFINITION**

An RFI is a written request prepared by the Contractor asking the Owner to provide additional information necessary to clarify an item which the Contractor feels is not clearly shown or called for in the drawings or specifications, or to address problems which have arisen under field conditions.

7.4.2 **SCOPE**

The RFI shall reference all the applicable Contract Documents including specification section, detail, page numbers, drawing numbers, and sheet numbers, etc. The Contractor shall make suggestions and/or interpretations of the issue raised by the RFI. An RFI cannot modify the Contract Sum, Contract Time, or the Contract Documents.

7.4.3 **Response Time**

Unless Owner expressly directs otherwise in writing, Contractor shall submit RFIs directly to the Architect, with copies forwarded to the Owner. Contractor shall submit a revised and updated priority schedule with each RFI. The Architect shall endeavor to follow the Contractor's requested order of priorities. The Owner and Contractor agree that an adequate time period for the Architect (or other designated recipient of the RFI) to respond to an RFI is generally fourteen (14) calendar days after the Architect's receipt of an RFI, unless the Owner and Contractor agree otherwise in writing. However, in all cases, the Architect shall take such time, whether more or less than 14 days, as is necessary in the Architect's professional judgment to permit adequate review and evaluation of the RFI. If Contractor informs the Architect that it needs a response to

an RFI expedited to avoid delay to the critical path, the Architect shall provide a response as quickly as reasonably possible. The total time required for the Architect to respond is subject to the complexity of the RFI, the number of RFI's submitted concurrently and the reprioritization of pending RFI's submitted by the Contractor, among other things. If Contractor believes that the Architect's response results in a change in the Work that warrants additional money or time, or that Architect's response was unreasonably delayed and caused delay to the Project's critical path, Contractor shall follow the procedures for additional money or time under Section 4.5. No presumption shall arise as to the timeliness of the response if the response is more than fourteen (14) days after the Architect's receipt of the RFI. Contractor shall review the Contract Documents before submitting an RFI to ensure that the information is not already in the Contract money or time and costs incurred for each time the information was already in the Contract Documents, Owner may withhold \$100 from progress payments or retention in addition to any other remedies which Owner may have the right to pursue.

7.4.4 COSTS INCURRED

The Contractor shall be invoiced by the Owner for any costs incurred for professional services, which shall be withheld from progress payments or retention, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request.

7.5 **REQUEST FOR PROPOSAL ("RFP")**

7.5.1 **DEFINITION**

An RFP is Owner's written request asking the Contractor to submit to the Owner an estimate of the effect, including credits, of a proposed change on the Contract Sum and the Contract Time.

7.5.2 **SCOPE**

An RFP shall contain adequate information, including any necessary drawings and specifications, to enable Contractor to provide the cost breakdowns required by section 7.7. The Contractor shall not be entitled to any additional money for preparing a response to an RFP, whether ultimately accepted or not.

7.6 **CHANGE ORDER REQUEST** ("COR")

7.6.1 **Definition**

A COR is a written request prepared by the Contractor asking the Owner for additional money or time.

7.6.2 **CHANGES IN PRICE**

A COR shall include breakdowns per section 7.7 to validate any proposed change in Contract Sum.

7.6.3 CHANGES IN TIME

Where a change in Contract Time is requested, a COR shall also include delay analysis to validate any proposed change to the Contract Time, and shall meet all requirements in these General Conditions, including but not limited to Section 8.4. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in section 3.9 and Division 1 of the Specifications.

7.7 **PRICE OF CHANGE ORDERS**

7.7.1 **Scope**

Any COR shall provide in writing to the Owner, the Architect and any construction manager, the effect of the proposed CO upon the Contract Sum and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and material showing actual quantities, hours, unit prices, wage rates, required for the change, and the effect upon the Contract Time of such CO.

7.7.2 **DETERMINATION OF COST**

The amount of the increase or decrease in the Contract Sum resulting from a CO, if any, shall be determined in one or more of the following ways as applicable to a specific situation:

- A. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- B. Unit prices stated in the Contractor's original bid, the Contract Documents, or subsequently agreed upon between the Owner and the Contractor;
- C. Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- D. By cost of material and labor and percentage of overhead and profit. If the value is determined by this method the following requirements shall apply:

1. **Daily Reports by Contractor**.

a) <u>General</u>: At the close of each working day, the Contractor shall submit a daily report to the Inspector of Record and any construction manager, on forms approved by the Owner, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day, the location of the work, and for other services and expenditures when authorized concerning extra work items. An attempt shall be made to reconcile the report daily, and it shall be signed by the Inspector of Record and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by Subcontractors or others shall be submitted through the Contractor.

b) <u>Labor</u>: Show names of workers, classifications, and hours worked.

c) <u>Materials</u>: Describe and list quantities of materials used.

d) <u>Equipment</u>: Show type of equipment, size, identification number, and hours of operation, including, if applicable, loading and transportation.

e) <u>Other Services and Expenditures</u>: Describe in such detail as the Owner may require.

2. **Basis for Establishing Costs**.

a) <u>Labor</u> will be the actual cost for wages prevailing locally for each craft or type of workers at the time the extra work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. The use of a labor classification, which would increase the extra work cost, will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

b) <u>Materials</u> shall be at invoice or lowest current price at which such materials are locally available and delivered to the Site in the quantities involved, plus sales tax, freight, and delivery.

The Owner reserves the right to approve materials and sources of supply or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the Owner.

c) <u>Tool and Equipment Rental</u>. No payment will be made for the use of tools which have a replacement value of \$100 or less.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies or distributors at the time the work is performed.

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Necessary loading and transportation costs for equipment used on the extra work shall be included. If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the Owner than holding it at the work Site, it shall be returned unless the Contractor elects to keep it at the work Site at no expense to the Owner.

All equipment shall be acceptable to the Inspector of Record, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and modifications shall be used to classify equipment, and equipment shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

d) <u>Other Items</u>. The Owner may authorize other items which may be required on the extra work. Such items include labor, services, material, and equipment which are different in their nature from those required by the Work, and which are of a type not ordinarily available from the Contractor or any of the Subcontractors. Invoices covering all such items in detail shall be submitted with the Application for Payment.

e) <u>Invoices</u>. Vendors' invoices for material, equipment rental, and other expenditures shall be submitted with the COR. If the Application for Payment is not substantiated by invoices or other documentation, the Owner may establish the cost of the item involved at the lowest price which was current at the time of the Daily Report.

f) <u>Overhead</u>, premiums and profit. For overhead, including direct and indirect costs, submit with the COR and include: home office overhead, off-Site supervision, CO preparation/negotiation/research for Owner initiated changes, time delays, project interference and disruption, additional guaranty and warranty durations, on-Site supervision, additional temporary protection, additional temporary utilities, additional material handling costs, and additional safety equipment costs.

7.7.3 FORMAT FOR PROPOSED COST CHANGE

The following format shall be used as applicable by the Owner and the Contractor to communicate proposed additions and deductions to the Contract.

	<u>EXTRA</u>	<u>CREDIT</u>
A. Material (attach itemized quantity and unit cost plus sales tax, invoices, receipts, truck tags, etc., for force account work)		
B. Labor (attach itemized hours and rates, daily logs, certified payroll, etc.)		
C. Equipment (attach any invoices)		
D. Subtotal		
E. If Subcontractor performed Work, add Subcontractor's overhead and profit to portions performed by Subcontractor, not to exceed fifteen percent (15%) of item D.		
F. Liability and Property Damage Insurance, Worker's Compensation Insurance, Social Security, and Unemployment Taxes, not to exceed twenty percent (20%) of Item B. G. Subtotal		
H. General Contractor's Overhead and Profit, not to exceed fifteen percent (15%) of Item G; and for work performed by subcontractors, not to exceed five percent (5%).		
I. Subtotal		
J. Bond not to exceed one percent (1%) of Item I.		
K. TOTAL		

It is expressly understood that the value of such extra work or changes, as determined by any of the aforementioned methods, expressly includes (1) any and all of the Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the project or resulting from delay to the project, and (2) any costs of preparing a COR, including but not limited to delay analysis. Any costs or expenses not included are deemed waived.

It is further understood that the **total** percentage markup on any change order shall not exceed twenty five percent (25%).

7.7.4 **DISCOUNTS, REBATES, AND REFUNDS**

For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to the Contractor, and the Contractor shall make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof shall be allowed as a reduction of the Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omissions in the Work as provided herein.

7.7.5 ACCOUNTING RECORDS

With respect to portions of the Work performed by COs and CCDs on a time-and-materials, unitcost, or similar basis, the Contractor shall keep and maintain cost-accounting records satisfactory to the Owner, which shall be available to the Owner on the same terms as any other books and records the Contractor is required to maintain under the Contract Documents.

7.7.6 **NOTICE REQUIRED**

Contractor shall submit a written Notice of Potential Change for additional money or time pursuant to section 4.5.1.

7.7.7 **APPLICABILITY TO SUBCONTRACTORS**

Any requirements under this Article 7 shall be equally applicable to COs or CCDs issued to Subcontractors by the Contractor to the same extent required of the Contractor.

7.8 WAIVER OF RIGHT TO CLAIM MONEY OR TIME

Failure to demand money based on costs, or time extensions, as part of a COR constitutes a complete waiver of Contractor's right to claim the omitted money or time. All money or time for an issue must be included in the COR at the time submitted.

ARTICLE 8

TIME

8.1 **DEFINITIONS**

8.1.1 **CONTRACT TIME**

Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Completion of the Work.

8.1.2 **NOTICE TO PROCEED**

Contractor shall not commence the Work until it receives a Notice to Proceed from Owner. The date of commencement of the Work is the date established in the Notice to Proceed. The date of commencement shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible.

8.1.3 **DAYS**

The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

8.2 HOURS OF WORK

8.2.1 **SUFFICIENT FORCES**

Contractors and Subcontractors shall furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule.

8.2.2 **PERFORMANCE DURING WORKING HOURS**

Work shall be performed during regular working hours except that in the event of an emergency or when required to complete the Work in accordance with job progress, work may be performed outside of regular working hours with the advance written consent of the Owner.

8.2.3 **LABOR CODE APPLICATION**

As provided in Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by the Contractor or by any Subcontractor on any subcontract under this Contract, upon the work or upon any part of the work contemplated by this Contract, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as hereinafter provided. Notwithstanding the provision hereinabove set forth, work performed by employees of Contractors in excess of eight (8) hours per day and forty (40) hours during any one week shall be permitted upon this public work with compensation provided for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1-1/2) times the basic rate of pay.

Contractor or subcontractor shall pay to the Owner a penalty of Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by the Contractor, or by any Subcontractor, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and forty (40) hours in any one (1) calendar week, in violation of the provisions of Article 3 (commencing at § 1810), Chapter 1, Part 7, Division 2 of the Labor Code, unless compensation for the workers so employed by Contractor is not less than one and one-half (1-1/2) times the basic rate of pay for all hours worked in excess of eight (8) hours per day.

8.2.4 **COSTS FOR AFTER HOURS INSPECTIONS**

If the work done after hours is required by the Contract Documents to be done outside the Contractor's or the Inspector of Record's regular working hours, the costs of any inspections, if required to be done outside normal working hours, shall be borne by the Owner.

If the Owner allows the Contractor to do work outside regular working hours for the Contractor's own convenience, the costs of any inspections required outside regular working hours, among other remedies, shall be invoiced to the Contractor by the Owner and withheld from progress payments and/or retention. Contractor shall give Owner at least 48 hours notice prior to working outside regular working hours.

If the Contractor elects to perform work outside the Inspector of Record's regular working hours, costs of any inspections required outside regular working hours, among other remedies, may be invoiced to the Contractor by the Owner and withheld from progress payments and/or retention.

8.2.5 **TIME FOR COMMENCEMENT BY SUBCONTRACTORS**

Unless otherwise provided in the Contract Documents, all Subcontractors shall commence their Work within two (2) consecutive business days after notice to them by the Contractor and shall prosecute their Work in accordance with the progress of the Work.

8.3 **PROGRESS AND COMPLETION**

8.3.1 **TIME OF THE ESSENCE**

Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

8.3.2 **NO COMMENCEMENT WITHOUT INSURANCE**

The Contractor shall not knowingly, except by agreement or instruction of the Owner, in writing, commence operations on the Site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor. The date of commencement of the Work shall not be changed by the effective date of such insurance.

8.3.3 **EXPEDITIOUS COMPLETION**

The Contractor shall proceed expeditiously to perform the Work, with adequate forces, labor, materials, equipment, services and management, and shall achieve Completion within the Contract Time.

8.4 **EXTENSIONS OF TIME - LIQUIDATED DAMAGES**

8.4.1 CONDITIONS ALLOWING FOR EXTENSIONS OF TIME TO COMPLETE THE WORK, ONLY (EXCUSABLE DELAY)

If Contractor exercises due diligence, but the critical path schedule of the Work is unavoidably delayed due to acts of God, acts of public enemy, acts of the Government, acts of the Owner or anyone employed by it, acts of another contractor in performance of a contract (other than this Contract) with the Owner, fires, floods, epidemics, quarantine restrictions, labor disputes, unusually severe weather, or delays of subcontractors due to such causes, the Owner shall extend the time to complete the Work if Contractor complies with Section 4.5 and Article 7. Owner shall take into consideration other relevant factors such as concurrent delays. Contractor has the burden of proving that any delay was excusable.

8.4.2 COMPENSABLE DELAY (TIME AND MONEY)

Compensable delays are those excusable delays for which Contractor is also entitled to money. To be compensable, an excusable delay must be one for which the Owner is responsible, where the delay was unreasonable under the circumstances involved, and where the delay was not within the contemplation of the parties; *however*, Contractor shall not be entitled to monetary compensation when (a) Contractor could have reasonably anticipated the delay and avoided or minimized the cost impacts of it, (b) there was a concurrent delay which does not qualify for monetary compensation under this paragraph, (c) the cause of the delay was reasonably unforeseen by the City or the delay was caused by factors beyond the control of the Owner, including but not limited to a delay under Section 2.2.8 above or a delay caused by a utility company's failure to perform despite Owner's reasonable arrangements for such performance; or (d) any other defense available to Owner under law or equity applies. Contractor has the burden of proving that any delay was excusable and compensable, including an analysis that establishes non-concurrency.

8.4.3 NOTICE BY CONTRACTOR REQUIRED; PROCEDURES FOR DEMANDING ADDITIONAL TIME OR MONEY

For notice and other required procedures related to requests by Contractor for additional time or money related to delay, Contractor shall comply with the Contract Documents, including but not limited to Sections 3.18 and 4.5, and Article 7, above.

8.4.4 **EARLY COMPLETION**

Regardless of the cause therefore, the Contractor may not maintain any Claim or cause of action against the Owner for damages incurred as a result of its failure or inability to complete its work on the Project in a shorter period than established in the Contract Documents, the parties stipulating that the period set forth in the Contract Documents is a reasonable time within which to perform the Work on the Project.

8.4.5 LIQUIDATED DAMAGES

Failure to Complete the Project within the time and in the manner provided for by the Contract Documents (i.e., by the Completion deadline) shall subject the Contractor to liquidated damages. For purposes of liquidated damages, the concept of "substantial completion" shall not constitute Completion and is not part of this agreement. The actual occurrence of damages and the actual amount of the damages which the Owner would suffer if the Project were not completed by the Completion deadline are dependent upon many circumstances and conditions which could prevail in various combinations and, from the nature of the case, it is impracticable and extremely difficult to fix the actual damages. Damages which the Owner would suffer in the event of delay include, but are not limited to, loss of the use of the Project, disruption of activities, costs of administration, supervision and the incalculable inconvenience and loss suffered by the public.

Accordingly, the parties agree that the amount set forth in the Agreement shall be presumed to be the amount of damages which the Owner shall directly incur upon failure of the Contractor to Complete the Project by the Completion deadline, during or as a result of each calendar day by which Completion of the Project is delayed beyond the Completion deadline as adjusted by Change Orders.

If the Contractor fails to Complete the Project by the Completion deadline as adjusted by Change Orders, and liquidated damages therefore accrue, the Owner, in addition to all other remedies provided by law, shall have the right to assess liquidated damages at any time, and to withhold liquidated damages (and any interest thereon) at any time from any and all retention or progress payments, which would otherwise be or become due the Contractor. In addition, if it is reasonably apparent to the Owner before the Completion deadline (as adjusted by Change Orders) that the Contractor cannot or will not complete the Work before that Completion deadline, Owner may assess and withhold, from retention or progress payments, the estimated amount of liquidated damages that will accrue in the future. If the retained percentage or withheld progress payments are not sufficient to discharge all liabilities of the Contractor incurred under this Article, the Contractor and its sureties shall continue to remain liable to the Owner until all such liabilities are satisfied in full.

If the Owner accepts any work or makes any payment under this Agreement after a default by reason of delays, the payment or payments shall in no respect constitute a waiver or modification of any Agreement provisions regarding time of Completion and liquidated damages.

8.5 **GOVERNMENT APPROVALS**

Owner shall not be liable for any delays or damages related to the time required to obtain government approvals.

ARTICLE 9

PAYMENTS AND COMPLETION

9.1 **CONTRACT SUM**

The Contract Sum is stated in the Agreement, later adjusted by Change Orders and Construction Change Directives, and is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

9.2 COST BREAKDOWN

9.2.1 **Required Information**

On forms approved by the Owner, the Contractor shall furnish the following:

- A. Within ten (10) days of the mailing, faxing or delivering of the Notice of Award of the Contract, a detailed breakdown of the Contract Sum (Schedule of Values) for each Project or Site. Each item in the schedule of values shall include its proper share of the overhead and profit.
- B. Within ten (10) days of the mailing, faxing or delivering of the Notice of Award of the Contract, a schedule of estimated monthly payment requests (cash flow) due the Contractor showing the values and construction time of the various portions of the Work to be performed by it and by its Subcontractors or material and equipment suppliers containing such supporting evidence as to its correctness as the Owner may require;
- C. Five (5) days prior to the submission of a pay request, an itemized breakdown of work done for the purpose of requesting partial payments;
- D. Within ten (10) days of the mailing, faxing or delivering of the Notice of Award of the Contract, the name, address, telephone number, fax number, license number, and classification of all of its Subcontractors and of all other parties furnishing labor, material, or equipment for its Contract, along with the amount of each such subcontract or the price of such labor, material, and equipment needed for its entire portion of the Work.

9.2.2 **OWNER ACCEPTANCE REQUIRED**

The Owner shall review all submissions received pursuant to paragraph 9.2.1 in a timely manner. All submissions must be accepted by the Owner before becoming the basis of any payment.

9.3 **APPLICATIONS FOR PAYMENT**

9.3.1 **Procedure**

On or before the fifth (5th) day of each calendar month during the progress of the portion of the Work for which payment is being requested, the Contractor shall submit to the Architect, unless there is a construction manager for the Project or the Owner directs otherwise, an itemized Application for Payment for operations completed in accordance with the Schedule of Values through the end of the previous calendar month. Such application shall be notarized, if required, and supported by the following or such portion thereof as the applicable entity requires:

- A. The amount paid to the date of the Application to the Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;
- B. The amount being requested with the Application for Payment by the Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;
- C. The balance that will be due to each of such entities after said payment is made;
- D. A certification that the Record Drawings and Annotated Specifications are current;
- E. The Owner approved additions to and subtractions from the Contract Sum and Time;
- F. A summary of the retentions (each Application shall provide for retention, as set out in Article 9.6);
- G. Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the Owner may require from time to time;
- H. The percentage of completion of the Contractor's Work by line item;
- I. A statement showing all payments made by the Contractor for labor and materials on account of the Work covered in the preceding Application for Payment. Such applications shall not include requests for payment of amounts the Contractor does not intend to pay to subcontractors or others because of a dispute or other reason; and
- J. Contractor's monthly reports, daily reports, and monthly schedule updates for all months of Work prior to the Application for Payment that Contractor has not previously submitted.

9.3.2 PURCHASE OF MATERIALS AND EQUIPMENT

As the Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from Owner, to assure that there will be no delays, payment by the Owner for stored material shall be made only in unusual circumstances where the Architect specifically recommends, and Owner specifically approves the payment in writing. If payments are to be made on account of materials and equipment not incorporated in the Work, but delivered and suitably stored at the Site or at some other location agreed upon in writing by the Owner, the payments shall be conditioned upon submission by the Contractor, Subcontractor, or vendor of bills of sale and such other documents satisfactory to the Owner to establish the Owner's title to such materials or equipment free of all liens and encumbrances, and otherwise protect the Owner's interest, including, without limitation, provision of applicable insurance and transportation to the Site. All stored items shall be inventoried, specified by identification numbers (if applicable), released to the Owner by sureties of the Contractor and the Subcontractor and, if stored off-Site, stored only in a bonded warehouse.

9.3.3 WARRANTY OF TITLE

The Contractor warrants that title to all work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances in favor of the Contractor, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the work. Transfer of title to work does not constitute a waiver by Owner of any defects in the work.

9.4 **REVIEW OF PROGRESS PAYMENT**

9.4.1 **OWNER ACCEPTANCE**

The Owner will, within seven (7) days after receipt of the Contractor's Application for Payment, either accept such payment or notify the Contractor in writing of the Owner's reasons for withholding acceptance in whole or in part as provided in paragraph 9.5.1.

9.4.2 **OWNER'S REVIEW**

The review of the Contractor's Application for Payment by the Owner will be based, at least in part, on the Owner's observations at the Site and the data comprising the Application for Payment that the Work has progressed to the point indicated. The review is also subject to an evaluation of the Work for conformance with the Contract Documents, to results of subsequent tests and inspections, to minor deviations from the Contract Documents correctable prior to completion, and to specific qualifications expressed by the Owner. The Owner may reject the Application for Payment if it is not complete under section 9.3. The issuance of a Certificate for

Payment will constitute a representation that the Contractor is entitled to payment in the amount certified, subject to any specific qualifications Owner expresses in the Certificate for Payment. However, Contractor's entitlement to payment may be affected by subsequent evaluations of the Work for conformance with the Contract Documents, test and inspections and discovery of minor deviations from the Contract Documents correctable prior to completion. The issuance of a Certificate for Payment will not be a waiver by the Owner of any defects in the work covered by the Application for Payment, nor will it be a representation that the Owner has:

- A. Made exhaustive or continuous on-Site inspections to check the quality or quantity of the Work;
- B. Reviewed construction means, methods, techniques, sequences, or procedures;
- C. Reviewed copies of requisitions received from Subcontractors, material and equipment suppliers, and other data requested by the Owner to substantiate the Contractor's right to payment; or
- D. Made an examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

9.5 DECISIONS TO WITHHOLD PAYMENT

9.5.1 **Reasons to Withhold Payment**

The Owner may withhold from a progress payment, in whole or in part, to such extent as may be necessary to protect the Owner due to any of the following:

- A. Defective or incomplete Work not remedied;
- Stop Payment Notices. For any stop payment notice, the Owner shall withhold B. the amount stated in the stop payment notice, the stop notice claimant's anticipated interest and court costs and an amount to provide for the public entity's reasonable cost of any litigation pursuant to the stop payment notice. For any stop payment notice action the parties resolve before judgment is entered, Owner has the right to permanently withhold for any reasonable cost of litigation for that stop payment notice, even if it exceeds the amount originally withheld by Owner for the estimated reasonable cost of litigation. However, if (1) the Contractor at its sole expense provides a bond or other security satisfactory to the Owner in the amount of at least one hundred twenty-five percent (125%) of the claim, in a form satisfactory to the Owner, which protects the Owner against such claim, and (2) the Owner chooses to accept the bond, then Owner would release the stop payment notice funds withheld to the Contractor, except that Owner may permanently withhold for any reasonable cost of litigation. Any stop payment notice release bond shall be executed by a California admitted, fiscally solvent surety, completely unaffiliated with and separate from the surety on the payment and performance bonds, that does not have any assets pooled with the payment and performance bond sureties.

- C. Liquidated damages against the Contractor, whether already accrued or estimated to accrue in the future;
- D. Reasonable doubt that the Work can be completed for the unpaid balance of any Contract Sum or by the completion date;
- E. Damage to the property or work of the Owner, another contractor, or subcontractor;
- F. Unsatisfactory prosecution of the Work by the Contractor;
- G. Failure to store and properly secure materials;
- H. Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, monthly progress schedules, shop drawings, submittal schedules, schedule of values, product data and samples, proposed product lists, executed change orders, and verified reports;
- I. Failure of the Contractor to maintain record drawings;
- J. Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment;
- K. Unauthorized deviations from the Contract Documents;
- L. Failure of the Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates;
- M. Subsequently discovered evidence or observations nullifying the whole or part of a previously issued Certificate for Payment;
- N. Failure by Contractor to pay Subcontractors or material suppliers as required by Contract or law, which includes but is not limited to Contractor's failure to pay prevailing wage and any assessment of statutory penalties;
- O. Overpayment to Contractor on a previous payment;
- P. Credits owed to Owner for reduced scope of work or work that Contractor will not perform;
- Q. The estimated cost of performing work pursuant to Section 2.4;
- R. Actual damages related to false claims by Contractor;
- S. Breach of any provision of the Contract Documents;

- T. Owner's potential or actual loss, liability or damages caused by the Contractor; and
- U. As permitted by other provisions in the Contract or as otherwise allowed by law, including statutory penalties Owner or other entities assessed against Contractor. (See e.g., Labor Code section 1813 (working hours) or Public Contract Code section 4110 (subcontractor listings and substitutions))

Owner may, but is not required to, provide to Contractor with the progress payment written notice of the items for which Owner is withholding amounts from the payment. To claim wrongful withholding by the Owner, or if Contractor otherwise disputes any amount being withheld, Contractor must submit an inquiry in writing to Owner within thirty (30) days of receipt of the notice, and Owner shall respond within fifteen (15) days of receipt of the inquiry. If any disputed issues remain unresolved after Owner's response, Contractor shall timely submit a Claim pursuant to Section 4.5.

For any withhold amount based on an estimate where the actual amount later becomes known and certain, no later than the final accounting for the Project the Owner will release any amount withheld over that certain and known amount. If the certain and known amount exceeds the amount previously withheld, Owner may withhold additional amounts from Contractor to cover the excess amount. If available funds are not sufficient, Contractor shall pay Owner the difference.

9.5.2 **PAYMENT AFTER CURE**

When Contractor removes or cures the grounds for withholding amounts, payment shall be made for amounts withheld because of them. No interest shall be paid on any retainage or amounts withheld due to the failure of the Contractor to perform in accordance with the terms and conditions of the Contract Documents.

9.5.3 **OVERPAYMENT AND/OR FAILURE TO WITHHOLD**

Neither Owner's overpayment to Contractor, nor Owner's failure to withhold an amount from payment that Owner had the right to withhold, shall constitute a waiver by Owner of its rights to withhold those amounts from future payments to Contractor or to otherwise pursue recovery of those amounts from Contractor.

9.6 **PROGRESS PAYMENTS**

9.6.1 **PAYMENTS TO CONTRACTOR**

Unless otherwise stated in the Contract Documents, within thirty (30) days after receipt of an undisputed and properly submitted Application for Payment, Contractor shall be paid a sum equal to ninety-five percent (95%) of the undisputed value of the Work performed up to the last day of the previous month, less the aggregate of previous payments; and Owner shall retain the other five percent (5%) of the undisputed value of the Work. The value of the Work completed

shall be an estimate only, no inaccuracy or error in said estimate shall operate to release the Contractor, or any bondsman, from damages arising from such Work or from enforcing each and every provision of this Contract, and the Owner shall have the right subsequently to correct any error made in any estimate for payment. Contractor shall base an Application for Payment only on the original Contract Sum plus any fully executed and Board-approved Change Orders. Contractor shall not include Notices of Potential Claims, CORs, Claims or disputed amounts.

The Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for work performed, so long as any lawful or proper direction given by the Owner concerning the Work, or any portion thereof, remains uncomplied with. Payment shall not be a waiver of any such direction.

9.6.2 **PAYMENTS TO SUBCONTRACTORS**

No later than ten (10) days after receipt of payment from Owner, pursuant to Business and Professions Code section 7108.5, the Contractor shall pay to each Subcontractor, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

9.6.3 **PERCENTAGE OF COMPLETION OR PAYMENT INFORMATION**

The Owner will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor, and action taken thereon by the Owner, on account of portions of the Work done by such Subcontractor.

9.6.4 **NO OBLIGATION OF OWNER FOR SUBCONTRACTOR PAYMENT**

The Owner shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

9.6.5 **PAYMENT TO SUPPLIERS**

Payment to material or equipment suppliers shall be treated in a manner similar to that provided in paragraphs 9.6.2, 9.6.3 and 9.6.4.

9.6.6 PAYMENT NOT CONSTITUTING APPROVAL OR ACCEPTANCE

An accepted Application for Payment, issuance of a Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance or approval of any portion of the Work, especially any Work not in accordance with the Contract Documents.

9.6.7 **JOINT CHECKS**

Owner shall have the right, if necessary for the protection of the Owner, to issue joint checks made payable to the Contractor and Subcontractors and/or material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. However, Owner has no duty to issue joint checks. In no event shall any joint check payment be construed to create any contract between the Owner and a Subcontractor of any tier, any obligation from the Owner to such Subcontractor, or rights in such Subcontractor against the Owner.

9.7 **COMPLETION OF THE WORK**

9.7.1 **CLOSE-OUT PROCEDURES**

When the Contractor considers that the Work is complete and submits a written notice to Owner requesting an inspection of the Work, the Owner shall review the Work and prepare and submit to the Contractor a comprehensive list of items to be completed or corrected (the "Punch List"). The Contractor and/or its Subcontractors shall proceed promptly to complete and correct items on the Punch List. Failure to include an item on the Punch List does not alter the responsibility of the Contractor to complete all Work (including the omitted item) in accordance with the Contract Documents, and to complete or correct the work so long as the statute of limitations (or repose) has not run.

When the Contractor believes the Punch List work is complete and in accordance with the Contract Documents, it shall then submit a request for an additional inspection by the Owner to determine completion. Owner shall again inspect the Work and inform the Contractor of any items that are incomplete or incorrect. Contractor shall promptly complete or correct items until no items remain.

After the Work, including all Punch List work, is inspected and informally deemed by the Owner to be complete, the Owner's governing body may formally accept the Work as complete at a meeting of the governing body. Warranties required by the Contract Documents shall commence on the date of Contractor's completion of the Work.

9.7.2 COSTS OF MULTIPLE INSPECTIONS

More than two (2) requests by Contractor to make inspections to confirm completion as required under paragraph 9.7.1 shall be considered an additional service of Owner, and all subsequent costs will be invoiced to Contractor and withheld from remaining payments.

9.8 **PARTIAL OCCUPANCY OR USE**

The Owner may occupy or use any completed, or partially completed, portion of the Work at any stage prior to acceptance, or prior to completion if there is no formal acceptance. Occupancy or use of any portion of the Work, or the whole Work, shall not constitute approval or acceptance of it, nor shall such occupancy or use relieve Contractor of any of its obligations under the Contract Documents regarding that portion of, or the whole, Work.

The Owner and the Contractor shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents. When the Contractor considers a portion complete, the Contractor may request an inspection of that portion and preparation of a Punch List by the Owner for that portion, as set forth for the entire Work under paragraph 9.7.1; however, such inspection and Punch List shall not act as any form of approval or acceptance of that portion of the Work, or of any Work not complying with the requirements of the Contract, and that portion shall be subject to subsequent inspections and Punch Lists.

Immediately prior to such partial occupancy or use, the Owner, the Architect and the Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

9.9 FINAL PROGRESS PAYMENT AND RELEASE OF RETENTION

9.9.1 FINAL APPLICATION FOR PROGRESS PAYMENT

When, pursuant to Section 9.7.1, the Owner finds all of the Work is completed in accordance with the Contract Documents, it shall so notify Contractor, who shall then submit to the Owner its final Application for Payment.

Upon receipt and approval of such final Application for Payment, the Owner shall issue a final Certificate of Payment, based on its knowledge, information, and belief, and on the basis of its observations, inspections, and all other data accumulated or received by the Owner in connection with the Work, that such Work has been completed in accordance with the Contract Documents.

9.9.2 **PROCEDURES FOR APPLICATION FOR FINAL PROGRESS PAYMENT**

The Application for Final Progress Payment pursuant to Section 9.9.1 shall be accompanied by the same details as set forth in paragraph 9.3, and in addition, the following conditions must be fulfilled:

- A. The Work shall be complete, and the Contractor shall have made, or caused to have been made, all corrections to the Work which are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of Owner required under the Contract.
- B. Each Subcontractor shall have delivered to the Contractor all written guarantees, warranties, applications, and bonds required by the Contract Documents for its portion of the Work, and Contractor delivered them to the Owner.
- C. The Contractor shall deliver to the Owner (i) reproducible final Record Drawings and Annotated Specifications showing the Contractor's Work "as built," with the Contractor's certification of the accuracy of the Record Drawings and Annotated

Specifications, (ii) all warranties and guarantees, (iii) operation and maintenance instructions, manuals and materials for equipment and apparatus, and (iv) all other documents required by the Contract Documents.

D. Contractor shall provide extensive assistance in the utilization of any equipment or system such as initial start-up or testing, adjusting and balancing, preparation of operation and maintenance manuals and training personnel for operation and maintenance.

Acceptance of Final Progress Payment shall constitute a complete waiver of Claims except for those previously identified in writing and identified by that payee as unsettled at the time of Final Progress Payment.

9.9.3 **Release of Retainage**

Owner may withhold from release or payment of retainage (or "retention") up to 150% of disputed amounts listed in Section 9.5. If retainage is held in an escrow account pursuant to an escrow agreement under Public Contract Code section 22300 (see Section 9.10) and Owner withholds from release of retainage based on a breach of the Contract, or other default, by Contractor, Owner may withdraw the withheld retainage from the escrow account. Owner shall release the undisputed retainage within sixty (60) days after completion of the Work. For this purpose, "completion" is defined in Public Contract Code section 7107(c). No interest shall be paid on any retainage, or on any amounts withheld, except as provided to the contrary in any Escrow Agreement and General Conditions between the Owner and the Contractor under Public Contract Code section 22300.

9.10 SUBSTITUTION OF SECURITIES

In accordance with section 22300 of the Public Contract Code, the Owner will permit the substitution of securities for any retention monies withheld by the Owner to ensure performance under the Contract. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the Owner, or with a state or federally chartered bank as the escrow agent, who shall then pay such retention monies to the Contractor. Upon completion of the Contract, the securities shall be returned to the Contractor if Owner has no basis to withhold under the Contract Documents.

Securities eligible for investment under this section shall include those listed in Government Code section 16430, bank or savings and loan certificates of deposit, interest-bearing, demand-deposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the Owner.

The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon.

Any escrow agreement entered by Owner and Contractor pursuant to Public Contract Code section 22300, shall be substantially similar to the form set forth in Public Contract Code section 22300.

ARTICLE 10

PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 CONTRACTOR RESPONSIBILITY

The Contractor shall have responsibility for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract. Each Contractor shall designate a responsible member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs. Contractor will ensure that his employees and Subcontractors cooperate and coordinate safety matters with any other contractors to form a joint safety effort.

10.1.2 SUBCONTRACTOR RESPONSIBILITY

Subcontractors have the responsibility for participating in, and enforcing, the safety and loss prevention programs established by the Contractor for the Project, which will cover all Work performed by the Contractor and its Subcontractors. Each Subcontractor shall designate a responsible member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs.

10.1.3 COOPERATION

All Subcontractors and material or equipment suppliers, shall cooperate fully with Contractor, the Owner, and all insurance carriers and loss prevention engineers.

10.1.4 ACCIDENT REPORTS

Subcontractors shall promptly report in writing to the Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or off the Site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger. Contractor shall thereafter promptly report the facts in writing to the Owner giving full details of the accident.

10.1.5 FIRST-AID SUPPLIES AT SITE

The Contractor will provide and maintain at the Site first-aid supplies for minor injuries.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor

The Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

- A. Employees on the Work and other persons who may be affected thereby;
- B. The Work, material, and equipment to be incorporated therein, whether in storage on or off the Site, under the care, custody, or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
- C. Other property at the Site or adjacent thereto such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

10.2.2 CONTRACTOR NOTICES

The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

10.2.3 SAFETY BARRIERS AND SAFEGUARDS

The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

10.2.4 USE OR STORAGE OF HAZARDOUS MATERIAL

When use or storage of explosives, other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall notify the Owner any time that explosives or hazardous materials are expected to be stored on Site. Location of storage shall be coordinated with the Owner and local fire authorities.

10.2.5 Fingerprinting

At its own expense, Contractor shall comply with all fingerprinting requirements under law and Contract, including but not limited to the requirements of Education Code section 45125.2 and the Independent Contractor Student Contact Form which is a part of the Contract. Contractor shall hold harmless, defend and indemnify the Owner under section 3.16, for any costs, including attorneys' fees, Owner incurs from Contractor's failure to comply.

10.3 **PROTECTION OF WORK AND PROPERTY**

10.3.1 **PROTECTION OF WORK**

The Contractor and Subcontractors shall continuously protect the Work, the Owner's property, and the property of others, from damage, injury, or loss until formal acceptance of the Work or completion of the Work if there is no formal acceptance of the Work. The Contractor and Subcontractors shall make good any such damage, injury, or loss, except such as may be solely due to, or caused by, agents or employees of the Owner.

10.3.2 PROTECTION FOR ELEMENTS

The Contractor will remove all mud, water, or other elements as may be required for the proper protection and prosecution of its Work. The Contractor shall at all times provide heat, coverings, and enclosures necessary to maintain adequate protection against weather so as to preserve the Work, materials, equipment, apparatus, and fixtures free from injury or damage.

10.3.3 SHORING AND STRUCTURAL LOADING

The Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the Site in excess of safe limits, or loading such as to result in damage to the structural, architectural, mechanical, electrical, or other components of the Work. The design of all temporary construction equipment and appliances used in construction of the Work and not a permanent part thereof, including, without limitation, hoisting equipment, cribbing, shoring, and temporary bracing of structural steel, is the sole responsibility of the Contractor. All such items shall conform to the requirements of governing codes and all laws, ordinances, rules, regulations, and orders of all authorities having jurisdiction. The Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural steel work, to prevent possible wind damage during construction of the Work. The installation of such bracing or shoring shall not damage or cause damage to the Work in place or the Work installed by others. Any damage which does occur shall be promptly repaired by the Contractor at no cost to the Owner.

10.3.4 CONFORMANCE WITHIN ESTABLISHED LIMITS

The Contractor and Subcontractors shall confine their construction equipment, the storage of materials, and the operations of workers to the limits indicated by laws, ordinances, permits, and the limits established by the Owner, and shall not unreasonably encumber the premises with construction equipment or materials.

10.3.5 SUBCONTRACTOR ENFORCEMENT OF RULES

Subcontractors shall enforce the Owner's and the Contractor's instructions, laws, and regulations regarding signs, advertisements, fires, smoking, the presence of liquor, and the presence of firearms by any person at the Site.

10.3.6 SITE ACCESS

The Contractor and the Subcontractors shall use only those ingress and egress routes designated by the Owner, observe the boundaries of the Site designated by the Owner, park only in those areas designated by the Owner, which areas may be on or off the Site, and comply with any parking control program established by the Owner such as furnishing license plate information and placing identifying stickers on vehicles.

10.3.7 **PROTECTION OF MATERIALS**

The Contractor and the Subcontractors shall receive, count, inspect for damage, record, store, and protect construction materials for the Work and Subcontractors shall promptly send to the Contractor evidence of receipt of such materials, indicating thereon any shortage, change, or damage (failure to so note shall constitute acceptance by the Subcontractor of financial responsibility for any shortage).

10.4 EMERGENCIES

10.4.1 Emergency Action

In an emergency affecting the safety of persons or property, the Contractor shall take any action necessary, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional money or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Section 4.5 and Article 7.

10.4.2 ACCIDENT REPORTS

The Contractor shall promptly report in writing to the Owner all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported immediately by telephone or messenger to the Owner.

10.5 HAZARDOUS MATERIALS

10.5.1 DISCOVERY OF HAZARDOUS MATERIALS

In the event the Contractor encounters or suspects the presence on the Site material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by section 25249.5 of the California Health and Safety Code, which (a) has not been rendered harmless, and (b) the handling or removal of which is not within the scope of the Work, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and the Architect in writing, whether or not such material was generated by the Contractor or the Owner. The Work in the affected area shall not thereafter be resumed, except by written agreement of the Owner and the Contractor, if in fact the material is asbestos, polychlorinated biphenyl (PCB), or other hazardous material, and has not been rendered harmless. The Work in the affected area shall be resumed only in the absence of asbestos,

polychlorinated biphenyl (PCB), or other hazardous material, or when it has been rendered harmless by written agreement of the Owner and the Contractor.

10.5.2 HAZARDOUS MATERIAL WORK LIMITATIONS

In the event that the presence of hazardous materials is suspected or discovered on the Site, the Owner shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. The Contractor shall not be required pursuant to Article 7 to perform without consent any Work in the affected area of the Site relating to asbestos, polychlorinated biphenyl (PCB), or other hazardous material, until any known or suspected hazardous material has been removed, or rendered harmless, or determined to be harmless by Owner, as certified by an independent testing laboratory and/or approved by the appropriate government agency.

10.5.3 INDEMNIFICATION BY OWNER FOR HAZARDOUS MATERIAL NOT CAUSED BY CONTRACTOR

In the event the presence of hazardous materials on the Site is not caused by the Contractor, Owner shall pay for all costs of testing and remediation, if any, and shall compensate Contractor for any additional costs incurred or Project delay in accordance with the applicable provisions of Article 7 herein. Owner shall defend, indemnify and hold harmless the Contractor and its agents, officers, directors and employees from and against any and all claims, damages, losses, costs and expenses incurred in connection with or arising out of, or relating to, the performance of the Work in the area affected by the hazardous material, except to the extent the claims, damages, losses, costs, or expenses were caused by Contractor's active negligence, sole negligence or willful misconduct. By providing this indemnification, District does not waive any immunities.

10.5.4 INDEMNIFICATION BY CONTRACTOR FOR HAZARDOUS MATERIAL CAUSED BY CONTRACTOR

In the event the presence of hazardous materials on the Site is caused by Contractor, Subcontractors, materialmen or suppliers, the Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the Owner for any additional costs incurred as a result of the generation of hazardous material on the Project Site. In addition, the Contractor shall defend, indemnify and hold harmless Owner and its agents, officers, and employees from and against any and all claims, damages, losses, costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Site, except to the extent the claims, damages, losses, costs, or expenses were caused by Owner's active negligence, sole negligence or willful misconduct.

10.5.5 TERMS OF HAZARDOUS MATERIAL PROVISION

The terms of this Hazardous Material provision shall survive the completion of the Work and/or any termination of this Contract.

10.5.6 ARCHEOLOGICAL MATERIALS

In the event the Contractor encounters or reasonably suspects the presence on the Site of archeological materials, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and the Architect in writing. The Work in the affected area shall not thereafter be resumed, except after Contractor's receipt of written notice form the Owner.

ARTICLE 11

INSURANCE AND BONDS

11.1. CONTRACTOR'S LIABILITY INSURANCE

11.1.1 LIABILITY INSURANCE REQUIREMENTS

11.1.1 By the earlier of the deadline set forth in the Instructions to Bidders or the commencement of the Work and within limits acceptable to the Owner, the Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California as admitted carriers with a financial rating of at least A+, Class XII status as rated in the most recent edition of Best's Insurance Reports such commercial general liability insurance per occurrence for bodily injury, personal injury and property damage as set forth in the Agreement and automobile liability insurance per accident for bodily injury and property damage combined single limit as set forth in the Agreement as will protect the Contractor from claims set forth below, which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations are by the Contractor, by a Subcontractor, by Sub-subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- 11.1.1.1 claims for damages because of bodily injury (including emotional distress), sickness, disease, or death of any person other than the Contractor's employees. This coverage shall be provided in a form at least as broad as Insurance Services Office (ISO) Form CG 0001 11188;
- 11.1.1.2 claims for damages arising from personal or advertising injury in a form at least as broad as ISO Form CG 0001 11188;
- 11.1.1.3 claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents; and
- 11.1.1.4 claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the Work; and

- 11.1.1.5 claims involving blanket contractual liability applicable to the Contractor's obligations under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Contractor and the Subcontractors; and
- 11.1.1.6 claims involving Completed Operations, Independent Contractors' coverage, and Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating. (XCU)

If commercial general liability insurance or another insurance form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the project location (with the ISO CG 2501 or insurer's equivalent endorsement provided to the Owner) or the general aggregate limit shall be twice the required occurrence limit.

Any deductible or self-insured retention must be declared to and approved by the Owner. At the option of the Owner, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Owner, its Board of Trustees, members of its Board of Trustees, officers, employees, agents and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

11.1.2 SUBCONTRACTOR INSURANCE REQUIREMENTS

The Contractor shall require its Subcontractors and any Sub-subcontractors to take out and maintain similar public liability insurance and property damage insurance, in a company or companies lawfully authorized to do business in California as admitted carriers with a financial rating of at least A+, Class XII status as rated in the most recent edition of Best's Insurance Reports, in like amounts and scope of coverage.

11.1.3 **Owner's Insurance**

The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance. Optionally, the Owner may purchase and maintain other insurance for self protection against claims which may arise from operations under the Contract. The Contractor shall not be responsible for purchasing and maintaining this optional Owner's liability insurance unless specifically required by the Contract Documents.

11.1.4 Additional Insured Endorsement Requirements

The Contractor shall name, on any policy of insurance, the Owner and the Architect as additional insureds. Subcontractors shall name the Contractor, the Owner and the Architect as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be excess to any policy of insurance required

herein. The amount of the insurer's liability shall not be reduced by the existence of such other insurance.

11.1.5 WORKERS' COMPENSATION INSURANCE

During the term of this Contract, the Contractor shall provide workers' compensation insurance for all of the Contractor's employees engaged in Work under this Contract on or at the site of the Project and, in case any of the Contractor's work is sublet, the Contractor shall require the Subcontractor to provide workers' compensation insurance for all the Subcontractor's employees engaged in Work under the subcontract. Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in Work under this Contract on or at the site of the Project is not protected under the Workers' Compensation laws, the Contractor shall provide or cause a Subcontractor to provide adequate insurance coverage for the protection of those employees not otherwise protected. The Contractor shall file with the Owner certificates of insurance as required under this Article and in compliance with Labor Code section 3700.

If the contractor fails to maintain such insurance, the Owner may take out compensation insurance which the Owner might be liable to pay under the provisions of the Act by reason of an employee of the Contractor being injured or killed, and withhold from progress payments and/or retention the amount of the premium for such insurance.

11.1.6 BUILDER'S RISK/"ALL RISK" INSURANCE

11.1.6.1 **COURSE-OF-CONSTRUCTION INSURANCE REQUIREMENTS.** Unless provided by Owner at Owner's sole discretion, Contractor, during the progress of the Work and until final acceptance of the Work by Owner upon completion of the entire Contract, shall maintain Builder's Risk/Course-of-Construction insurance satisfactory to the Owner, issued on a completed value basis on all insurable Work included under the Contract Documents. This insurance shall insure against all risks, including but not limited to the following perils: vandalism, theft, malicious mischief, fire, sprinkler leakage, civil authority, sonic boom, explosion, collapse, flood, earthquake (for projects not solely funded through revenue bonds, limited to earthquakes equivalent to or under 3.5 on the Richter Scale in magnitude), wind, hail, lightning, smoke, riot or civil commotion, debris removal (including demolition) and reasonable compensation for the Architect's services and expenses required as a result of such insured loss. This insurance shall provide coverage in an amount not less than the full cost to repair, replace or reconstruct the Work. Such insurance shall include the Owner, the Architect, and any other person or entity with an insurable interest in the Work as an additional named insured.

The Contractor shall submit to the Owner for its approval all items deemed to be uninsurable under the Builder's Risk/Course-of Construction insurance. The risk of the damage to the Work due to the perils covered by the Builder's Risk/Course-of-Construction insurance, as well as any other hazard which might result in damage to the Work, is that of the Contractor and the surety, and no claims for such loss or damage shall be recognized by the Owner, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

11.1.7 CONSENT OF INSURER FOR PARTIAL OCCUPANCY OR USE

Partial occupancy or use in accordance with the Contract Documents shall not commence until the insurance company providing property insurance has consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company and shall, without mutual consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of the insurance.

11.1.8 FIRE INSURANCE

Before the commencement of the Work, the Contractor shall procure, maintain, and cause to be maintained at the Contractor's expense, fire insurance on all Work included under the Contract Documents, insuring the full replacement value of such Work as well as the cost of any removal and demolition necessary to replace or repair all Work damaged by fire. The amount of fire insurance shall be subject to approval by the Owner and shall be sufficient to protect the Project against loss or damage in full until the Work is accepted by the Owner. Should the Work being constructed be damaged by fire or other causes during construction, it shall be replaced in accordance with the requirements of the drawings and specifications without additional expense to the Owner.

11.1.9 **Other Insurance**

The Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations.

11.1.10 **PROOF OF CARRIAGE OF INSURANCE**

The Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract until all required insurance, certificates, and an Additional Insured Endorsement and Declarations Page have been obtained and delivered in duplicate to the Owner for approval subject to the following requirements:

(a) Certificates and insurance policies shall include the following clause:

This policy shall not be non-renewed, canceled, or reduced in required limits of liability or amounts of insurance until notice has been mailed to the Owner. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice.

- (b) Certificates of insurance shall state in particular those insured, the extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices.
- (c) Certificates of insurance shall clearly state that the Owner, the Architect and the Construction Manager are named as additional insureds under the policy

described and that such insurance policy shall be primary to any insurance or selfinsurance maintained by Owner and any other insurance carried by the Owner with respect to the matters covered by such policy shall be excess and noncontributing.

(d) The Contractor and its Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the Owner.

11.1.11 COMPLIANCE

In the event of the failure of any contractor to furnish and maintain any insurance required by this Article, the Contractor shall be in default under the Contract. Compliance by Contractor with the requirement to carry insurance and furnish certificates, policies, Additional Insured Endorsement and Declarations Page evidencing the same shall not relieve the Contractor from liability assumed under any provision of the Contract Documents, including, without limitation, the obligation to defend and indemnify the Owner and the Architect.

11.2 PERFORMANCE AND PAYMENT BONDS

11.2.1 BOND REQUIREMENTS

Unless otherwise specified in the Contract Documents, prior to commencing any portion of the Work, the Contractor shall apply for and furnish Owner separate payment and performance bonds for its portion of the Work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. All bonds shall be provided by a corporate surety authorized and admitted to transact business in California. All bonds shall be submitted on the Owner's approved form.

To the extent, if any, that the Contract Sum is increased in accordance with the Contract Documents, the Contractor shall cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the Owner. To the extent available, the bonds shall further provide that no change or alteration of the Contract Documents (including, without limitation, an increase in the Contract Sum, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor will release the surety. If the Contractor fails to furnish the required bond, the Owner may terminate the Contract for cause.

11.2.2 SURETY QUALIFICATION

Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure section 995.120 shall be accepted. The surety insurers must, unless otherwise agreed to by Owner in writing, at the time of issuance of the bonds, have a rating not lower than "A-" as rated by A.M. Best Company, Inc. or other independent rating companies. Owner reserves the right to approve or reject the surety insurers selected by Contractor and to require Contractor to obtain bonds from surety insurers satisfactory to the Owner.

ARTICLE 12

UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK

12.1.1 UNCOVERING WORK FOR REQUIRED INSPECTIONS

If a portion of the Work is covered contrary to the Owner's request or to requirements specifically expressed in the Contract Documents, Contractor must, if required in writing by the Owner, uncover it for the Owner's observation and replace the removed work at the Contractor's expense without change in the Contract Sum or Time.

12.1.2 COSTS FOR INSPECTIONS NOT REQUIRED

If a portion of the Work has been covered which the Owner has not specifically requested to observe prior to its being covered, the Owner may request to see such work, and it shall be uncovered by the Contractor. If such work is in accordance with the Contract Documents, costs of uncover and replacement shall, by appropriate Change Order, be paid by the Owner. If such work is not in accordance with Contract Documents, the Contractor shall pay such costs, unless the condition was caused by the Owner or a separate contractor, in which event the Owner shall be responsible for payment of such costs to the Contractor.

12.2 CORRECTION OF WORK; WARRANTY

12.2.1 CORRECTION OF REJECTED WORK

The Contractor shall promptly correct the work rejected by the Owner for failing to conform to the requirements of the Contract Documents, until the statutes of limitation (or repose) and all warranties have run, as applicable, and whether or not fabricated, installed or completed. The Contractor shall bear costs of correcting the rejected work, including additional testing, inspections, and compensation for the Owner's expenses and costs incurred.

12.2.2 REMOVAL OF NONCONFORMING WORK

The Contractor shall remove from the Site portions of the Work which are not in accordance with the requirements of the Contract Documents and are not corrected by the Contractor or accepted or approved by the Owner.

12.2.3 OWNER'S RIGHTS IF CONTRACTOR FAILS TO CORRECT

If the Contractor fails to correct nonconforming work within a reasonable time, the Owner may correct it in accordance with Section 2.4. As part of Owner's correction of the work, the Owner may remove any portion of the nonconforming Work and store any salvageable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within ten (10) days after written notice, the Owner may upon ten (10) additional days written notice sell such material or equipment at auction or at private sale and shall account for

the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Architect's and other professionals and representatives' services and expenses, made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, the Contractor shall be invoiced for the deficiency or Owner may withhold such costs from payment pursuant to Section 9.5. If progress payments or retention then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

12.2.4 COST OF CORRECTING THE WORK

The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or separate contractors, whether completed or partially completed, caused by the Contractor's correction or removal of the nonconforming work.

12.2.5 WARRANTY CORRECTIONS (INCLUDES REPLACEMENT)

Pursuant to the warranty in Section 3.5, if within one (1) year after the completion of the Work or within a longer time period for an applicable special warranty or guarantee required by the Contract Documents, any of the Work does not comply with the Contract Documents, the Contractor shall correct it after receipt of Owner's written notice to do so, unless the Owner has previously waived in writing such right to demand correction. Contractor shall correct the Work promptly, and passage of the applicable warranty period shall not release Contractor from its obligation to correct the Work if Owner provided the written notice within the applicable warranty period. Contractor's obligation to correct the warranty item continues until the correction is made. After the correction is made to Owner's satisfaction, a new warranty period of the same length as the original warranty period shall run on the corrected work. The obligations under this paragraph 12.2.5 shall survive acceptance of the Work under the Contract and termination of the Contract.

12.2.6 NO TIME LIMITATION

Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the time period of one (1) year as described in Section 12.2.5 relates only to the specific warranty obligation of the Contractor to correct the Work after the date of commencement of warranties under Sections 3.5 and 9.7.1, and has, for example, no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, or to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

12.3 NONCONFORMING WORK AND WITHHOLDING THE VALUE OF IT

If it is found at any time before completion of the Work that the Contractor has varied from the Contract Documents in materials, quality, form, finish, or in the amount or value of the materials

or labor used, the Owner may, in addition to other remedies in the Contract Documents or under law and as allowed by law, accept the improper work. The Owner may withhold from any amount due or to become due Contractor that sum of money equivalent to the difference in value between the Work performed and that called for by the Drawings and Specifications. The Owner shall determine such difference in value. No structural related work shall be accepted that is not in conformance with the Contract Documents.

ARTICLE 13

MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located.

13.2 SUCCESSORS AND ASSIGNS

The Owner and the Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole or in part without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

13.3 WRITTEN NOTICE

In the absence of specific notice requirements in the Contract Documents, written notice shall be deemed to have been duly served if delivered in person to the individual, member of the firm or entity, or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified or overnight mail to the last business address known to the party giving notice. Owner shall, at Contractor's cost, timely notify Contractor of Owner's receipt of any third party claims relating to the Contract pursuant to Public Contract Code section 9201.

13.4 **RIGHTS AND REMEDIES**

13.4.1 DUTIES AND OBLIGATIONS CUMULATIVE

Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

13.4.2 NO WAIVER

No action or failure to act by the Owner, Inspector of Record, Architect or any construction manager shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed to in a written amendment to the Contract.

13.5 **TESTS AND INSPECTIONS**

13.5.1 COMPLIANCE

Tests, inspections, and approvals of portions of the Work required by the Contract Documents will comply with Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

13.5.2 INDEPENDENT TESTING LABORATORY

The Owner will select and pay an independent testing laboratory to conduct all tests and inspections, including shipping or transportation costs or expenses (mileage and hours). Selection of the materials required to be tested shall be made by the laboratory or the Owner's representative and not by the Contractor. However, if Contractor requests that the Owner use a different testing laboratory and Owner chooses to approve such request, Contractor shall obtain prior approval. Owner will pay all costs for testing, contractor may not pay any testing expenses. Owner may invoice such costs or expenses to the Contractor or withhold such costs or expenses from progress payments and/or retention.

13.5.3 Advance Notice to Inspector of Record

The Contractor shall notify the Inspector of Record a sufficient time in advance of its readiness for required observation or inspection so that the Inspector of Record may arrange for same. The Contractor shall notify the Inspector of Record a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Inspector of Record may arrange for the testing of the material at the source of supply.

13.5.4 TESTING OFF-SITE

Any material shipped by the Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector of Record that such testing and inspection will not be required, shall not be incorporated in the Work.

13.5.5 ADDITIONAL TESTING OR INSPECTION

If the Inspector of Record, the Architect, the Owner, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under section 13.5.1, the Inspector of Record will, upon written authorization from the Owner, make arrangements for such additional testing, inspection, or approval. The Owner shall bear such costs except as provided in section 13.5.6.

13.5.6 COSTS FOR RETESTING

If such procedures for testing, inspection, or approval under sections 13.5.1, 13.5.2 and 13.5.5 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's services and expenses. Any such costs shall be paid by the Owner, invoiced to the Contractor, and, among other remedies, can be withheld from progress payments and/or retention.

13.5.7 COSTS FOR PREMATURE TEST

In the event the Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Contractor shall be invoiced by the Owner for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Architect's fees and expenses, and the amount of the invoice can among other remedies, be withheld from progress payments and/or retention.

13.5.8 Tests or Inspections Not to Delay Work

Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

13.6 [INTENTIONALLY LEFT BLANK]

13.7 TRENCH EXCAVATION

13.7.1 TRENCHES GREATER THAN FIVE FEET

Pursuant to Labor Code section 6705, if the Contract Sum exceeds \$25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall, in advance of excavation, submit to the Owner or a registered civil or structural engineer employed by the Owner a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

13.7.2 EXCAVATION SAFETY

If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by the Owner or by the person to whom authority to accept has been delegated by the Owner.

13.7.3 NO TORT LIABILITY OF OWNER

Pursuant to Labor Code section 6705, nothing in this Article shall impose tort liability upon the Owner or any of its employees.

13.7.4 NO EXCAVATION WITHOUT PERMITS

The Contractor shall not commence any excavation work until it has secured all necessary permits including the required CAL OSHA excavation/shoring permit. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

13.8 WAGE RATES

13.8.1 WAGE RATES

Pursuant to the provisions of Article 2 (commencing at § 1770), Chapter 1, Part 7, Division 2, of the Labor Code, the governing board of the Owner has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public work is to be performed for each craft, classification, or type of worker needed for this Project from the Director of Industrial Relations ("Director"). These rates are on file with the Clerk of the Owner's Governing Board, and copies will be made available to any interested party on request. The Contractor shall post a copy of such wage rates at the Site.

13.8.2 HOLIDAY AND OVERTIME PAY

Holiday and overtime work, when permitted by law, shall be paid for at a rate of at least one and one-half (1½) times the above specified rate of per diem wages, unless otherwise specified. Holidays shall be defined in the Collective Bargaining Agreement applicable to each particular craft, classification, or type of worker employed.

13.8.3 WAGE RATES NOT AFFECTED BY SUBCONTRACTS

The Contractor shall pay and shall cause to be paid each worker engaged in work on the Project not less than the general prevailing rate of per diem wages determined by the Director, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such workers.

13.8.4 CHANGE IN PREVAILING WAGE DURING BID OR CONSTRUCTION

If during the period this bid is required to remain open, the Director of Industrial Relations determines that there has been a change in any prevailing rate of per diem wages in the locality in which this public work is to be performed, such change shall not alter the wage rates discussed in the Notice to Bidders or the Contract subsequently awarded.

13.8.5 FORFEITURE AND PAYMENTS

Pursuant to Labor Code section 1775, the Contractor and any subcontractor under the Contractor shall as a penalty to the Owner, forfeit not more than two hundred dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing rate of per diem wages, determined by the Director, for such craft or classification in which such worker is employed for any public work done under the Agreement by the Contractor or by any Subcontractor under it. Minimum penalties shall apply, as also provided in Labor Code section 1775. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on both of the following: (1) whether the failure of the contractor or subcontractor; and (2) whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations. The difference between such prevailing rate of per diem wage and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing rate of per diem wage shall be paid to each worker by the Contractor or subcontractor or subcontractor.

13.8.6 MINIMUM WAGE RATES

Any worker employed to perform work on the Project, which work is not covered by any craft or classification listed in the general prevailing rate of per diem wages determined by the Director, shall be paid not less than the minimum rate of wages specified therein for the craft or classification which most nearly corresponds to the Work to be performed by them, and such minimum wage rate shall be retroactive to time of initial employment of such person in such craft or classification.

13.8.7 **PER DIEM WAGES**

Pursuant to Labor Code section 1773.1, per diem wages include fringe benefits such as employer payments for health and welfare, pension, and vacation pay.

13.8.8 **POSTING OF WAGE RATES AND OTHER REQUIRED JOB SITE NOTICES**

The Contractor shall post at appropriate conspicuous points on the Site, a schedule showing all determined wage rates and all other required job site notices as prescribed by regulation.

13.9 RECORD OF WAGES PAID: INSPECTION

13.9.1 APPLICATION OF LABOR CODE

Pursuant to section 1776 of the Labor Code:

(a) Each Contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, 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 him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that is made under penalty of perjury, stating both of the following:

- (1) The information contained in the payroll record is true and correct.
- (2) The employer has complied with the requirements of sections 1771, 1811 and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations ("DIR"). The Contractor and each subcontractor shall furnish a certified copy of all payroll records directly to the Labor Commissioner monthly or more frequently, if so specified in the Agreement and in a format the Labor Commissioner prescribes.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement of the DIR. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of the preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to such records at the principal office of the Contractor.

(c) Unless required as of January 1, 2016, to be furnished directly to the Labor Commissioner under Labor Code section 1771.4(a)(3), the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement of the DIR or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in (a) above.

(d) A Contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested such records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement of the DIR shall be marked or obliterated to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or the subcontractor performing the Contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number. An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subsection.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of written notice requesting the records enumerated in subdivision (a). In the event that the Contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement of the DIR, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of the subcontractor to comply with this section.

13.10 APPRENTICES

13.10.1 APPRENTICE WAGES AND DEFINITIONS

All apprentices employed by the Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and shall be employed only at the work of the craft or trade to which he or she is registered. Only apprentices, as defined in section 3077 of the Labor Code, who are in training under apprenticeship standards and written apprenticeship agreements under Chapter 4 (commencing with § 3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training.

13.10.2 APPRENTICE LABOR POOL

When the Contractor to whom the Contract is awarded by the Owner, or any Subcontractor under him or her, in performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Contractor and Subcontractor may apply to the joint apprenticeship committee administering the apprenticeship standards of the craft or trade in the area of the Site of the Project, for a certificate approving the Contractor or Subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, approval as established by the joint apprenticeship committee or committees shall be subject to review by the Administrator of Apprenticeship. The joint apprenticeship committee or committees, subsequent to approving the subject Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor in order to comply with this section. Every Contractor and Subcontractor shall submit the contract award information to the applicable joint apprenticeship committee which shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices to be employed, and the approximate dates the apprentices will be employed. There shall be an affirmative duty upon the joint apprenticeship committee or committees administering the apprenticeship standards of the crafts or trade in the area of the Site of the public work, to ensure equal employment and affirmative action and apprenticeship for women and minorities. Contractors or Subcontractors shall not be required to submit individual applications for approval to local joint apprenticeship committees provided they are already covered by the local apprenticeship standards. The ratio of work performed by apprentices to journeymen, who shall be employed in the craft or trade on the Project, may be the ratio stipulated in the apprenticeship standards under which the joint apprenticeship committee operates, but, except as otherwise provided in this section, in no case shall the ratio be less than one (1) hour of apprentice work for every five (5) hours of labor performed by a journeyman. However, the minimum ratio for the Operating Engineer and Labor classification shall not be less than one (1) apprentice for each four (4) journeymen.

13.10.3 JOURNEYMAN/APPRENTICE RATIO; COMPUTATION OF HOURS

Any ratio shall apply during any day or portion of a day when any journeyman or the higher standard stipulated by the joint apprenticeship committee, is employed at the job Site and shall

be computed on the basis of the hours worked during the day by journeymen so. Any work performed by a journeyman in excess of eight (8) hours per day or forty (40) hours per week, shall not be used to calculate the hourly ratio required by the section. The Contractor shall employ apprentices for the number of hours computed as above before the end of the Contract. However, the Contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the job Site. Where an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Division of Apprenticeship Standards, upon application of a joint apprenticeship committee, may order a minimum ratio of not less than one (1) apprentice for each five (5) journeymen in a craft or trade classification.

13.10.4 JOURNEYMAN/APPRENTICE RATIO

The Contractor or Subcontractor, if he or she is covered by this section upon the issuance of the approval certificate, or if he or she has been previously approved in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the apprenticeship standards. Upon proper showing by the Contractor that he or she employs apprentices in the craft or trade in the state on all of his or her contracts on an annual average of not less than one (1) hour of apprentice work for every five (5) hours of labor performed by a journeyman, or in the land surveyor classification, one (1) apprentice for each five (5) journeymen, the Division of Apprenticeship Standards may grant a certificate exempting the Contractor from the 1-to-5 hourly ratio as set forth in this section. This section shall not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor, when the contracts of general contractors or those specialty contractors involve less than Thirty Thousand Dollars (\$30,000).

13.10.4.1 *Apprenticeable Craft or Trade.* "Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The joint apprenticeship committee shall have the discretion to grant a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting a Contractor from the 1-to-5 ratio set forth in this Article when it finds that any one of the following conditions is met:

- A. Unemployment for the previous three-month period in the area exceeds an average of fifteen percent (15%).
- B. The number of apprentices in training in such area exceeds a ratio of 1-to-5.
- C. There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth (1/30) of its journeymen annually through the apprenticeship training, either on a statewide basis or on a local basis.
- D. Assignment of an apprentice to any work performed under this contract would create a condition which would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large or if the specific task to which

the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyman.

13.10.5 RATIO EXEMPTION

When exemptions are granted to an organization which represents Contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member Contractors will not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

13.10.6 APPRENTICE FUND

A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contricbutions in computing his or her bid for the contract. The Division of Labor Standards Enforcement is authorized to enforce the payment of the contributions to the fund or funds as set forth in the Labor Code section 227.

13.10.7 **PRIME CONTRACTOR COMPLIANCE**

The responsibility of compliance with section 13.10 and section 1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. However, if a subcontractor is found to have violated Section 1777.5, the prime contractor of the project is not liable for any penalties under subdivision (2) unless the prime contractor had knowledge of the subcontractor's failure to comply with the provisions of Section 1777.5 or unless the contract executed between the contractor and the subcontractor for the performance of work on the public works project failed to include a copy of the provisions of Section 1771, 1775, 1776, 1777.5, 1831 and 1851. Additionaly, the contractor shall continually monitor a subcontractor's use of apprentices required to be employed on the public works project pursuant to subdivision (d) of Section 1777.5, including, but not limited to, periodic review of the certified payroll of the subcontractor, and upon becoming aware of a failure of the subcontractor to employ the required number of apprentices, the contractor shall take corrective action, including, but not limited to, retaining funds due to the subcontractor for work performed on the public works project until the failure is corrected.

13.10.8 DECISIONS OF JOINT APPRENTICESHIP COMMITTEE

All decisions of the joint apprenticeship committee under this section13.10 and Labor Code section 1777.5 are subject to Labor Code section 3081.

13.10.9 **No Bias**

It shall be unlawful for an employer or a labor union to refuse to accept otherwise qualified employees as registered apprentices on any public works on the grounds of race, religious creed, color, national origin, ancestry, sex, or age, except as provided in the Labor Code section 3077.

13.10.10 VIOLATION OF LABOR CODE

Pursuant to Labor Code section 1777.1, in the event a Contractor or Subcontractor willfully fails to comply with the provisions of this section 13.10 and Labor Code section 1777.5, among other things:

(a) The Labor Commissioner may deny to the contractor or subcontractor, and to its responsible officers, the right to bid on, or be awarded or perform work as a subcontractor on, any public works project for a period of up to one year for the first violation and for a period of up to three years for the second and subsequent violation. Each period of debarment shall run from the date the determination of noncompliance by the Labor Commissioner becomes a final order.

(b) A contractor or subcontractor who violates section 1777.5 shall forfeit as a civil penalty an amount not exceeding the sum of one hundred dollars (\$100) for each full calendar day of noncompliance for a first violation and not more than three hundred dollars (\$300) for a second or subsequent violation within a three-year period. Upon receipt of a determination that a civil penalty has been imposed, the awarding body shall enforce the penalty, which includes withholding the amount of the civil penalty from the contract progress payments or retention then due or to become due.

(c) In lieu of the penalty provided, the Labor Commissioner may for a first time violation and with the concurrence of an applicable apprenticeship program, order the contractor or subcontractor to provide apprentice employment equivalent to the work hours that would have been provided for apprentices during the period of noncompliance.

(d) Any funds withheld by the awarding body pursuant to this section shall be deposited in the General Fund.

(e) The interpretation and enforcement of section 1777.5 and this section shall be in accordance with the regulations of the California Apprenticeship Council.

Pursuant to Public Contract Code section 6109, no contractor or subcontractor may bid on, be awarded, or perform work as a subcontractor on a public works project if ineligible to bid or work on, or be awarded, a public works project pursuant to section 1777.1 of the Labor Code.

13.11 ASSIGNMENT OF ANTITRUST CLAIMS

13.11.1 Application

Pursuant to Public Contract Code section 7103.5 and Government Code section 4552, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Bus. & Prof. Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders Final Progress Payment to the Contractor, without further acknowledgment by the parties. If the Owner receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with § 4550) of Division 5 of Title 1 of the Government Code, the assignor may, upon demand, recover from the Owner any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the Owner as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

13.11.2 Assignment of Claim

Upon demand in writing by the assignor, the Owner shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the Owner has not been injured thereby or the Owner declines to file a court action for the cause of action.

13.12 AUDIT

Pursuant to and in accordance with the provisions of Government Code section 8546.7, or any amendments thereto, all books, records, and files of the Owner, the Contractor, or any Subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of Ten Thousand Dollars (\$10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of three (3) years after release of all retention under this Contract. Contractor shall preserve and cause to be preserved such books, records, and files for the audit period. During the progress of the Work and for three (3) years after release of all retention under the Contract, Owner shall also have the right to an audit, and Contractor must cooperate by producing all information requested within seven (7) days.

13.13 STORM WATER DISCHARGE PERMIT

If applicable, the Contractor shall file a Notice of Intent to comply with the terms of the general permit to discharge storm water associated with construction activity Order 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2017-006-DWQ). The Notice of Intent must be sent to the following address along with the appropriate payment (warrant to be furnished by the Owner

upon request by the Contractor, allow warrant processing time.): California State Water Resources Control Board, Division of Water Quality, Storm Water Permit Unit, P.O. Box 1977, Sacramento, CA 95812-1977. The Contractor may also call the State Water Board's Construction Activity Storm Water Hotline at (916) 657-1146. The Notice of Intent shall be filed prior to the start of any construction activity.

ARTICLE 14

TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 **TERMINATION BY THE CONTRACTOR FOR CAUSE**

Contractor may not terminate for convenience. Contractor may only terminate for cause if the Work is stopped by others for a period of one hundred eighty (180) consecutive days through no act or fault of the Contractor, a Subcontractor of any tier, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible, and the Work was stopped by others for one of the following reasons: (A) Issuance of an order of a court or other public authority having jurisdiction which requires Owner to stop all Work; or (B) an act of government, such as a declaration of national emergency, making material unavailable which requires Owner to stop all Work. If such grounds exist, the Contractor may serve written notice of such grounds on Owner and demand a meet-and-confer conference to negotiate a resolution in good faith within twenty (20) days of Owner's receipt of such notice. If such conference does not lead to resolution and the grounds for termination still exist, Contractor may terminate the Contract and recover from the Owner payment for Work executed and for reasonable verified costs with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages for the Work executed, but excluding overhead (field and home office) and profit for (i) Work not performed and (ii) the period of time that the Work was stopped.

14.2 **TERMINATION BY THE OWNER FOR CAUSE**

14.2.1 GROUNDS FOR TERMINATION

The Owner may terminate the Contract if the Contractor:

- A. Refuses or fails to supply enough properly skilled workers or proper materials, or refuses or fails to take steps to adequately prosecute the work toward completion within the Contract Time;
- B. Fails to make payment to Subcontractors for materials or labor in accordance with Public Contract Code section 10262 or Business and Professions Code section 7108.5, as applicable;
- C. Violates Labor Code section 1771.1(a), subject to the provisions of Labor Code section 1771.1(f);

- D. Disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction; or
- E. Otherwise is in breach of the Contract Documents.

14.2.2 NOTIFICATION OF TERMINATION

When any of the above reasons exist, the Owner may, without prejudice to any other rights or remedies of the Owner, give notice to Contractor of the grounds for termination and demand cure of the grounds within seven (7) days (a "Notice of Intent to Terminate"). If Contractor fails to **either** (a) completely cure the grounds for termination within seven (7) days **or** (b) reasonably commence cure of the grounds for termination within seven (7) days and reasonably continue to cure the grounds for termination until such cure is complete, then Owner may terminate the Contract effective immediately upon service of written Notice of Termination and may, subject to any prior rights of Contractor's surety on the performance bond ("Surety"):

- A. Take possession of the Site and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- B. Accept assignment of subcontracts pursuant to section 5.4; and
- C. Complete the Work by whatever reasonable method the Owner may deem expedient.

14.2.3 PAYMENTS WITHHELD

If the Owner terminates the Contract for one of the reasons stated in section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is complete.

14.2.4 PAYMENTS UPON COMPLETION

If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. This payment obligation shall survive completion of the Contract.

14.2.5 INCLUSION OF TERMINATION FOR CONVENIENCE

Any purported termination by Owner for cause under this section 14.2, which is revoked or determined to not have been for cause, shall be deemed to have been a termination for convenience effective as of the same date as the purported termination for cause.

14.3 SUSPENSION OR TERMINATION BY THE OWNER FOR CONVENIENCE

14.3.1 SUSPENSION BY OWNER

The Owner may, without cause, order the Contractor in writing to suspend, delay, or interrupt the Work in whole or in part for such period of time as the Owner may determine.

14.3.1.1 *Adjustments.* An adjustment shall be made for increases in the cost of performance of the Contract, including profit on the increased cost of performance caused by suspension, delay, or interruption. No adjustment shall be made to the extent:

- A. That performance is, was or would have been so suspended, delayed, or interrupted by another cause for which the Contractor is responsible; or
- B. That an equitable adjustment is made or denied under another provision of this Contract.

14.3.1.2 *Adjustments for Fixed Cost.* Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

14.3.2 TERMINATION BY THE OWNER FOR CONVENIENCE

14.3.2.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

14.3.2.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall:

- 1. Cease operations as directed by the Owner in the notice;
- 2. Take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- 3. Except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

14.3.2.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination.
14.4 NOT A WAIVER

Any suspension or termination by Owner for convenience or cause under this Article 14 shall not act as a waiver of any claims by Owner against Contractor or others for damages based on breach of contract, negligence or other grounds.

14.5 MUTUAL TERMINATION FOR CONVENIENCE

The Contractor and the Owner may mutually agree in writing to terminate this Contract for convenience. The Contractor shall receive payment for all Work performed to the date of termination in accordance with the provisions of Article 9.

14.6 EARLY TERMINATION

Notwithstanding any provision herein to the contrary, if for any fiscal year of this Contract the governing body of the Owner fails to appropriate or allocate funds for future periodic payments under the Contract after exercising reasonable efforts to do so, the Owner may upon thirty (30) days' notice, order work on the Project to cease. The Owner will remain obligated to pay for the work already performed but shall not be obligated to pay the balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and for which the work has not been done.

END OF DOCUMENT

DOCUMENT 00 73 00

SPECIAL CONDITIONS

1. Mitigation Measures

Contractor shall comply will all applicable mitigation measures, if any, adopted by any public agency with respect to this Project pursuant to the California Environmental Quality Act. (Public Resources Code section 21000 et. seq.).

2. Modernization / Post Occupancy Projects

- a. <u>Access</u>. Access to the school buildings and entry to buildings, classrooms, restrooms, mechanical rooms, electrical rooms, or other rooms, for construction purposes, must be coordinated with District and onsite District personnel before Work is to start. Unless agreed to otherwise in writing, only a school custodian will be allowed to unlock and lock doors in existing building(s). The custodian will be available only while school is in session. If a custodian is required to arrive before 7:00 a.m. or leave after 3:30 p.m. to accommodate Contractor's Work, the overtime wages for the custodian will be paid by the Contractor, unless, at the discretion of the District, other arrangements are made in advance.
- b. <u>Master Key</u>. Upon request, the District may, at is own discretion, provide a master key to the school site for the convenience of the Contractor. The Contractor agrees to pay all expenses to re-key the entire school site and all other affected District buildings if the master key is lost or stolen or if any unauthorized party obtains a copy of the key or access to the school.
- c. <u>Maintaining Services</u>. The Contractor is advised that Work is to be performed in spaces regularly scheduled for instruction. Interruption and/or periods of shutdown of public access, electrical service, water service, lighting, or other utilities shall be only as arranged in advance with the District. Contractor shall provide temporary services to all facilities interrupted by Contractor's Work.
- d. <u>Maintaining Utilities</u>. The Contractor shall maintain in operation during duration of Contract, drainage lines, storm drains, sewers, water, gas, electrical, steam, and other utility service lines within working area. No new services or connections shall be anticipated for operation of existing facilities during construction.
- e. <u>Confidentiality</u>. Contractor shall maintain the confidentiality of all information, documents, programs, procedures and all other items that Contractor encounters while performing the Work. This requirement shall be ongoing and shall survive the expiration or termination of this Contract and specifically includes, without

limitation, all student, parent, and employee disciplinary information and health information.

f. <u>No Work During Student Testing</u>. Contractor shall, at no additional cost to the District and at the District's request, coordinate its Work to not disturb District students including, without limitation, not performing any Work when students at the Site are taking State-required tests.

3. <u>Substitution for Specified Items</u>

- a. Requests for substitutions prior to award of the Contract shall be done within the time period indicated in the Instructions to Bidders.
- b. Whenever in the Specifications any materials, process, or article is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer any material, process, or article that shall be substantially equal or better in every respect to that so indicated or specified.
 - (1) If the material, process, or article offered by Contractor is not, in the opinion of the District, substantially equal or better in every respect to that specified, then Contractor shall furnish the material, process, or article specified in the Specifications without any additional compensation or change order.
 - (2) This provision shall not be applicable with respect to any material, product, thing or service for which District made findings and gave notice in accordance with Public Contract Code section 3400(b); therefore, Contractor shall not be entitled to request a substitution with respect to those materials, products or services.
 - c. A request for a substitution shall be in writing and shall include:
 - (1) All variations of the proposed substitute from the material specified including, but not limited to, principles of operation, materials, or construction finish, thickness or gauge of materials, dimensions, weight, and tolerances;
 - (2) Available maintenance, repair or replacement services;
 - (3) Increases or decreases in operating, maintenance, repair, replacement, and spare parts costs;
 - (4) Whether or not acceptance of the substitute will require other changes in the Work (or in work performed by the District or others under Contract with the District); and

- (5) The time impact on any part of the Work resulting directly or indirectly from acceptance of the proposed substitute.
- d. No substitutions shall be made until approved, in writing, by the District. The burden of proof as to equality of any material, process, or article shall rest with Contractor. The Contractor warrants that if substitutes are approved:
 - (1) The proposed substitute is equal or superior in all respects to that specified, and that such proposed substitute is suitable and fit for the intended purpose and will perform adequately the function and achieve the results called for by the general design and the Contract Documents;
 - (2) The Contractor provides the same warranties and guarantees for the substitute that would be provided for that specified;
 - (3) The Contractor shall be fully responsible for the installation of the substitute and any changes in the Work required, either directly or indirectly, because of the acceptance of such substitute, with no increase in Contract Price or Contract Time. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the Contract Price or Contract Time;
 - (4) The Contractor shall be responsible for any re-design costs occasioned by District's acceptance and/or approval of any substitute; and
 - (5) The Contractor shall, in the event that a substitute is less costly than that specified, credit the District with one hundred percent (100%) of the net difference between the substitute and the originally specified material. In this event, the Contractor agrees to execute a deductive Change Order to reflect that credit.
- e. In the event Contractor furnishes a material, process, or article more expensive than that specified, the difference in the cost of that material, process, or article so furnished shall be borne by Contractor.
- f. In no event shall the District be liable for any increase in Contract Price or Contract Time due to any claimed delay in the evaluation of any proposed substitute or in the acceptance or rejection of any proposed substitute.

4. **Fingerprinting**

Contractor shall comply with the provisions of Education Code section 45125.2 regarding the submission of employee fingerprints to the California Department of

Justice and the completion of criminal background investigations of its employees, its subcontractor(s), and its subcontractors' employees. Contractor shall not permit any employee to have any contact with District pupils until such time as Contractor has verified in writing to the governing board of the District, that such employee has not been convicted of a felony, as defined in Education Code section 45122.1. Contractor shall fully complete and perform all tasks required pursuant to the Criminal Background Investigation/ Fingerprinting Certification.

5. Weather Days

Extensions of the Performance Period shall be determined by reference to the Terms and Conditions to Field Contract. Rain in excess of one-tenth of an inch (1/10") in one (1) day, or temperature which does not exceed 32° F shall be considered adverse weather. The following chart shows the normal number of adverse weather days:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
10	8	8	5	2	1	0	0	1	3	7	10

6. <u>Insurance Policy Limits</u>. All of Contractor's insurance shall be with insurance companies with an A.M. Best rating of no less than A: XI. All limits of insurance shall not be less than what is specified in Agreement Between Owner and Contractor Document 00 52 26, Article XI, Indemnifications and Insurance in the.

7. Permits, Certificates, Licenses, Fees, Approval

- a. **Payment for Permits, Certificates, Licenses, and Fees**. As required in the Terms and Conditions to Field Contract, the Contractor shall secure and pay for all permits, licenses and certificates necessary for the prosecution of the Work with the exception of the following:
 - (1) Water connection fees
 - (2) Sewer connection fees
 - (3) Electrical connection fees
 - (4) Gas connections fees
 - (5) Cable TV connection fees
 - (6) Phone connection fee

With respect to the above listed items, Contractor shall be responsible for securing such items, however, District will be responsible for payment of these charges or fees. Contractor shall notify the District of the amount due with respect to such items and to whom the amount is payable. Contractor shall provide the District with an invoice and receipt with respect to such charges or fees. The contractor shall receive written approval from the District prior to any payment.

b. The Contractor shall obtain a Grading Permit: Not Used.

c. Storm Water Pollution Prevention Plan

• NPDES PERMITTING

1. <u>General</u>. The intent of these requirements is to enforce federal, state and local laws, ordinances, codes and regulations that pertain to storm water pollution attributable to construction projects. Storm drains discharge directly to creeks without treatment. Therefore, discharge of pollutants (i.e. any substance, material or waste other than uncontaminated storm water) into the storm drain system is strictly prohibited.

For the purpose of eliminating storm water pollution, the Contractor shall implement effective

control measures over the entire project. There are several publications which provide guidance on selecting and implementing effective control measures known as Best Management Practices (BMPs). BMPs include, but are not limited to, schedules of activities, prohibition of practices, general good housekeeping practices, operational practices, pollution prevention practices, maintenance procedures and other management procedures designed to prevent the discharge of pollutants directly or indirectly to the storm drain system. BMPs also include the construction of some facilities which may be required to prevent, control and abate storm water pollution. The reference publications are as follows:

- * California Storm Water Best Management Practices Handbook-Industrial/Commercial
- * California Storm Water Best Management Practices Handbook-Construction Activity

These handbooks may be purchased from Blue Print Services (BPS), 1700 Jefferson Street, Oakland, California 94612, (510) 287-5485.

The Contractor shall be responsible for preparing and submitting to the Owner a Storm Water Pollution Prevention Plan (SWPPP) in conformance with the California NPDES (National Pollution Discharge Elimination System) General Permit for Storm Water Discharges associated with construction activity. The SWPPP shall address intended methods to reduce the amount of pollutants contained in storm water runoff during construction of the work.

The SWPPP is considered a report available to the public under Section 308 (b) of the Clean Water Act. The SWPPP shall be kept at the site during construction and made available upon request of a representative of the

Regional Water Board or other local agency. The Contractor shall amend the SWPPP for any change in construction or operations which may affect the discharge of pollutants to surface water, ground waters, or storm drain system.

The Contractor shall submit the SWPPP to the Owner and governing agencies within fifteen (15) days of the Notice to Proceed. Upon approval of the SWPPP, the Contractor shall be responsible for implementing, maintaining, and repairing all storm water pollution controls as described in his approved SWPPP for the duration of the work. The Contractor shall make any repairs to the storm water pollution controls and amend the SWPPP if, in the opinion of the Owner, the Contractor is not in compliance with the SWPPP. Failure to make the necessary repairs or other maintenance when directed by the Owner shall result in the necessary repair work being done by District forces, and the Contractor will be billed at double the rate of all District expenses. In addition, the Contractor shall be responsible for any fines imposed by the Regional Water Quality Control Board or other agency as a result of noncompliance, negligence, or violation of permit conditions.

Records of all inspections and compliance certifications reporting must be retained as part of the Storm Water Pollution Prevention Plan for a period of three years. Upon completion of the project construction and termination of coverage under the General Permit, the records shall be retained by the contractor with a copy of the final SWPPP.

2. <u>Material Storage</u>. Storage and exposure of raw materials, by-products, finished products, and containers shall be controlled as described below:

All construction materials shall be stored at least ten (10) feet away from inlets, catch basins, and curb returns. The Contractor shall not allow any material to enter the storm drain system. At the end of each working day, the Contractor shall collect and dispose of all scrap, debris, and waste material.

During wet weather or when rain is forecast, the Contractor shall store materials that can contaminate rainwater or be transported by storm water or other runoff to the storm drain system inside a building or cover them with a tarp or other waterproof material secured with weighted tires or sandbags to prevent contact with rain.

The Contractor is reminded that storage and disposal of all hazardous materials such as paints, thinners, solvents, and fuels; and all hazardous wastes such as waste oil must meet all federal, state and local standards and requirements.

3. <u>De-watering Operations</u>. All groundwater removed from the trench or excavations must be de-silted prior to discharging it into the storm drain system through filtering materials and methods meeting the Association of Bay Area Governments (ABAG) Standards for Erosion & Sediment Control Measures and/or through methods and procedures described in the California Storm Water Best Management Practice Handbook - Construction Activity (latest edition).

4. <u>Pavement Saw-Cutting Operations</u>. The Contractor shall prevent any saw-cutting debris from entering the storm drain system. The Contractor, preferably, shall use dry cutting techniques and sweep up residue. If wet methods are used, the Contractor shall vacuum slurry as cutting proceeds or collect all wastewater by constructing a sand bag sediment barrier. The bermed area shall be of adequate size to collect all wastewater and solids. The Contractor shall allow collected water to evaporate if the wastewater volume is minimal and if maintaining the ponding area does not interfere with public use of the street area or create a safety hazard. If approved by the Owner, the Contractor may direct or pump saw-cutting wastewater to a dirt area and allow to infiltrate. The dirt area shall be adequate to contain all the wastewater. After wastewater has infiltrated, all remaining silt and debris from the ponding or bermed area shall be removed or vacuumed and disposed of properly.

If a suitable dirt area is not available or discharge to the sanitary sewer is not feasible, with the approval of the Owner and Contra Costa County Flood Control (CCCFC) & Water Conservation District (WCD), the Contractor shall filter the saw-cutting wastewater through filtering materials and methods meeting ABAG Standards for Erosion and Sedimentation Control Measures (latest edition) before discharging to the storm drain.

- 5. <u>Pavement Operations</u>. The Contractor shall prevent the discharge of pollutants from paving operations by using measures to prevent run-on and run-off pollution, disposing of wastes properly, and by implementing the procedures in the Best Management Practices Handbook. In addition, the Contractor shall observe the following guidelines:
 - Paving during wet weather:
 - a) No paving while it is raining.
 - b) No paving of the top lift of asphalt concrete (AC) on any day that experiences ¹/₄" of rain in a twenty-four (24) hour period.
 - c) No paving of bottom lift if previous seventy-two (72) hour period experienced more than ¹/₂" rain, unless directed by the Owner.
 - Store materials as required under section 2.
 - Cover inlets and manholes when applying asphalt, seal coat, tack coat, slurry seal, fog seal, etc.
 - Place drip pans or absorbent materials under paving equipment when not in use. During wet weather, store contaminated paving equipment indoors, or cover with tarp or other waterproof covering.
 - Sweep site daily using mechanical methods to prevent sand, gravel or excess asphalt from entering or being transported by rain into the storm drain system.
 - Keep ample supplies of drip pans or absorbent materials on-site.
 - If paving involves Portland cement concrete, refer to section G6 below.
 - All of the above at the discretion of the Owner.

- 6. <u>Concrete Operations</u>. **Do not wash out concrete trucks into storm drains, open ditches, streets, streams, etc.** The Contractor shall prevent the discharge of pollutants from concrete operations by using measures to prevent run-on and run-off pollution, properly disposing of wastes, and by implementing the following BMPs:
 - Store all materials in waterproof containers or under cover away from drain inlets or drainage areas.
 - Avoid mixing excess amounts of Portland cement materials. Dispose of any excess materials properly.
 - Whenever possible, perform washout of concrete trucks off-site where discharge is controlled and not permitted to discharge to the storm drain system. For on-site washout:
 - Locate washout area at least fifty (50) feet from storm drains, open ditches or other water bodies, preferably in a dirt area. Confine run-off from this area by constructing a temporary pit or bermed area large enough for the liquid and solid waste.
 - Wash out concrete wastes into the temporary pit where the concrete can set, be broken up and then disposed of properly. If the volume of water is greater than what will allow concrete to set, allow the wash water to infiltrate and/or evaporate, if possible. Remove or vacuum the remaining silt and debris from the ponding or bermed area and dispose of it properly.
 - Dispose of wastewater from washing of exposed aggregate to dirt area. The dirt area shall be adequate to contain all the wastewater and once the wastewater has infiltrated, any remaining residue must be removed.
 - Collect and return sweepings from exposed aggregate concrete to a stockpile or dispose of the waste in trash container.
- 7. <u>Grading and Excavation Operations</u>. The Contractor shall prepare a 40 scale erosion control plan and submit it to the Owner and governing agencies for approval, within fifteen (15) days of the Notice To Proceed.

The erosion and sedimentation control materials and methods shall be in accordance with ABAG Standards For Erosion And Sediment Control Measures and/or the procedures and methods described in the California Storm Water Best Management Practice Handbook - Construction Activity (latest edition).

Sedimentation and erosion control/filter materials shall be placed in a manner that will retain any debris or sediment from flowing into the storm drain system. The Contractor shall have labor, tools, equipment and materials needed, at the job site, to provide the erosion control measures necessary as a result of earthwork or trenching before beginning or continuing these construction activities. Sand bags and straw wattle shall be stockpiled adjacent to the locations of activity and ready to be installed when the rainfall forecast for 48 hours is 40% or greater or when directed by the Owner. The Contractor shall install siltation control devices around catch basins at the end of each working day. These devices shall be maintained at all times during the construction period, and shall be removed when construction is complete.

The Contractor shall not be allowed to block existing drainage flowing onto the work area. The Contractor shall install temporary drainage facilities, if necessary. There shall be no extra compensation to the Contractor for keeping existing drainage open. The Contractor is responsible for any damage to property or existing improvements resulting from blocking existing drainage.

The Contractor shall inspect the sites of work at the beginning and once every 24hour period through the duration of each storm to assure that inlets and pipes are not blocked with silt or debris and shall be prepared to make repairs to the erosion control devices and take any other remedial measures as directed by the Owner. At the end of a storm event all depressions with ponded water, the water in catch basins, and the check dam ponds shall be pumped dry and all silt and debris removed. This work shall be completed within twenty-four (24) hours after the end of each storm.

- 8. <u>Spill Prevention and Control</u>. The Contractor shall take any and all precautions to prevent accidental spills during the work under this contract. However, in the event of a spill:
 - The Contractor shall immediately contain and prevent leaks and spills from entering the storm drain system, and properly clean-up and dispose of the waste and clean-up materials. If waste is hazardous, the Contractor shall comply with all federal, state and local hazardous waste requirements.
 - The Contractor shall not wash any spilled material into the streets, gutters, storm drains, or creeks.
 - The Contractor shall report any hazardous material spills immediately to the Owner and the City of San Jose Police Department, as per hazardous material response protocol.
- 9. <u>Vehicle/Equipment Cleaning</u>. The Contractor shall not perform vehicle or equipment cleaning or maintenance on-site or in the street using soaps, solvents, de-greasers, steam cleaning equipment or equivalent methods. The Contractor shall perform vehicle or equipment cleaning with water only in a designated, bermed area that will not allow rinse water to run off-site or into the storm drain system. The rinse-water shall be permitted to infiltrate in dirt area or shall be discharged to the sanitary sewer with the approval of the Owner.

The Contractor shall dispose of wash water from the cleaning of water base paint equipment and tools to the sanitary sewer.

If using oil based paint, to the maximum extent practicable, the Contractor shall filter the paint thinner and solvents for reuse and dispose of the waste thinner and solvent, and sludge from cleaning of equipment and tools as hazardous waste. No disposal of oil base materials is allowed into the City sewer system.

10. <u>Contractor Training and Awareness</u>. The Contractor shall train all employees on the water pollution prevention requirements contained in these specifications. The Contractor shall inform all subcontractors of the water pollution prevention contract requirements and include appropriate subcontract provisions to ensure that these requirements are met.

The Contractor shall utilize thermoplastic to stencil new catch basins, constructed as part of the project, with "No Dumping, Drains to Bay".

- 11. <u>Good Housekeeping Practices</u>. In addition to the practices and procedures discussed above, the Contractor shall implement the following applicable good housekeeping practices.
 - Store materials that have the potential to be transported to the storm drain system by storm run-off or by a spill under cover in a contained area or in sealed waterproof containers.
 - Use tarps on the ground to collect fallen debris or splatters that could contribute to storm water pollution.
 - Secure opened bags of cement, and of other light or powdered materials which can be transported by wind.
 - Pick up litter, construction debris and other wastes daily from outside areas including the sidewalk area, gutter, street pavement and storm drains impacted by the project. All wastes shall be stored in covered containers or disposed of or recycled immediately.
 - Dispose of wash water to the sanitary sewer with the approval of Owner or recycle wash water (refer to section 6).
 - Inspect vehicles and equipment arriving on-site for leaking fluids and promptly repair leaking vehicles and equipment. Vehicles leaking fluids will not be allowed on the construction site and if not repaired, must be removed.
 - Avoid spills by handling materials carefully. Keep a stockpile of spill control materials, such as rags or absorbents, readily accessible on-site. Clean up all spills immediately to prevent any material from being discharged to the storm drain (refer to section 8).
 - Train employees regularly on good housekeeping practices and BMPs. Assign responsibility to specific employees on BMPs, good housekeeping practices, and what to do in the event of a spill (refer to section 10).
 - Maintain and replace all sediment and water pollution control devices as necessary to ensure that said controls are working effectively (e.g. inspect all sediment ponds or sandbag sedimentation/filtering systems after each rain. Remove accumulated sediment and debris and replace or repair damaged sandbags immediately).

END OF DOCUMENT

DOCUMENT 00 73 73

COMPLIANCE MONITORING AND ENFORCEMENT NOTICE

The <u>Conduit Raceway Project at Piedmont Middle School is</u> a public works project that is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The prevailing wage laws require that all workers be paid at least the minimum hourly prevailing wage rate as determined by the Director of Industrial Relations for the specific classification (or type of work) performed by workers on the project. The awarding body shall post prevailing wage rates and all other job site postings prescribed by regulation or require the prime contractor to do so.

The Contractor, and each subcontractor, shall submit weekly certified payrolls directly to the Labor Commissioner at least monthly or more frequently if specified in the contract with the District. CPRs shall be in a format prescribed by the Labor Commissioner and the department shall undertake those activities it deems necessary to monitor and enforce compliance with prevailing wage requirements. Complaints concerning nonpayment of the required prevailing wage rates to workers on this project may be filed with the Division of Labor Standards Enforcement (DLSE).

END OF DOCUMENT

DOCUMENT 00 81 00

HAZARDOUS MATERIALS PROCEDURES AND REQUIREMENTS

1. Summary

This document includes information applicable to hazardous materials and hazard waste abatement.

2. Notice of Hazardous Waste or Materials Conditions

- a. Contractor shall give notice in writing to the District, the Construction Manager, and the Architect promptly, before any of the following conditions are disturbed, and in no event later than twenty-four (24) hours after first observance, of any:
 - (1) Material that Contractor believes may be material that is hazardous waste or hazardous material, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law;
 - (2) Other material that may present a substantial danger to persons or property exposed thereto in connection with Work at the site.
- b. Contractor's written notice shall indicate whether the hazardous waste or material was shown or indicated in the Contract Documents to be within the scope of Work, and whether the materials were brought to the site by Contractor, its Subcontractors, suppliers, or anyone else for whom Contractor is responsible. As used in this document the term "hazardous materials" shall include, without limitation, asbestos, lead, Polycholrinated biphenyl (PCB), petroleum and related hydrocarbons, and radioactive material.
- c. In response to Contractor's written notice, the District shall investigate the identified conditions.
- d. If the District determines that conditions do not involve hazardous materials or that no change in terms of Contract is justified, the District shall so notify Contractor in writing, stating reasons. If the District and Contractor cannot agree on whether conditions justify an adjustment in Contract Price or Contract Times, or on the extent of any adjustment, Contractor shall proceed with the Work as directed by the District.
- e. If after receipt of notice from the District, Contractor does not agree to resume Work based on a reasonable belief it is unsafe, or does not agree to resume Work under special conditions, then District may order such portion of Work that is in connection with such hazardous condition or such affected area to be

deleted from the Work, or performed by others, or District may invoke its rights to terminate the Contract in whole or in part. District will determine entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of deleting such portion of Work, or performing the Work by others.

f. If Contractor stops Work in connection with any hazardous condition and in any area affected thereby, Contractor shall immediately redeploy its workers, equipment, and materials, as necessary, to other portions of the Work to minimize delay and disruption.

3. Additional Warranties and Representations

- a. Contractor represents and warrants that it, its employees, and its subcontractors and their employees, shall at all times have the required levels of familiarity with the Site and the Work, training, and ability to comply fully with all applicable law and contract requirements for safe and expeditious performance of the Work, including whatever training is or may be required regarding the activities to be performed (including, but not limited to, all training required to address adequately the actual or potential dangers of Contract performance).
- b. Contractor represents and warrants that it, its employees, and its subcontractors and their employees, shall at all times have and maintain in good standing any and all certifications and licenses required by applicable federal, state, and other governmental and quasi-governmental requirements applicable to the Work.
- c. Contractor represents and warrants that it has studied carefully all requirements of the Specifications regarding procedures for demolition, hazardous waste abatement, or safety practices, specified in the Contract, and prior to submitting its bid, has either (a) verified to its satisfaction that the specified procedures are adequate and sufficient to achieve the results intended by the Contract Documents, or (b) by way of approved "or equal" request or request for clarification and written Addenda, secured changes to the specified procedures sufficient to achieve the results intended by the Contractor accepts the risk that any specified procedure will result in a completed Project in full compliance with the Contract Documents.

4. Monitoring and Testing

a. District reserves the right, in its sole discretion, to conduct air monitoring, earth monitoring, Work monitoring, and any other tests (in addition to testing required under the agreement or applicable law), to monitor Contract requirements of safe and statutorily compliant work methods and (where applicable) safe re-entry level air standards under state and federal law upon completion of the job, and compliance of the work with periodic and final inspection by public and quasi-public entities having jurisdiction.

- b. Contractor acknowledges that District has the right to perform, or cause to be performed, various activities and tests including, but not limited to, preabatement, during abatement, and post-abatement air monitoring, that District shall have no obligation to perform said activities and tests, and that a portion of said activities and tests may take place prior to the completion of the Work by Contractor. In the event District elects to perform these activities and tests, Contractor shall afford District ample access to the Site and all areas of the Work as may be necessary for the performance of these activities or tests by District in the Contract Price and the Scheduled Completion Date.
- c. Notwithstanding District's rights granted by this paragraph, Contractor may retain its own industrial hygiene consultant at Contractor's own expense and may collect samples and may perform tests including, but not limited to, preabatement, during abatement, and post-abatement personal air monitoring, and District reserves the right to request documentation of all such activities and tests performed by Contractor relating to the Work and Contractor shall immediately provide that documentation upon request.

5. Compliance with Laws

- a. Contractor shall perform safe, expeditious, and orderly work in accordance with the best practices and the highest standards in the hazardous waste abatement, removal, and disposal industry, the applicable law, and the Contract Documents, including, but not limited to, all responsibilities relating to the preparation and return of waste shipment records, all requirements of the law, delivering of all requisite notices, and obtaining all necessary governmental and quasi-governmental approvals.
- b. Contractor represents that it is familiar with and shall comply with all laws applicable to the Work or completed Work including, but not limited to, all federal, state, and local laws, statutes, standards, rules, regulations, and ordinances applicable to the Work relating to:
 - (1) The protection of the public health, welfare and environment;
 - (2) Storage, handling, or use of asbestos, PCB, lead, petroleum based products or other hazardous materials;
 - (3) The generation, processing, treatment, storage, transport, disposal, destruction, or other management of asbestos, PCB, lead, petroleum, or hazardous waste materials or other waste materials of any kind; and

(4) The protection of environmentally sensitive areas such as wetlands and coastal areas.

6. Disposal

- a. Contractor has the sole responsibility for determining current waste storage, handling, transportation, and disposal regulations for the job Site and for each waste disposal facility. Contractor must comply fully at its sole cost and expense with these regulations and any applicable law. District may, but is not obligated to, require submittals with this information for it to review consistent with the Contract Documents.
- b. Contractor shall develop and implement a system acceptable to District to track hazardous waste from the Site to disposal, including appropriate "Hazardous Waste Manifests" on the EPA form, so that District may track the volume of waste it put in each landfill and receive from each landfill a certificate of receipt.
- c. Contractor shall provide District with the name and address of each waste disposal facility prior to any disposal, and District shall have the express right to reject any proposed disposal facility. Contractor shall not use any disposal facility to which District has objected. Contractor shall document actual disposal or destruction of waste at a designated facility by completing a disposal certificate or certificate of destruction forwarding the original to the District.

7. Permits

- a. Before performing any of the Work, and at such other times as may be required by applicable law, Contractor shall deliver all requisite notices and obtain the approval of all governmental and quasi-governmental authorities having jurisdiction over the Work. Contractor shall submit evidence satisfactory to District that it and any disposal facility
 - (1) have obtained all required permits, approvals, and the like in a timely manner both prior to commencement of the Work and thereafter as and when required by applicable law, and
 - (2) are in compliance with all such permits, approvals and the regulations.

For example, before commencing any work in connection with the Work involving asbestos-containing materials, or PCBs, or other hazardous materials subject to regulation, Contractor agrees to provide the required notice of intent to renovate or demolish to the appropriate state or federal agency having jurisdiction, by certified mail, return receipt requested, or by some other method of transmittal for which a return receipt is obtained, and to send a copy of that notice to District. Contractor shall not conduct any Work involving asbestos-containing materials or PCBs unless Contractor has first confirmed that the appropriate agency having jurisdiction is in receipt of the required notification. All permits, licenses, and bonds that are required by governmental or quasi-governmental authorities, and all fees, deposits, tap fees, offsite easements, and asbestos and PCB disposal facilities expenses necessary for the prosecution of the Work, shall be procured and paid for by Contractor. Contractor shall give all notices and comply with the all applicable laws bearing on the conduct of the Work as drawn and specified. If Contractor observes or reasonably should have observed that Plans and Specifications and other Contract Documents are at variance therewith, it shall be responsible for promptly notifying District in writing of such fact. If Contractor performs any Work contrary to applicable laws, it shall bear all costs arising therefrom.

b. In the case of any permits or notices held in District's name or of necessity to be made in District's name, District shall cooperate with Contractor in securing the permit or giving the notice, but the Contractor shall prepare for District review and execution upon approval, all necessary applications, notices, and other materials.

8. Indemnification

a. To the extent permitted by law, the indemnities and limitations of liability expressed throughout the Contract Documents apply with equal force and effect to any claims or liabilities imposed or existing by virtue of the removal, abatement, and disposal of hazardous waste. This includes, but is not limited to, liabilities connected to the selection and use of a waste disposal facility, personal injury, property damage, loss of use of property, damage to the environment or natural resources, or "disposal" and "release" of materials associated with the Work (as defined in 42 U.S.C. § 960l et seq.).

9. Termination

a. District shall have an absolute right to terminate for default immediately without notice and without an opportunity to cure should Contractor knowingly or recklessly commit a material breach of the terms of the Contract Documents, or any applicable law, on any matter involving the exposure of persons or property to hazardous waste. However, if the breach of contract exposing persons or property to hazardous waste is due solely to an ordinary, unintentional, and non-reckless failure to exercise reasonable care, then the procedures for termination for cause shall apply without modification.

END OF DOCUMENT

DOCUMENT 00 88 00

AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

 THIS AGREEMENT AND RELEASE OF CLAIMS ("Agreement and Release") IS MADE

 AND ENTERED INTO THIS _____ DAY OF _____, 20 ____ by and

 between the Berryessa Union School District ("District") and ______

 ("Contractor"), whose place of business is ______.

RECITALS:

- 1. District and Contractor entered into Piedmont Middle School Conduit Raceway NO.:B-02-2022-23 ("Contract" or "Project") in the County of Santa Clara, California.
- **2.** The Work under the Contract has been completed.

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

AGREEMENT

3. Contractor will only be assessed liquidated damages as detailed below:

Original Contract Sum	\$
Modified Contract Sum	\$
Payment to Date	\$
Liquidated Damages	\$
Payment Due Contractor	\$

- 4. Subject to the provisions hereof, District shall forthwith pay to Contractor the undisputed sum of \$_____ (_____ Dollars and _____ Cents) under the Contract, less any amounts represented by any notice to withhold funds on file with District as of the date of such payment.
- 5. Contractor acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against District arising from the performance of work under the Contract, except for the claims described in Paragraph 6 and continuing obligations described in Paragraph 8. It is the intention of the parties in executing this Agreement and Release that this Agreement and Release shall be effective as a full, final and general release of all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities of Contractor against District, all its respective agents, employees, inspectors, assignees and transferees except for the

Disputed Claim is set forth in Paragraph 6 and continuing obligations described in Paragraph 8 hereof.

6. The following claims are disputed (hereinafter, the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release:

<u>Claim No.</u> <u>Description of Claim</u> <u>Amount of Claim Date Claim Submitted</u>

[Insert information, including attachment if necessary]

- 7. Consistent with California Public Contract Code section 7100, Contractor hereby agrees that, in consideration of the payment set forth in Paragraph 4 hereof, Contractor hereby releases and forever discharges District, all its agents, employees, inspectors, assignees, and transferees from any and all liability, claims, demands, actions, or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract.
- 8. Guarantees and warranties for the Work, and any other continuing obligation of Contractor, shall remain in full force and effect as specified in the Contract Documents.
- 9. To the furthest extent permitted by California law, Contractor shall defend, indemnify, and hold harmless the District, its agents, representatives, officers, consultants, employees, trustees, and volunteers (the "indemnified parties") from any and all losses, liabilities, claims, suits, and actions of any kind, nature, and description, including, but not limited to, attorneys' fees and costs, directly or indirectly arising out of, connected with, or resulting from the performance of the Contract unless caused wholly by the sole negligence or willful misconduct of the indemnified parties.
- **10.** Contractor hereby waives the provisions of California Civil Code section 1542 which provides as follows:

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

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

12. All rights of District shall survive completion of the Work or termination of Contract, and execution of this Release.

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

Berryessa Union School District

TITLE: _____

NAME: _____

SIGNATURE: _____

CONTRACTOR

TITLE: _____

NAME: _____

SIGNATURE: _____

END OF DOCUMENT

11/13/13

DOCUMENT 00 89 00

GUARANTEE FORM

("Contractor") hereby agrees that the ______ ("Work" of Contractor) which Contractor has installed for the Berryessa Union School District ("District") for the following project:

PROJECT: Bid #B-02-2022-23 PIEDMONT MIDDLE SCHOOL BLDG., L DEMOLITION

has been performed in accordance with the requirements of the Contract Documents and that the Work as installed will fulfill the requirements of the Contract Documents.

The undersigned agrees to repair or replace any or all of such Work that may prove to be defective in workmanship or material together with any other adjacent Work that may be displaced in connection with such replacement within a period of <u>ONE</u> year(s) from the date of completion as defined in Public Contract Code section 7107, subdivision (c), ordinary wear and tear and unusual abuse or neglect excepted. The date of completion is ______, 20___.

In the event of the undersigned's failure to comply with the above-mentioned conditions within a reasonable period of time, as determined by the District, but not later than seven (7) days after being notified in writing by the District, the undersigned authorizes the District to proceed to have said defects repaired and made good at the expense of the undersigned. The undersigned shall pay the costs and charges therefore upon demand.

Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	
Representatives to be contacted	for service subject to terms of Contract:
NAME:	
ADDRESS:	
PHONE NO.:	

END OF DOCUMENT

11/13/13

DOCUMENT 00 92 00

SMOKE-FREE ENVIRONMENT CERTIFICATION

PROJECT/CONTRACT NO.: B-02-2022-23

PIEDMONT MIDDLE SCHOOL BLDG.L DEMOLITION between Berryessa Union School District (the "District" or the "Owner") and ______ (the "Contractor" or the "Bidder") (the "Contract" or the "Project").

This Smoke-Free Environment Certification form is required from the successful Bidder.

Per District Board Policy and consistent with Education Code section 48901 and Health and Safety Code section 39002 all District sites, including the Project site are Tobacco Free Environments. Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes; school buildings, school grounds, school owned vehicles and vehicles owned by others while on District property.

I acknowledge that I am aware of the District's policy regarding smoke-free environments at District sites, including the Project site and hereby certify that I will adhere to the requirements of that policy and not permit any of my firm's employees, agents, subcontractors, or my firm's subcontractors' employees or agents to smoke on the Project site.

Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	

END OF DOCUMENT

_

DOCUMENT 00 92 50

ASBESTOS AND OTHER HAZARDOUS MATERIALS CERTIFICATION

Contractor hereby certifies that no Asbestos, or Asbestos-Containing Materials, polychlorinated biphenyl (PCB), or any material listed by the federal or state Environmental Protection Agency or federal or state health agencies as a hazardous material, or any other material defined as being hazardous under federal or state laws, rules, or regulations "New Material Hazardous", shall be furnished, installed, or incorporated in any way into the Project or in any tools, devices, clothing, or equipment used to affect any portion of Contractor's work on the Project for District.

Contractor further certifies that it has instructed its employees with respect to the abovementioned standards, hazards, risks, and liabilities.

Asbestos and/or asbestos-containing material shall be defined as all items containing but not limited to chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite. Any or all material containing greater than one-tenth of one percent (.1%) asbestos shall be defined as asbestos-containing material.

Any disputes involving the question of whether or not material is New Hazardous Material shall be settled by electron microscopy or other appropriate and recognized testing procedure, at the District's determination. The costs of any such tests shall be paid by Contractor if the material is found to be New Hazardous Material.

All Work or materials found to be New Hazardous Material or Work or material installed with "New Hazardous Material" containing equipment will be immediately rejected and this Work will be removed at Contractor's expense at no additional cost to the District.

Contractor has read and understood the document Hazardous Materials Procedures & Requirements, and shall comply with all the provisions outlined therein.

Date:	
Proper Name of Bidde	r:
Signature:	
Print Name:	
Title:	
	END OF DOCUMENT

DOCUMENT 00 93 00

LEAD-BASED PAINT CERTIFICATION

California Occupational Safety and Health Administration (CalOSHA), Environmental Protection Agency (EPA), California Department of Health Services (DHS), California Department of Education (CDE), and the Consumer Product Safety Commission (CPSC) regulate lead-containing paint and lead products. Because the Contractor and its employees will be providing services for the District, and because the Contractor's work may disturb lead-containing building materials, **CONTRACTOR IS HEREBY NOTIFIED** of the potential presence of lead-containing materials located within certain buildings utilized by the District. All school buildings built prior to 1993 are presumed to contain some lead-based paint until sampling proves otherwise.

The CDE mandates that school districts utilize DHS lead-certified personnel when a leadbased hazard is identified. Examples of lead-certified personnel include: project designers, inspectors, and abatement workers. Furthermore, since it is assumed by the district that all painted surfaces (interior as well as exterior) within the District contain some level of lead, it is imperative that the Contractor, its workers and subcontractors fully and adequately comply with all applicable laws, rules and regulations governing lead-based materials (Including Title 8, California Code of Regulations, Section 1532.1). Any and all Work which may result in the disturbance of lead-containing building materials must be coordinated through the District.

The California Education Code also prohibits the use or import of lead-containing paint, lead plumbing and solders, or other potential sources of lead contamination in the construction of any new school facility or in the modernization or renovation of any existing school facility. The Contractor shall provide the District with any sample results prior to beginning Work, during the Work, and after the completion of the Work. The District may request to examine, prior to the commencement of the Work, the lead training records of each employee of the Contractor.

If failure to comply with these laws, rules, and regulations results in a site or worker contamination, the Contractor will be held solely responsible for all costs involved in any required corrective actions, and shall defend, indemnify and hold harmless the District, pursuant to the indemnification provisions of the Contract, for all damages and other claims arising therefrom. If lead disturbance is anticipated in the Work, only persons with appropriate accreditation, registrations, licenses and training shall conduct this Work.

It shall be the responsibility of the Contractor to properly dispose of any and all waste products, including but not limited to, paint chips, any collected residue, or any other visual material that may occur from the prepping of any painted surface. It will be the responsibility of the Contractor to provide the proper disposal of any hazardous waste by a certified hazardous waste hauler. This company shall be registered with the Department of Transportation (DOT) and shall be able to issue a current manifest number upon transporting any hazardous material from any school site within the District.

THE UNDERSIGNED HEREBY ACKNOWLEDGES, UNDER PENALTY OF PERJURY, THAT HE OR SHE HAS RECEIVED NOTIFICATION OF POTENTIAL LEAD-BASED MATERIALS ON THE OWNER'S PROPERTY, AS WELL AS THE EXISTENCE OF APPLICABLE LAWS, RULES AND REGULATIONS GOVERNING WORK WITH, AND DISPOSAL OF, SUCH MATERIALS WITH WHICH IT MUST COMPLY. THE UNDERSIGNED ALSO WARRANTS THAT HE OR SHE HAS THE AUTHORITY TO SIGN ON BEHALF OF AND BIND THE CONTRACTOR.

Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	

THE UNDERSIGNED HEREBY ACKNOWLEDGES, UNDER PENALTY OF PERJURY, THAT HE OR SHE HAS RECEIVED NOTIFICATION OF POTENTIAL LEAD-BASED MATERIALS ON THE OWNER'S PROPERTY, AS WELL AS THE EXISTENCE OF APPLICABLE LAWS, RULES AND REGULATIONS GOVERNING WORK WITH, AND DISPOSAL OF, SUCH MATERIALS WITH WHICH IT MUST COMPLY. THE UNDERSIGNED ALSO WARRANTS THAT HE OR SHE HAS THE AUTHORITY TO SIGN ON BEHALF OF AND BIND THE CONTRACTOR. THE OWNER MAY REQUIRE PROOF OF SUCH AUTHORITY.

Date:	
Proper Name of Bidde	r:
Signature:	
Print Name:	
Title:	

END OF DOCUMENT

DOCUMENT 00 93 50

IMPORTED MATERIALS CERTIFICATION

PROJECT/CONTRACT NO.: Bid #B-021-2022-23 PIEDMONT MIDDLE SCHOOL BLDG. L DEMOLITION

This form shall be executed by the Contractor and by all entities that, in any way, provide or deliver and/or supply any soils, aggregate, or related materials ("Fill") to the Project Site. All Fill shall satisfy all requirements of any environmental review of the Project performed pursuant to the statutes and guidelines of the California Environmental Quality Act, section 21000 et seq. of the Public Resources Code ("CEQA"), and all requirements of section 17210 et seq. of the Education Code, including requirements for a Phase I environmental assessment acceptable to the State of California Department of Education and Department of Toxic Substances Control.

To the furthest extent permitted by California law, Contractor shall defend, indemnify, and hold harmless the District, its agents, representatives, officers, consultants, employees, trustees, and volunteers pursuant to the indemnification provisions in the Contract Documents for, without limitation, any claim(s) connected with providing, delivering, and/or supplying Fill.

Certification of:	Delivery Firm/Transporter	□ Supplier	□ Manufacturer
	□ Wholesaler	□ Broker	
	Distributor	Other	
Type of Entity	□ Corporation	General Partnership	
	□ Limited Partnership	□ Limited Liability Co	ompany
	Sole Proprietorship	Other	
Name of firm ("Fi	rm"):		
Mailing address: _			
Addresses of brand	ch office used for this Project:		
If subsidiary, name	e and address of parent company:		

By my signature below, I hereby certify that I am aware of section 25260 of the Health and Safety Code and the sections referenced therein regarding the definition of hazardous material. I further certify on behalf of the Firm that all soils, aggregates, or related materials provided, delivered, and/or supplied or that will be provided, delivered, and/or supplied by this Firm to the Project Site are free of any and all hazardous material as defined in section 25260 of the Health and Safety Code. I further certify that I am authorized to make this certification on behalf of the Firm.

=

Date:	
Proper Name of Contractor:	
Signature:	
Print Name:	
Title:	
Title:	

END OF DOCUMENT

11/13/13

SECTION 01 10 00 SUMMARY

PART 1 GENERAL

1.1 PROJECT

- A. Project Name: PIEDMONT MIDDLE SCHOOL BLDG. L DEMOLITION
- B. Owner's Name: Berryessa Union School District.
- C. Architect's Name: McKim Design Group
- D. The Project consists of the demolition of the existing classroom building "L" in its entirety to include the foundation, disconnection of all utilities with the exception of the main electrical distribution panel tied to the building. This will have to be braced and secured, so that PG&E can disconnect the service. Demolition of the existing chain link fencing and baseball back stop is included as well.

1.2 RELATED SECTIONS

- A. Contract Type: A single prime contract based on a Stipulated Price as described in Document 00 5200 Agreement Form
- 1.3 CONTRACT DESCRIPTION
 - A. See section 01 10 12 for Bid Division Descriptions
- 1.4 DESCRIPTION OF ALTERATIONS WORK
 - A. Scope of alterations work is shown on drawings and specification by McKim Design Group.
 - B. **Bid #B-02-2022-23** Work in the Contract comprises: of the demolition and disposal of the building in its entirety. The disconnection and capping of all utilities, the removal of chain link fencing, asphalt paving, and baseball backstop. The bracing of the existing electrical main distribution panel connected to the building, so that PG&E can disconnect the service at a later date. Contractor shall establish a rough grade for the future gymnasium building per plan elevations.

1.5 OWNER OCCUPANCY

- A. Owner intends to occupy the entire Project upon Substantial Completion.
- B. Owner intends to occupy all buildings at the end of project.
- C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

D. Schedule the Work to accommodate Owner occupancy.

Start Construction: September 26, 2022 End Construction: October 26, 2022

E. Work by Others:

1) Project Number: B-01-2022-23: Underground Conduit Raceway for Power and Low Voltage to support future gymnasium building.

1.6 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Provide access to and from site as required by law and by Owner.
 - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.
- C. Utility Outages and Shutdown.
 - 1. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days' notice to Owner and authorities having jurisdiction.
 - 2. Limit shutdown of utility services to minimal hours, arranged at least 48 hours in advance with Owner.
 - 3. Prevent accidental disruption of utility services to other facilities.

END OF SECTION

DOCUMENT 01 10 12

BID DIVISION DESCRIPTIONS

PIEDMONT MIDDLE SCHOOL BLDG. L DEMOLITION.

PART 1 - GENERAL

1.1 Section Includes

A. Descriptions of Bid Packages.

1.2 Related Sections

A. Section 01 10 00 - Summary of Work.

1.3 DESCRIPTIONS OF BID DIVISIONS

A. For the purpose of clarity, the scope of work for each Bid Package has been divided into three categories: "INCLUDED", "ALSO INCLUDED", and "EXCLUDED".

1. Items listed under "INCLUDED" are the standard and/or "conventional" work scope of each Bid Package.

2. Information provided under "ALSO INCLUDED" points out some items which may be considered less obvious or "unconventional," but which are included in the work scope of a particular Bid Package. (Information under this heading is not always necessary to delineate a Bid Package.)

3. Information provided under the heading "EXCLUDED" is for the purpose of indicating beginning and termination points, and/or to provide an understanding of fringe involvements included in Bid Packages. (Information under this heading is not always necessary to delineate a Bid Package.)

B. Bid Packages are the categories of Work into which the Project will be divided for bidding and construction. Bid Packages should not be confused with Specification Sections.

1. Bid Package Descriptions (Section 01 10 12) are written descriptions of the Scope of the Work included in each of the Bid Packages.

2. Bid Package Descriptions have been written to clearly define each Bid Package. Contractors are encouraged to request information or clarification by calling the Construction Manager. The Owner will not be responsible for a Contractor's incorrect interpretation of the Descriptions.

3. Although each Bid Package involves a

standard segment of "conventional" trade contracting, multiple contract project delivery requires that adjustments be made to permit the completion of each Bid Package as a separate segment of construction. Each Contractor shall carefully review the total scope of responsibilities with respect to the Work of the Bid Package(s), and shall provide for the total scope in Contractor's Proposal.

- 4. Each Contractor shall become familiar with the work scopes of all other Bid Packages which interface with the Bid Package of which a proposal is being submitted. Each Contractor shall consider that the work of Contractor's Bid Package(s) may follow the work of another Bid Package, that other Contractors may perform work after the work of Contractor's Bid Package(s), and that other Contractors may work simultaneously with the work of Contractor's Bid Package(s). Each Contractor shall include provisions for such sequencing and scheduling, and for cooperation and coordination with such other Contractors in the Bid Proposal.
- 5. Nothing contained in the Bidding Documents, including the Bid Division descriptions, shall be construed by Bidders as an assignment of work to any construction industry trade. Each Bidder is responsible for Bidder's own work assignments within the Bid Package.

1.4 BID PACKAGE DESCRIPTIONS

A. **BID DIVISION: BUILDING L DEMOLITION AT PIEDMONT MIDDLE SCHOOL – B-02-2022-23**

1. Included: Work in the Contract comprises: of the demolition and disposal of the building in its entirety. The disconnection and capping of all utilities, the removal of chain link fencing, asphalt paving, and baseball backstop. The bracing of the existing electrical main distribution panel connected to the building, so that PG&E can disconnect the service at a later date. Contractor shall establish a rough grade for the future gymnasium building per plan elevations.

Appendix A Abatement Scope of Work

Also included but not limited to:

Due to compressed schedule of this project, contractor will be required to submit all submittals (for this bid division) to CM/Architect 10 days after receipt of Notice to Proceed. The Contractor is required to provide an underground utility survey performed by a licensed underground utility locator at the contractor's expense. The locator's report must be submitted to the Owner and Construction Manager for review prior to beginning any demolition, excavation or grading operations. All construction and demolition included in these Bid Divisions shall be in accordance with all bid documents, all organizations having jurisdiction, and all other, applicable design criteria.

Provide As-built drawings (for this bid package) showing original contract, change order work, RFI'S and any other additional work.

Provide selective demolition and cutting of structural elements.

Provide all utility shut downs and disconnections.

Provide continuous clean up.

Provide coordination with all other Bid Division Contractors, District Maintenance staff and District vendors.

Provide labor for the daily securing of the site at quitting time.

Provide saw cutting and demolition of paving in the exterior of the buildings.

Provide rough grade per design

Includes all SWIIP provisions required by contract documents and the City of San Jose.

Includes all signage, safety provisions, required to complete all connections.

Includes all excavation, excavation shoring, plating, etc. and all required safety provisions required by all entities having jurisdiction.

Excluded:

NA.

END OF DOCUMENT

SECTION 01 20 00 PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

1.2 RELATED REQUIREMENTS

- A. Document 00 50 00 Contracting Forms and Supplements: Forms to be used.
- B. Document 00 52 00 Agreement Form: Contract Sum, retainages, payment period, monetary values of unit prices.
- C. Document 00 72 00 General Conditions and Document 00 73 00 Supplementary Conditions: Additional requirements for progress payments, final payment, changes in the Work.
- D. Document 00 73 00 Supplementary Conditions: Percentage allowances for Contractor's overhead and profit.
- E. Section 01 2100 Allowances: Payment procedures relating to allowances.
- F. Section 01 2200 Unit Prices: Monetary values of unit prices, payment and modification procedures relating to unit prices.

1.3 SCHEDULE OF VALUES

- A. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect and Construction Manager for approval.
- B. Forms filled out by hand will not be accepted.
- C. Submit Schedule of Values in duplicate within 10 days after date of the Notice of Award of the Contract. This date is per the District's General Conditions

Section 9.2.1.A by the District.

- D. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification Section. Identify site mobilization.
- E. Include in each line item, the amount of Allowances specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by the unit cost to achieve the total for the item.
- F. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- G. Revise schedule to list approved Change Orders, with each Application For Payment.

1.4 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. For each item, provide a column for listing each of the following:
 - 1. Item Number.
 - 2. Description of work.
 - 3. Scheduled Values.
 - 4. Previous Applications.
 - 5. Work in Place and Stored Materials under this Application.
 - 6. Authorized Change Orders.
 - 7. Total Completed and Stored to Date of Application.
 - 8. Percentage of Completion.
 - 9. Balance to Finish.
 - 10. Retainage.
- E. Execute certification by signature of authorized officer.

- F. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- G. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- H. Submit Four copies of each Application for Payment.
- I. Include the following with the application:
 - 1. Transmittal letter as specified for Submittals in Section 01 3000.
 - 2. Construction progress schedule, revised and current as specified in Section 01 3000.
 - 3. Partial release of liens from major Subcontractors and vendors.
 - 4. Affidavits attesting to off-site stored products.
 - 5. Conditional and Unconditional Waiver Releases.
- J. When Architect requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

1.5 MODIFICATION PROCEDURES

- A. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ a n d / o r subcontractors of changes to the Contract Documents.
- B. For required changes, Owner, Architect or Construction Manager will issue a CCD approved by DSA and signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
 - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change.
- C. Contractor may propose a change by submitting a request for change to Owner, Architect or Construction Manager describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01 6000.

- D. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
 - 1. For change requested by Owner, Architect or Construction Manager for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
 - 2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Owner, Architect or Construction Manager.
 - 3. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.
 - 4. For change ordered by Owner, Architect or Construction Manager without a quotation from Contractor, the amount will be determined by Architect based on the Contractor's substantiation of costs as specified for Time and Material work.
- E. Substantiation of Costs: Provide full information required for evaluation.
 - 1. On request, provide the following data:
 - a. Quantities of products, labor, and equipment.
 - b. Taxes, insurance, and bonds.
 - c. Overhead and profit.
 - d. Justification for any change in Contract Time.
 - e. Credit for deletions from Contract, similarly documented.
 - 2. Support each claim for additional costs with additional information:
 - a. Origin and date of claim.
 - b. Dates and times work was performed, and by whom.
 - c. Time records and wage rates paid.
 - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
 - 3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.

- F. Execution of Change Orders: Owner, Architect or Construction Manager will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- G. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- H. Promptly revise progress schedules to reflect any change in Contract Time, revise subschedules to adjust times for other items of work affected by the change, and resubmit.
- I. Promptly enter changes in Project Record Documents.

1.06 APPLICATION FOR FINAL PAYMENT

- J. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- K. Application for Final Payment will not be considered until the following have been accomplished:
 - 1. All closeout procedures specified in Section 01 7000 have been accomplished and the project is Certified by DSA.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 21 00 ALLOWANCES

PART 1 GENERAL

- 1.1 SECTION INCLUDES
- 1.2 RELATED REQUIREMENTS
 - A. Section 01 2000 Price and Payment Procedures: Additional payment and modification procedures.
- 1.3 CONTINGENCY ALLOWANCE
 - A. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from this Contingency Allowance.
 - B. Funds will be drawn from the Contingency Allowance only by Change Order.
 - C. Labor quantities MUST be verified by the I.O.R. prior to payment.
 - D. At closeout of Contract, funds remaining in Contingency Allowance will be credited to Owner by Change Order.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 22 00 UNIT PRICES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. List of unit prices, for use in preparing Bids.
- B. Measurement and payment criteria applicable to Work performed under a unit price payment method.

1.2 RELATED REQUIREMENTS

- A. Document 00 21 13 Instructions to Bidders: Instructions for preparation of pricing for Unit Prices.
- B. Document 00 43 22 Unit Prices Form: List of Unit Prices as supplement to Bid Form.
- C. Section 01 2000 Price and Payment Procedures: Additional payment and modification procedures.

1.3 COSTS INCLUDED

A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

1.4 UNIT QUANTITIES SPECIFIED

A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements of actual Work will determine the payment amount.

1.5 MEASUREMENT OF QUANTITIES

- A. Measurement methods delineated in the individual specification sections complement the criteria of this section. In the event of conflict, the requirements of the individual specification section govern.
- B. Take all measurements and compute quantities. Measurements and quantities will be verified by Architect, Owner or Construction Manager.
- C. Assist by providing necessary equipment, workers, and survey personnel as required.

- D. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
- E. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
- F. Measurement by Area: Measured by square dimension using mean length and width or radius.
- G. Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.
- H. Stipulated Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as a completed item or unit of the Work.
- I. Perform surveys required to determine quantities, including control surveys to establish measurement reference lines. Notify Architect prior to starting work.
- J. Contractor's Engineer Responsibilities: Sign surveyor's field notes or keep duplicate field notes, calculate and certify quantities for payment purposes.

1.6 PAYMENT

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Architect, multiplied by the unit price.
- B. Payment will not be made for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from the transporting vehicle.
 - 4. Products placed beyond the lines and levels of the required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected Products.

1.7 DEFECT ASSESSMENT

A. Replace Work, or portions of the Work, not conforming to specified requirements.

- B. If, in the opinion of Architect, Owner or Construction Manager it is not practical to remove and replace the Work, Architect will direct one of the following remedies:
 - 1. The defective Work may remain, but the unit price will be adjusted to a new unit price at the discretion of Architect, Owner or Construction Manager.
 - 2. The defective Work will be partially repaired to the instructions of the Architect, and the unit price will be adjusted to a new unit price at the discretion of Architect.
- C. The individual specification sections may modify these options or may identify a specific formula or percentage price reduction.
- D. The authority of Architect to assess the defect and identify payment adjustment is final.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

DOCUMENT 01 23 00

ALTERNATES AND UNIT PRICING

PART I – ALTERNATES

1.01 RELATED DOCUMENTS AND PROVISIONS

- A. All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:
 - 1. General Conditions;
 - 2. Special Conditions;
 - 3. Bid Form and Proposal;
 - 4. Instruction to Bidders.

1.02 DESCRIPTION

A. The following items of work include proposed modifications to, substitutions for, to and/or deletions from the various parts of the Work specified in other Documents of the Specifications. The acceptance or rejection of any of the alternates is strictly at the option of the District subject to District's acceptance of Contractor's stated prices contained in this Proposal.

1.03 GENERAL

A. Where an item is omitted, or scope of Work is decreased, all Work pertaining to the item whether specifically stated or not, shall be omitted and where an items is added or modified or where scope of Work is increased, all Work pertaining to that required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

1.04 BASE BID

A. The Base Bid includes all work required to construct the Project completely and in accordance with the Contract Documents.

1.05 ALTERNATES

A. The below Alternate descriptions are general in nature and for reference purposes only. The Contract Documents, including, without limitation, the Drawings and Specifications, must be referred to for the complete scope of Work.

PART 2 - UNIT PRICING

2.01 GENERAL

A. Contractor shall completely state all required figures based on Unit Prices listed below. Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in

accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

2.02 UNIT PRICES

A. Furnish unit prices for each of the named items included on the bid form on a square foot, lineal foot, or per each basis, as applies. Unit prices shall include all labor, materials, services, profit, overhead, insurance (excluding costs of insurance covered by OCIP), bonds, taxes, and all other incidental costs of Contractor, subcontractors, and supplier(s).

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

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DOCUMENT 01 25 00

SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Substitutions For Specified Items;
- B. Special Conditions.

1.02 SUBSTITUTIONS OF MATERIALS AND EQUIPMENT

- A. Catalog numbers and specific brands or trade names followed by the designation "or equal" are used in conjunction with material and equipment required by the Specifications to establish the standards of quality, utility, and appearance required. Substitutions which are equal in quality, utility, and appearance to those specified may be reviewed subject to the provisions of the General Conditions.
- B. Wherever more than one manufacturer's product is specified, the first-named product is the basis for the design used in the work and the use of alternativenamed manufacturers' products or substitutes may require modifications in that design. If such alternatives are proposed by Contractor and are approved by the District and-or the Architect, Contractor shall assume all costs required to make necessary revisions and modifications of the design resulting from the substitutions requested by the Contractor.
- C. When materials and equipment are specified by first manufacturer's name and product number, second manufacturer's name and "or approved equal," supporting data for the second product, if proposed by Contractor, shall be submitted in accordance with the requirements for substitutions.
- D. If the District and-or Architect, in reviewing proposed substitute materials and equipment, requires revisions or corrections to be made to previously accepted Shop Drawings and supplemental supporting data to be resubmitted, Contractor shall promptly do so. If any proposed substitution is judged by the District and-or Architect to be unacceptable, the specified material or equipment shall be provided.

- E. Samples may be required. Tests required by the District and-or Architect for the determination of quality and utility shall be made at the expense of Contractor, with acceptance of the test procedure first given by the District.
- F. In reviewing the supporting data submitted for substitutions, the District andor Architect will use for purposes of comparison all the characteristics of the specified material or equipment as they appear in the manufacturer's published data even though all the characteristics may not have been particularly mentioned in the Contract Documents. If more than two (2) submissions of supporting data are required, the cost of reviewing the additional supporting data shall be borne by Contractor, and the District will deduct the costs from the Contract Price.

1.03 SUBMITTALS

- A. Substitution Request Submittal: Requests for substitution will be considered if received as noted in the contract documents. Requests not received within the timeline established may be considered or rejected at the discretion of the Architect.
 - 1. Submit 3 copies of each request for substitution for consideration. Submit requests in the form and in accordance with procedures required for Change Order proposals.
 - 2. Identify the product, or the fabrication or installation method to be replaced in each request. Include related Specification Document and Drawing numbers. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:
 - a. Product Date, including Drawings and descriptions, or products, fabrication and installation procedures.
 - b. Samples, where applicable or requested.
 - c. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements such as size, weight, durability, performance and visual effect.
 - d. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Owner and separate Contractors that will become necessary to accommodate the proposed substitution.

- e. A statement indicating the substitution's effect on the Contractor's Construction Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
- f. Cost information, including a proposal of the net change, if any in the Contract Sum.
- g. Certification by the Contractor that the substitution proposed is equal-to or better in every significant respect to that required by the Contract Documents, and that it will perform adequately in the application indicated. Include the Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of the failure of the substitution to perform adequately.
- B. <u>Architect's Action</u>: Within one week of receipt of the request for substitution, the Architect will request additional information or documentation necessary for evaluation of the request. Within 2 weeks of receipt of the request, or one week of receipt of the additional information or documentation, whichever is later, the Architect will notify the Contractor of acceptance or rejection of the proposed substitution. If a decision on use of a proposed substitute cannot be made or obtained within the time allocated, use the product specified by name.

PART 2 – PRODUCTS

2.01 SUBSTITUTIONS

- A. Conditions: The Contractor's substitution request will be received and considered by the Architect when one or more of the following conditions are satisfied, as determined by the Architect; otherwise, requests will be returned without action except to record noncompliance with these requirements.
 - 1. Extensive revisions to Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of Contract Documents.
 - 3. The request is timely, fully documented and properly submitted.
 - 4. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
 - 5. The specified product or method of construction cannot be provided within the Contract Time. The request will not be considered if the

product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.

- 6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
- 7. A substantial advantage is offered the Owner, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities for the Owner may be required to bear. Additional responsibilities for the Owner may include additional compensation to the Architect for redesign and evaluation services, increased cost of other construction by the Owner or separate Contractors, and similar considerations.
- 8. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility.
- 9. The specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.
- 10. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.
- B. The Contractor's submittal and Architect's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval
- C. By making requests for substitutions based on Sub-paragraph above, the Contractor:
 - 1. Represents that the Contractor has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to the specified.
 - 2. Represents that the Contractor will provide the same warranty for the substitution that the Contractor would for the specified.
 - 3. Certifies that the cost data presented is complete and includes all related costs under this Contract except the Architect's redesign costs, and waives all claims for additional costs related to the substitution which subsequently becomes apparent.

- 4. Will coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be completed in all respects.
- D. If a proposed substitution requires investigation, testing or approval to determine its suitability for incorporation into the work, the testing of the proposed substitution shall be as determined by the Architect. The Contractor shall bear all cost of such investigations or test.
- E. All Substitutions that affect Structural Safety, Fire and Life Safety, Access Compliance or Energy (as applicable) shall be submitted to the Division of the State Architect for review and approval.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

11/13/13

SECTION 01 30 00 ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Electronic document submittal service.
- B. Preconstruction meeting.
- C. Site mobilization meeting.
- D. Progress meetings.
- E. Construction progress schedule.
- F. Submittals for review, information, and project closeout.
- G. Submittal procedures.

1.2 RELATED REQUIREMENTS

- A. Division 00 Procurement and Contracting Requirements
- B. Section 01 3216 Construction Progress Schedule: Form, content, and administration of schedules.
- C. Section 01 7000 Execution and Closeout Requirements: Additional coordination requirements.
- D. Section 01 7800 Closeout Submittals: Project record documents.

1.3 PROJECT COORDINATION

- A. Project Coordinator: Construction Manager.
- B. Cooperate with the Construction Manager in allocation of mobilization areas of site; staging, Contractor access, traffic, and parking facilities.
- C. Coordinate field engineering and layout work under instructions of the District, CM and Architect.
- D. Make the following types of submittals to Architect through the Construction Manager and I.O.R.:
 - 1. Requests for information.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Applications for payment and change order requests.

- 6. Progress schedules.
- 7. Closeout submittals.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF) format and transmitted via email or an Internet-based submittal service as determined by the CM that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.
 - 1. Besides submittals for review, information, and closeout, this procedure applies to requests for information (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.
 - 2. []ll parties are required to use this service.
 - 3. It is Contractor's responsibility to submit documents in PDF format.
 - 4. Subcontractors, suppliers, and Architect's consultants will be permitted to use the service at no extra charge.
 - 5. Users of the service need an email address, Internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, www.adobe.com, or Bluebeam PDF Revu, www.bluebeam.com), unless such software capability is provided by the service provider.
 - 6. Paper document transmittals will be reviewed if submitted with samples or other similar items only; emailed PDF documents will not be reviewed if an internet service is agreed to.
 - 7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.
- B. Submittal Service: The selected service is:
 - 1. To be approved by the Owner.
- C. Training: One, one-hour, web-based training session will be arranged for all participants, with representatives of Architect and Contractor participating; further training is the responsibility of the user of the service.
 - 1. Representatives of Owner and Construction Manager will be included in this training as necessary.

D. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.

3.2 CONTRACTOR MEETINGS

- A. Conduct trade preconstruction meeting with each trade to review scope and schedule prior to start of work.
- B. Conduct coordination meetings with multiple trades prior to start of work in cases where more than two trades are working simultaneously in the same work area, or where two or more trades' work intersects, or impacts the other.

3.3 PRECONSTRUCTION MEETING

- A. Owner will schedule a meeting after Notice of Award.
- B. Project Coordinator will schedule a meeting after Notice of Award.
- C. Attendance Required:
 - 1. Owner.
 - 2. Architect.
 - 3. Contractor.
 - 4. Construction Manager.
 - 5. [].
- D. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties to the Contract, Owner, Construction Manager and Architect.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
 - 8. Review site logistics plans, site safety plans and construction sequencing.
- E. The Construction Manager will record minutes and distribute copies within 48 hours after meeting to participants.[]

3.4 SITE MOBILIZATION MEETING

- A. Construction Manager will schedule meeting at the Project site prior to [] occupancy.
- B. Attendance Required:
 - 1. Contractor.
 - 2. Owner.
 - 3. I.O.R..
- C. Agenda:
 - 1. Use of premises by Owner and Contractor.
 - 2. Owner's requirements and occupancy prior to completion.
 - 3. Construction facilities and controls provided by Owner.
 - 4. Temporary utilities provided by Owner.
 - 5. Survey and building layout.
 - 6. Security and housekeeping procedures.
 - 7. Schedules.
 - 8. Application for payment procedures.
 - 9. Procedures for testing.
 - 10. Procedures for maintaining record documents.
 - 11. Requirements for start-up of equipment.
 - 12. Inspection and acceptance of equipment put into service during construction period.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.5 PROGRESS MEETINGS

- A. Construction Manager will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- B. Attendance Required: Job superintendent, Owner, CM, Architect, I.O.R., subcontractors as appropriate to agenda topics for each meeting.
- C. Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work progress and three week look-ahead against the original schedule submitted by the contractor prior to initiation of work.
 - 3. Field observations, issues, and decisions.

- 4. Identification of issues that impede, or will impede, planned progress including open RFIs.
- 5. Review of submittals schedule and status of submittals.
- 6. Maintenance of progress schedule.
- 7. Corrective measures to regain projected schedules.
- 8. Planned progress during succeeding work period.
- 9. Maintenance of quality and work standards.
- 10. Effect of proposed changes on progress schedule and coordination.
- 11. Other business relating to Work.
- D. Record minutes and distribute copies within 48 hours after meeting to participants.

3.6 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Samples for selection.
- B. Submit to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below.

3.7 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.
 - 2. Certificates upon completion of installation.
 - 3. Test reports.
 - 4. Inspection reports.
 - 5. Manufacturer's instructions.
 - 6. Manufacturer's field reports.
 - 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator and to Owner.

3.8 SUBMITTALS FOR PROJECT CLOSEOUT

- A. When the following are specified in individual sections, submit them at project closeout:
 - 1. Project record documents with field marked as-built drawings.
 - 2. Operation and maintenance data.
 - 3. Warranties.
 - 4. Bonds.
 - 5. Training Manuals.
 - 6. Other types as indicated.
- B. Submit for Owner's benefit during and after project completion.

3.9 NUMBER OF COPIES OF SUBMITTALS

- A. Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Upon review and acceptance of submittals, provide two hard copies, one to the Architect and one to the Owner.
- C. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
 - 1. After review, produce duplicates.
 - 2. Retained samples will not be returned to Contractor unless specifically so stated.

3.10 SUBMITTAL PROCEDURES

- A. Shop Drawing Procedures:
 - 1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting the Contract Documents and coordinating related Work.
 - 2. Use of the Construction drawings for shop drawing production will only be allowed if the contractor and specific sub-contractor submit a signed release of liability statement provided by the Architect. [].
 - 3. Generic, non-project specific information submitted as shop drawings do not meet the requirements for shop drawings.
- B. Transmit each submittal with a copy of approved submittal form.
- C. Submit complete list of anticipated submittals no later than 10 days after notice to proceed[].
- D. Submittals must be submitted and review completed and accepted prior to the start of work.
- E. Submittals are to be complete for all items in each specification section. Partial

submittals may not be reviewed.

- F. Transmit each submittal with a transmittal.
- G. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- H. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- I. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the Work and Contract Documents and date of review.
- J. Deliver submittals to Architect via email or Contractor's website. Provide email notification when submittals are loaded to website.
- K. Schedule submittals to expedite the Project, and coordinate submission of related items.
- L. For each submittal for review, allow 10 business days excluding delivery time to and from the Contractor.
- M. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work. Describe proposed substitutions or equals on the submittal cover. Accepting a submittal that does not identify deviations from the contract does not constitute acceptance of the deviations.
- N. Provide space for Contractor and Architect review stamps.
- O. When revised for resubmission, identify all changes made since previous submission.
- P. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- Q. Submittals not requested will not be recognized or processed.

END OF SECTION

SECTION 01 32 16 CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Preliminary schedule.
- B. Construction progress schedule, bar chart type.

1.2 RELATED SECTIONS

A. Section 01 3000 - Administrative Requirements

1.3 REFERENCES

A. AGC (CPSM) - Construction Planning and Scheduling Manual; Associated General Contractors of America; 2004.

1.4 SUBMITTALS

- A. Within 10 days after notice to proceed, submit complete, detailed construction schedule.
 - 1. This project will be built in conjunction and concurrently with other projects. Integrate schedule for this project with other projects being performed.
 - 2. Schedules to be maintained in Primavera, P6 Project Planner platform, or equal.
 - 3. Submit one copies of the schedule in PDF and digital format.
- B. Submit updated schedule with each Application for Payment.

1.5 SCHEDULE FORMAT

A. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.

PART 2 PRODUCTS

2.1 Software: Primavera P6 Project Planner,

or MS Projects.

PART 3 EXECUTION

3.1 NETWORK ANALYSIS

- A. Prepare network analysis diagrams and supporting mathematical analyses using the Critical Path Method.
- B. Illustrate order and interdependence of activities and sequence of work; how start of a given activity depends on completion of preceding activities, and how completion of the activity may restrain start of subsequent activities.
- C. Mathematical Analysis: Tabulate each activity of detailed network diagrams, using calendar dates, and identify for each activity:
 - 1. Preceding and following event numbers.
 - 2. Activity description.
 - 3. Estimated duration of activity, in maximum 15 day intervals.
 - 4. Earliest start date.
 - 5. Earliest finish date.
 - 6. Actual start date.
 - 7. Actual finish date.
 - 8. Latest start date.
 - 9. Latest finish date.
 - 10. Total and free; float time shall accrue to Owner and to Owner's benefit.

3.2 REVIEW AND EVALUATION OF SCHEDULE

- A. Participate in joint review and evaluation of schedule with Architect at each submittal.
- B. Evaluate project status to determine work behind schedule and work ahead of schedule.
- C. After review, revise as necessary as result of review, and resubmit within two business days.

3.3 UPDATING SCHEDULE

A. Maintain schedules to record actual start and finish dates of completed activities.

- B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
- C. Annotate diagrams to graphically depict current status of Work.
- D. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- E. Indicate changes required to maintain Date of Substantial Completion.

3.4 UPDATE INTERVALS

- A. Provide monthly updates from notice to proceed to start of construction.
- B. Provide updates every other week during construction.

3.5 DISTRIBUTION OF SCHEDULE

A. Distribute copies of updated schedules to Contractor's project site file, Architect, and Owner.

END OF SECTION

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. References and standards.
- B. Quality assurance submittals.
- C. Control of installation.
- D. Tolerances.
- E. Testing and inspection services.

1.2 RELATED REQUIREMENTS

A. Section 01 3000 - Administrative Requirements: Submittal procedures.

1.3 REFERENCE STANDARDS

A. ASTM C1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2013a.

1.4 SUBMITTALS

- A. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
 - 1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- B. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.5 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.

- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

PART 2 PRODUCTS - NOT

USED PART 3 EXECUTION

3.1 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.2 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.
- 3.3 TESTING AND INSPECTION

Project Inspector to be approved by DSA and employed by the District.

Testing laboratory is to be employed by owner.

- A. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.
- B. Contractor Responsibilities:
 - 1. Make available to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
 - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
 - 3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
 - 4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
 - 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
 - 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- C. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Architect.
- D. Re-testing, re-inspection, stand-by time, and other cost or time impacts required because of non-conformance to specified requirements shall be paid for by the Contractor.

3.4 DIVISION OF THE STATE ARCHITECT TESTING AND INSPECTION FORM

- A. Architect shall provide to Contactor DSA Testing and Inspection Form approved for the project and Contractor to cooperate with the testing agency in performing the tests indicated.
- 3.5 DEFECT ASSESSMENT
 - A. Replace Work or portions of the Work not conforming to specified requirements.

B. If, in the opinion of Architect, it is not practical to remove and replace the Work, Architect will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 01 50 00 TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary telecommunications services.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Security requirements.
- F. Vehicular access and parking.
- G. Waste removal facilities and services.
- H. Field offices.

1.2 TEMPORARY UTILITIES

- A. Contractor may use Owner's existing utilities on the site at no charge.
- B. Contractor to provide equipment and devices to properly tap into existing utilities or to increase capacity of utilities if Owner's capacity is not adequate.
 - 1. Electrical power and metering, consisting of connection to existing facilities.
 - 2. Water supply, consisting of connection to existing facilities.
- C. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.3 TELECOMMUNICATIONS SERVICES

- A. Provide, maintain, and pay for telecommunications services to the Project Manager and Project Superintendent.
- B. Telecommunications services shall include:
 - 1. Cell phone lines: One line, minimum; per person.

- 2. Internet Connections: Minimum of one; DSL modem or faster.
- 3. Email: Account/address reserved for project use for each person.

1.4 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.

1.5 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.6 FENCING

- A. Construction: Commercial grade chain link fence.
- B. Areas of work including storage and lay down areas are to be separated from staff and students by fencing.
- C. Provide 6 foot (1.8 m) high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.7 EXTERIOR ENCLOSURES

A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.8 INTERIOR ENCLOSURES

A. Provide temporary partitions and ceilings as indicated to separate work areas from Owneroccupied areas, to prevent penetration of dust and moisture into Owner-occupied areas, and to prevent damage to existing materials and equipment. B. Construction: Framing and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces.

1.9 SECURITY

A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft. Do not disable Owner's security system without notification.

1.10 VEHICULAR ACCESS AND PARKING

- A. Coordinate access and haul routes with governing authorities and Owner.
- B. Provide and maintain access to fire hydrants, free of obstructions.
- C. Limited parking is available on site. Make provisions for contractor parking with the school's staff and the Construction Manager.
- D. Manage trade workers parking areas ensuring workers only parked in approved areas.

1.11 WASTE REMOVAL

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site weekly.
- C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.

1.12 FIELD OFFICES

A. Field office is not required.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

DOCUMENT 01 60 00

MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Purchase of Materials and Equipment;
- B. Special Conditions;
- C. Imported Materials Certification.

1.02 MATERIAL AND EQUIPMENT

- A. Only items approved by the District and-or Architect shall be used.
- B. Contractor shall submit lists of products and other product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

1.03 MATERIAL AND EQUIPMENT COLORS

- A. The District and-or Architect will provide a schedule of colors.
- B. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.
- C. Contractor shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Contractor shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer.

- B. Contractor shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.
- C. Contractor shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.
- D. Materials are not acceptable that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled.
- E. Contractor shall store material so as to cause no obstructions of sidewalks, roadways, and underground services. Contractor shall protect material and equipment furnished under Contract.
- F. Contractor may store materials on Site with prior written approval by the District, all material shall remain under Contractor's control and Contractor shall remain liable for any damage to the materials. Should the Project Site not have storage area available, the Contractor shall provide for off-site storage at no cost to District.
- G. When any room in Project is used as a shop or storeroom, the Contractor shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by District.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers listed in various sections of Contract Documents are names of those manufacturers that are believed to be capable of supplying one or more of items specified therein.
- B. The listing of a manufacturer does not imply that every product of that manufacturer is acceptable as meeting the requirements of the Contract Documents.

2.02 FACILITIES AND EQUIPMENT

A. Contractor shall provide, install, maintain, and operate a complete and adequate facility for handling, the execution, disposal, and distribution of material and equipment as required for proper and timely performance of Work connected with Contract.

2.03 MATERIAL REFERENCE STANDARDS

A. Where material is specified solely by reference to "standard specifications" and if requested by District, Contractor shall submit for review data on actual material proposed to be incorporated into Work of Contract listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

PART 3 - EXECUTION

3.01 WORKMANSHIP

- A. Where not more specifically described in any other Contract Documents, workmanship shall conform to methods and operations of best standards and accepted practices of trade or trades involved and shall include items of fabrication, construction, or installation regularly furnished or required for completion (including finish and for successful operation, as intended).
- B. Work shall be executed by tradepersons skilled in their respective lines of Work. When completed, parts shall have been durably and substantially built and present a neat appearance.

3.02 COORDINATION

- A. Contractor shall coordinate installation of Work so as to not interfere with installation of others. Adjustment or rework because of Contractor's failure to coordinate will be at no additional cost to District.
- B. Contractor shall examine in-place work for readiness, completeness, fitness to be concealed or to receive other work, and in compliance with Contract Documents. Concealing or covering Work constitutes acceptance of additional cost which will result should in-place Work be found unsuitable for receiving other Work or otherwise deviating from the requirements of the Contract Documents.

3.03 COMPLETENESS

A. Contractor shall provide all portions of the Work, unless clearly stated otherwise, installed complete and operational with all elements, accessories, anchorages, utility connections, etc., in manner to assure well-balanced performance, in accordance with manufacturer's recommendations and by Contract Documents. For example, electric water coolers require water, electricity, and drain services; roof drains require drain system; sinks fit within countertop, etc. Terms such as "installed complete," "operable condition," "for use intended," "connected to all utilities," "terminate with proper cap," "adequately anchored," "patch and refinish," "to match similar,"

should be assumed to apply in all cases, except where completeness of functional or operable condition is specifically stated as not required.

3.04 APPROVED INSTALLER OR APPLICATOR

A. Installation by a manufacturer's approved installer or applicator is an understood part of Specifications and only approved installer or applicator is to provide on-site Work where specified manufacturer has on-going program of approving (i.e. certifying, bonding, re-warranting) installers or applicators. Newly established relationships between a manufacturer and an installer or applicator who does not have other approved applicator work in progress or completed is not approved for this Project.

3.05 MANUFACTURER'S RECOMMENDATIONS

A. All installations shall be in accordance with manufacturer's published recommendations and specific written directions of manufacturer's representative. Should Contract Documents differ from recommendations of manufacturer or directions of his representative, Contractor shall analyze differences, make recommendations to the District and the Architect in writing, and shall not proceed until interpretation or clarification has been issued by the District and-or the Architect.

END OF DOCUMENT

11/13/13

SECTION 01 60 05 PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. General product requirements.
- B. Transportation, handling, storage and protection.
- C. Product option requirements.
- D. Substitution limitations and procedures.
- E. Maintenance materials, including extra materials, spare parts, tools, and software.

1.2 RELATED REQUIREMENTS

- A. Section 01 4000 Quality Requirements: Product quality monitoring.
- 1.3 REFERENCE STANDARDS
 - A. NFPA 70 National Electrical Code; National Fire Protection Association; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

1.4 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data and installation instructions. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
 - 1. Detail structural assemblies and structural connections to the building components.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 PRODUCTS

2.1 NEW PRODUCTS

- A. Provide new products only unless noted otherwise on the Drawings.
- B. Where all other criteria are met, Contractor shall give preference to products that:
 - 1. If used on interior, have lower emissions.
 - 2. If wet-applied, have lower VOC content.
 - 3. Have a published GreenScreen Chemical Hazard Analysis.

2.2 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers with a Provision for equal: Equal products are acceptable with Architect's or Owner's review.
- C. If specified product does not come with required options, select alternate manufacturer or customize product to suit.

2.3 MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to a site selected by the Owner within the District's boundaries; obtain receipt prior to final payment. Prior to delivery, coordinate delivery with Owner.

PART 3 EXECUTION

- 3.1 SUBSTITUTION PROCEDURES
 - A. Instructions to Bidders specify time restrictions for submitting requests for substitutions.
 - B. Architect will consider requests for substitutions only within 15 days after date established in Notice to Proceed.
 - C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Organize in side-by-side tabular format with specified product attributes in the left column and proposed substitution in the right column.
 - D. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the substitution as for the specified product.
 - 3. The installer is qualified or certified to install the proposed substitution.

- 4. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
- 5. Waives claims for additional costs or time extension that may subsequently become apparent.
- 6. Credit cost savings for substitutions to Owner.
- E. Substitution Submittal Procedure:
 - 1. Submit one copy of request for substitution for consideration. Limit each request to one proposed substitution.
 - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - 3. The Architect will notify Contractor in writing of decision to accept or reject request.
 - 4. If the product is accepted as equal, but additional information indicates that the product is not equal in a significant quality or property, the product will be removed and replaced at no cost to the Owner or a credit will be passed on to the Owner for diminished quality.

3.2 TRANSPORTATION AND HANDLING

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments prior to off-loading and stockpiling to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.
- G. Provide traffic control and flagmen for deliveries.

3.3 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.

- D. Store sensitive and absorbent products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground and wrap in plastic.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

DOCUMENT 01 61 00

DELIVERY, STORAGE AND HANDLING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Access, Conditions and Requirements;
- B. Special Conditions.

1.02 PRODUCTS

- A. Products are as defined in the General Conditions.
- B. Contractor shall not use and-or reuse materials and-or equipment removed from existing Premises, except as specifically permitted by the Contract Documents.
- C. Contractor shall provide interchangeable components of the same manufacturer, for similar components.

1.03 TRANSPORTATION AND HANDLING

- A. Contractor shall transport and handle Products in accordance with manufacturer's instructions.
- B. Contractor shall promptly inspect shipments to confirm that Products comply with requirements, quantities are correct, and products are undamaged.
- C. Contractor shall provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.

1.04 STORAGE AND PROTECTION

A. Contractor shall store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Contractor shall store sensitive products in weather-tight, climate controlled enclosures.

- B. For exterior storage of fabricated Products, Contractor shall place on sloped supports, above ground.
- C. Contractor shall provide off-site storage and protection when Site does not permit on-site storage or protection.
- D. Contractor shall cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
- E. Contractor shall store loose granular materials on solid flat surfaces in a welldrained area and prevent mixing with foreign matter.
- F. Contractor shall provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.
- G. Contractor shall arrange storage of Products to permit access for inspection and periodically inspect to assure Products are undamaged and are maintained under specified conditions.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

11/13/13

SECTION 01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Surveying for laying out the work.
- D. Cleaning and protection.
- E. Closeout procedures, except payment procedures.

1.2 RELATED REQUIREMENTS

- A. Section 01 1000 Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 01 3000 Administrative Requirements: Submittals procedures.
- C. Section 01 4000 Quality Requirements: Testing and inspection procedures.
- D. Section 01 7800 Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.
- E. Section 02 4050 Cutting and Patching

1.3 REFERENCE STANDARDS

A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

1.4 QUALIFICATIONS

A. For survey work, employ a land surveyor registered in the State in which the Project is located and acceptable to Architect. Submit evidence of Surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate.

1.5 PROJECT CONDITIONS

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.

- C. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
 - 1. Indoors: Limit conduct of especially noisy interior work to times when the building is not occupied by the owner.
 - 2. Provide sound attenuation systems to prevent disruption of staff and students (if occupied by them), neighboring residents and to meet City noise ordinance requirements.

1.6 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- E. In finished areas, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements. Exposed piping or ducts will not be allowed unless specifically noted as such on the Drawings.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.1 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. See 02 4050 Cutting and Patching for additional information.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.
- G. Verify Drawings are coordinated and match existing conditions prior to start of work.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.3 LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Architect of any discrepancies discovered.
- C. Contractor shall locate and protect survey control and reference points.
- D. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- E. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- F. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
- G. Utilize recognized engineering survey practices.
- H. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:

- 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations; and control or expansion joints.
- 2. Grid or axis for structures.
- 3. Building foundation, column locations, ground floor elevations, and Eave heights.
- I. Periodically verify layouts by same means.
- J. Maintain a complete and accurate log of control and survey work as it progresses.
- 3.4 GENERAL INSTALLATION REQUIREMENTS
 - A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
 - B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
 - C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
 - D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
 - E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.5 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
 - 2. Relocate items indicated on drawings.
 - 3. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
 - 4. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- C. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, Telecommunications, and Fire Alarm): Remove, relocate, and extend existing systems to accommodate new construction.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow

access or provide access panel.

- 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
- 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
 - b. Provide temporary connections as required to maintain existing systems in service.
- 4. Verify that services serve only abandoned facilities.
- 5. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- D. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
- E. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
- F. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- G. Refinish existing surfaces as indicated:
 - 1. Where rooms or spaces are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
 - 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
- H. Clean existing systems and equipment.
- I. Remove demolition debris and abandoned items from alterations areas and dispose of offsite; do not burn or bury.
- J. Do not begin new construction in alterations areas before demolition is complete.
- K. Comply with all other applicable requirements of this section.

3.6 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Replace curb cuts of insufficient size to provide
 - 3. Fit products together to integrate with other work.
 - 4. Provide openings for penetration of mechanical, electrical, and other services.
 - 5. Match work that has been cut to adjacent work.
 - 6. Repair areas adjacent to cuts to required condition.
 - 7. Repair new work damaged by subsequent work.
 - 8. Remove samples of installed work for testing when requested.
 - 9. Remove and replace defective and non-conforming work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. Patching:
 - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 - 2. Match color, texture, and appearance.
 - 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.7 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition. Broom sweep work areas at the end of each day.

- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Clean parking areas daily, including street parking used by workers.
- E. Sweep parking areas, driveways and streets used for the work. Removal of oil and other stains left by equipment or worker vehicles.
- F. Collect and remove waste materials, debris, and trash/rubbish from work area daily and dispose off-site weekly; do not burn or bury.

3.8 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.
- 3.9 ADJUSTING
 - A. Adjust operating products and equipment to ensure smooth and unhindered operation.
 - B. Test and balance HVAC systems affected by the work.

3.10 FINAL CLEANING

- A. Use cleaning materials that are nonhazardous.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- E. Clean filters of operating equipment.

F. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.11 CLOSEOUT PROCEDURES

- A. Make submittals that are required by Division of the State Architect or other authorities.
 - 1. Complete DSA Form 155 at each phase of the work indicated on the DSA Inspection Card, Form 152.
- B. Notify Architect when work is considered ready for Substantial Completion.
- C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's review.
- D. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to Owner-occupied areas.
- E. Notify Architect when work is considered finally complete.
- F. Complete items of work determined by Architect's final inspection.

END OF SECTION

DOCUMENT 01 72 00

FIELD ENGINEERING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Documents, apply to work of this document.

1.02 SUMMARY

- A. General: This Document specifies administrative and procedural requirements for field engineering services, including, but not necessarily limited to, the following:
 - 1. Layout of the Project
 - 2. Land Survey Work
 - 3. Shoring and Bracing Engineering
 - 4. Construction Equipment
 - 5. Support from Structure
 - 6. Stormwater Runoff Protection Plan
 - 7. Other Field Engineering
- B. Except for engineering work to be provided by the owner relative to existing conditions, all grade lines, levels and bench marks shall be established and maintained by the Contractor.

1.03 SUBMITTALS

- A. <u>Certificates</u>: Submit a certificate signed by the Land Surveyor or Professional Engineer certifying that the location and elevation of improvements comply with the Contract Documents.
- B. <u>Final Property Survey</u>: Submit 10 copies of the final property survey.
- C. <u>Project Record Documents</u>: Submit a record of Work performed and record survey data as required under provisions of Documents "Submittals" and "Project Closeout."

1.04 QUALITY ASSURANCE

A. <u>Surveyor</u>: Engage a Registered Land Surveyor registered with the State of California and approved by the Architect to perform land surveying and layout services required.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION

3.01 EXAMINATION

- A. The Owner will identify existing control points and property line corner stakes.
- B. Verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks before proceeding to layout the Work. Locate and protect existing benchmarks and control points. Preserve permanent reference points during construction.
- C. Do not change or relocate benchmarks or control points without prior written approval. Promptly report lost or destroyed reference points, or requirements to relocate reference points because of necessary changes in grades or locations.
- D. Promptly replace lost or destroyed project control points. Base replacements on the original survey control points.
- E. Establish and maintain a minimum of two permanent benchmarks on the site, referenced to data established by survey control points.
- F. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
- G. Existing Utilities and Equipment: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction. Contact utility companies, including USA, for on-site location services.
- H. Prior to construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, water service piping and gas. Verify locations of underground electrical line. It is the responsibility of the Contractor to use all means possible to locate underground utilities.

3.02 PERFORMANCE

- A. Working from lines and levels established by the property survey, establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to properly locate each element of the Project. Calculate and measure required dimensions within indicated or recognized tolerances. Do not scale Drawings to determine dimensions.
- B. Advise entities engaged in construction activities, of marked lines and levels provided for their use.
- C. As construction proceeds, check every major element for line, level and plumb.
- D. <u>Surveyor's Log</u>: Maintain a surveyor's log of control and other survey Work. Make this log available for reference.
 - 1. Record deviations from required lines and levels, and advise the Architect when deviations that exceed indicated or recognized tolerances are detected. On Project Record Drawings, record deviations that are accepted and not corrected.
 - 2. On completion of major site improvements, and other Work requiring field engineering services, prepare a certified survey showing dimensions, locations, angles and elevations of construction and sitework.
- E. <u>Site Improvements</u>: Locate and lay out site improvements, including pavements, stakes for grading, fill and topsoil placement, utility slopes and invert elevations by instrumentation and similar appropriate means.
- F. <u>Existing Utilities</u>: Furnish information necessary to adjust, move or relocate existing structures, utility poles, lines, services or other appurtenances located in, or affected by construction. Coordinate with local authorities having jurisdiction.
- G. <u>Final Property Survey</u>: Before Substantial Completion, prepare a final property survey showing significant features (real property) for the Project. Include on the survey a certification, signed by the Surveyor, to the effect that principal metes, bounds, lines and levels of the Project are accurately positioned as shown on the survey.
 - 1. Provide survey both on reproducible Mylar and an electronic copy compatible with AutoCAD V-14.
- H. <u>Shoring and Bracing:</u>

- 1. Design of Shoring and Bracing for support of formwork, scaffolding, or other temporary construction supports, shall be the responsibility of the Contractor. If requested, supply engineering calculations and data regarding proposed shoring and bracing.
- I. <u>Construction Equipment</u>: Engineering for cranes, temporary hoists, or other hoisting equipment requiring structural loading during construction shall be the responsibility of the Contractor. If requested, supply engineering calculations and data regarding proposed construction equipment. The structural system of the building is not intended to support hoisting systems unless specifically noted, and all such equipment shall be designed to be structurally independent of the building.

J. <u>Storm water Runoff Protection Plan (SWRPP)</u>

- 1. It shall be the responsibility of the Contractor to obtain all permits required by the EPA or their designated authority regarding control of Storm water at construction sites. It shall also be the responsibility of the Contractor to bring the construction activities for this project into compliance with the requirements of the State Water Resources Control Board General Construction Activity Storm Water Permit of April 17, 1997, to discharge storm water associated with construction activities, to be in full compliance with the San Jose Environmental Services Department Standards, and the National Pollutant Discharge Elimination (NPDES) Permit.
- 2. The Contractor shall engage a Civil Engineer as necessary to prepare an Erosion Control and SWRPP, and shall fully implement the recommendations of the Plan on the Project Site, including a Post-Construction Storm Water Management Plan.
- 3. The Contractor shall file a Notice of Intent to comply with the terms of the General Permit to discharge storm water associated with construction activity (WQ Order No. 92-08-DWQ). The Notice of Intent must be sent to the following address along with the appropriate payment (warrant to be furnished by the Owner upon request by the Contractor, allow normal warrant processing time) California State Water Resources Control Board, Division of Water Quality Storm Water Permit Unit, P.O. Box 1977, 901 "P" Street, Sacramento, California 95812-1977; (916) 657-0919. The Notice of Intent shall be filed prior to the start of any construction activity.
- K. <u>Other Field Engineering</u>: Other field engineering affecting means and methods of construction, or engineering of specific building components as required by Specification, or demolition shall be the responsibility of the Contractor.

END OF DOCUMENT

03/01/18

DOCUMENT 01 77 00

CLOSE OUT PROCEDURES

PART 1 GENERAL 1.1 SUMMARY

A. Document Includes:

- 1. Description of Contract closeout procedures including:
 - a. Removal of Temporary Construction Facilities
 - b. Substantial Completion
 - c. Final Completion
 - d. Project Record Documents
 - e. Project Guarantee
 - f. Warranties
 - g. Turn-In
 - h. Release of Claims
 - i. Fire Inspection Coordination
 - j. Building Inspection Coordination

1.2 REMOVAL OF TEMPORARY CONSTRUCTION FACILITIES

- A. Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities.
- C. Restore permanent facilities used during construction to specified condition.
- D. Comply with Document 01 50 00 (Temporary Facilities and Controls).

1.3 SUBSTANTIAL COMPLETION

- A. When Contractor considers Work or designated portion of the Work as Substantially Complete, submit written notice to District, with list of items remaining to be completed or corrected.
- B. Within reasonable time, District will inspect to determine status of completion.
- C. Should District determine that Work is not Substantially Complete, District will promptly notify Contractor in writing, listing all defects and omissions.

- D. Remedy deficiencies and send a second written notice of Substantial Completion. District will re-inspect the Work. If deficiencies previously noted are not corrected on re-inspection, then pay the cost of the re-inspection.
- E. When District concurs that Work is Substantially Complete, District will issue a Certificate of Substantial Completion, accompanied by Contractor's list of items to be completed or corrected as verified by District.
- F. Manufactured units, equipment and systems that require startup must have been started up and run for periods prescribed by District before a Certificate of Substantial Completion will be issued.
- G. A punch list examination will be performed upon Substantial Completion. One follow-up review of punch list items for each discipline will be provided. If further Site visits are required to review punch list items due to incompleteness of the Work by Contractor, Contractor will reimburse District for costs associated with these visits.

1.4 FINAL COMPLETION

- A. Final Completion occurs when Work meets requirements for District's Final Acceptance. When Contractor considers Work is Finally Complete, submit written certification that:
 - 1. Contractor has inspected Work for compliance with Contract Documents, and all requirements for Final Acceptance have been met.
 - 2. Except for Contractor maintenance after Final Acceptance, Work has been completed in accordance with Contract Documents and deficiencies listed with Certificate of Substantial Completion have been corrected. Equipment and systems have been tested in the presence of District, and are operative.
 - 3. Work is complete and ready for final inspection.
- B. In addition to submittals required by Contract Documents, provide submittals required by governing authorities and submit final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.
- C. When District finds Work is acceptable and final closeout submittals are complete, District will issue final Change Order reflecting approved adjustments to Contract Sum not previously made by Change Order. Should District determine that Work is incomplete or Defective:
 - 1. District promptly will so notify Contractor, in writing, listing the incomplete or Defective items.

- 2. Promptly remedy the deficiencies and notify the District when it is ready for reinspection.
- 3. When District determines that the Work is acceptable under the Contract Documents, District will request Contractor to make closeout submittals.
- D. Final adjustments of accounts:
 - 1. Submit a final statement of accounting to District, showing all adjustments to the Contract Sum and complete and execute Document 00 88 00 (Agreement and Release of Any and All Claims).
 - 2. If so required, District shall prepare a final Change Order for submittal to Contractor, showing adjustments to the Contract Sum that were not previously made into a Contract Modification.

1.5 PROJECT RECORD DOCUMENTS

A. Contract Documents will not be closed out and final payment will not be made until completion and submittal of Project Record Documents described in Document 01 78 39 (Project Record Documents).

1.6 PROJECT GUARANTEE

- A. Requirements for Contractor's guarantee of completed Work are included in Document 00 72 00 (General Conditions). Guarantee Work done under Contract against failures, leaks, or breaks or other unsatisfactory conditions due to defective equipment, materials, or workmanship, and perform repair work or replacement required, at Contractor's sole expense, for period of one year from date of Final Acceptance.
- B. Neither recordation of Final Acceptance nor final certificate for payment nor provision of the Contract nor partial or entire use or occupancy of premises by District shall constitute acceptance of Work not done in accordance with Contract Documents nor relieve Contractor of liability in respect to express warranties or responsibility for faulty materials or workmanship.
- C. District may make repairs to Defective Work as set forth in Document 00 72 00 (General Conditions).
- D. If, after installation, operation, or use of materials or equipment to be provided under Contract proves to be unsatisfactory to District, District shall have right to operate and use materials or equipment until said materials and equipment can, without damage to District, be taken out of service for correction or replacement. Period of use of Defective materials or equipment pending correction or replacement shall in no way decrease guarantee period required for acceptable corrected or replaced items of materials or equipment.

E. Nothing in this Document 01 77 00 shall be construed to limit, relieve, or release Contractor's, Subcontractors', and equipment suppliers' liability to District for damages sustained as result of latent defects in equipment caused by negligence of suppliers' agents, employees, or Subcontractors. Stated in another manner, warranty contained in the Contract Documents shall not amount to, nor shall it be deemed to be, waiver by District of any rights or remedies (or time limits in which to enforce such rights or remedies) it may have for Defective workmanship or Defective materials under laws of this State pertaining to acts of negligence.

1.7 WARRANTIES

- A. Execute Contractor's Submittals and assemble warranty documents, and Installation, Operation, and Maintenance Manuals described in Document 01 33 00 (Submittal Procedures), executed or supplied by Subcontractors, suppliers, and manufacturers.
 - 1. Provide table of contents and assemble in 8½ inches by 11 inches three-ring binder with durable plastic cover, appropriately separated and organized.
 - 2. Assemble in Specification Document order.
- B. Submit material prior to final Application for Payment.
 - 1. For equipment put into use with District's permission during construction, submit within 14 Days after first operation.
 - 2. For items of Work delayed materially beyond Date of Substantial Completion, provide updated Submittal within 14 Days after acceptance, listing date of acceptance as start of warranty period.
- C. Warranties are intended to protect District against failure of Work and against deficient, Defective, and faulty materials and workmanship, regardless of sources.
- D. Limitations: Warranties are not intended to cover failures that result from the following:
 - 1. Unusual or abnormal phenomena of the elements
 - 2. Vandalism after Substantial Completion
 - 3. Insurrection or acts of aggression including war
- E. Related Damages and Losses: Remove and replace Work which is damaged as result of Defective Work, or which must be removed and replaced to provide access for correction of warranted Work.

- F. Warranty Reinstatement: After correction of warranted Work, reinstate warranty for corrected Work to date of original warranty expiration or to a date not less than one year after corrected Work was done, whichever is later.
- G. Replacement Cost: Replace or restore failing warranted items without regard to anticipated useful service lives.
- H. Warranty Forms: Submit drafts to District for approval prior to execution. Forms shall not detract from or confuse requirements or interpretations of Contract Documents.
 - 1. Warranty shall be countersigned by manufacturers.
 - 2. Where specified, warranty shall be countersigned by Subcontractors and installers.
- I. Rejection of Warranties: District reserves right to reject unsolicited and coincidental product warranties that detract from or confuse requirements or interpretations of Contract Documents.
- J. Term of Warranties: For materials, equipment, systems, and workmanship, warranty period shall be one year minimum from date of Final Completion of entire Work except where:
 - 1. Detailed Specifications for certain materials, equipment or systems require longer warranty periods.
 - 2. Materials, equipment or systems are put into beneficial use of District prior to Final Completion as agreed to in writing by District.
- K. Warranty of Title: No material, supplies, or equipment for Work under Contract shall be purchased subject to any chattel mortgage, security agreement, or under a conditional sale or other agreement by which an interest therein or any part thereof is retained by seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with improvements and appurtenances constructed or placed thereon by Contractor, to District free from any claim, liens, security interest, or charges, and further agrees that neither Contractor nor any person, firm, or corporation furnishing any materials or labor for any Work covered by Contract shall have right to lien upon premises or improvement or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or impair right of persons furnishing materials or labor under bond given by Contractor for their protection or any rights under law permitting persons to look to funds due Contractor in hands of District.

1.8 TURN-IN

A. Contract Documents will not be closed out and final payment will not be made until all keys issued to Contractor during prosecution of Work and letters from property owners are turned in to District.

1.9 RELEASE OF CLAIMS

A. Contract Documents will not be closed out and final payment will not be made until Document 00 88 00 (Agreement and Release of Any and All Claims) is completed and executed by Contractor and District.

1.10 FIRE INSPECTION COORDINATION

A. Coordinate fire inspection and secure sufficient notice to District to permit convenient scheduling (if applicable).

1.11 BUILDING INSPECTION COORDINATION

A. Coordinate with District a final inspection for the purpose of obtaining an occupancy certificate (if applicable).

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION – NOT USED

END OF DOCUMENT

SECTION 01 78 00 CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.
- D. DSA forms

1.2 RELATED REQUIREMENTS

- A. Section 01 3000 Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Section 01 7000 Execution and Closeout Requirements: Contract closeout procedures.
- C. Individual Product Sections: Specific requirements for operation and maintenance data.
- D. Individual Product Sections: Warranties required for specific products or Work.

1.3 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 2. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
 - 3. Submit one set of revised final documents in electronic form within 10 days after final inspection.
- C. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as

the beginning of the warranty period.

- D. DSA Forms
 - 1. NA

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Addenda.
 - 3. Change Orders and other modifications to the Contract.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Record Drawings : Legibly mark each item to record actual construction including:
 - 1. Field changes of dimension and detail.
 - 2. Details not on original Contract drawings.

3.2 OPERATION AND MAINTENANCE DATA

- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.3 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.

- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

END OF SECTION

ASBESTOS, LEAD and PCB ABATEMENT PROJECT SPECIFICATIONS

PIEDMONT MIDDLE SCHOOL 955 PIEDMONT ROAD SAN JOSE, CA 95132

BUILDING L – CLASSROOMS 26-31

BUESD – PIEDMONT MS NEW GYM PROJECT: EXISTING BUILDING L DEMOLITION

Prepared for: BERRYESSA UNION ELEMENTARY SCHOOL DISTRICT 1376 PIEDMONT ROAD SAN JOSE, CA 95132

AUGUST 8, 2022

HMD Project # 22-090

Prepared by: HAZMAT DOC 3080 OLCOTT STREET • SUITE 135 D SANTA CLARA, CA 95054 Tel: 408.748.0055



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APPENDICES

- A. SCOPE OF WORK
- Β. ABATEMENT UNIT PRICES



SECTION 02 82 00 ASBESTOS-ABATEMENT

SUB-SECTION 00 GENERAL ASBESTOS REMOVAL SPECIFICATIONS

INTRODUCTION

These asbestos removal specifications are necessarily general and are intended only to give a description of what is required to adequately complete an asbestos abatement project. The asbestos abatement project is accompanied by a job-specific SCOPE-OF-WORK (attached as an appendix to this document), which summarizes the procedures, describes the extent and nature of the asbestos removal or abatement, and may detail any special conditions at the job site. These specifications are not intended to cover all variations that may occur, however, a field directive will address unanticipated variations.

TERMS AND DEFINITIONS

The following section is a list of terms and definitions that will be used in this specification.

Abatement: Procedures to control fiber release from asbestos-containing materials (ACM). Includes encapsulation, enclosure and removal.

Accredited: A person who holds a current certificate of training or updated certificate of continuing training as required by Federal and State regulations.

AHERA: The Asbestos Hazard Emergency Response Act of 1986, also referred to as the Asbestos-Containing Materials in Schools; Final Rule and Notice, and 40 CFR Part 763

Asbestos: Means the asbestiform varieties of serpentine, Chrysotile, riebeckite (crocidolite) cummingtonitegrunerite, anthophyllite and actinolite-tremolite

Asbestos-Containing Construction Material (ACCM): Term used by Cal/OSHA to describe construction materials that contain asbestos in amounts greater than one-tenth of one percent (0.1%) either alone or mixed with fibrous or non-fibrous materials.

Asbestos-Containing Material (ACM): Any material or product that contains more than 1 percent (1%)asbestos as determined by Polarized Light Microscopy (PLM) analysis, or assumed to contain greater than 1 percent asbestos.

Airlock: A system for permitting ingress or egress without permitting air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways at least 3 feet apart.

Air Monitoring: The process of measuring the fiber content of a specific volume of air in a stated period of time in an appropriate location.

Ambient Air: The air outside a building or structure OR the air as it normally exists in a space prior to activity

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

Authorized Visitor: Owner, HazMat Project Manager, or representative of any regulatory or other agency having jurisdiction over the project.



Cal/OSHA: California Division of Occupational Safety and Health

Clean Room: An uncontaminated area or room that is part of the worker decontamination unit, with provisions for storage of uncontaminated clothing and equipment.

HazMat Project Manager: An asbestos consulting company and its employees retained by Owner, which employs a full-time HazMat Project Manager who is qualified to perform asbestos consulting services.

Containment: The temporary, polyethylene-lined, enclosure structure erected to control the release of asbestos fibers to the ambient environment.

Contractor: An asbestos abatement contracting company and its employees, which employs a full-time contractor who is certified to provide asbestos abatement services, and whose employees hold current applicable accreditation.

Critical Barrier: A unit of temporary construction that provides the only separation between the asbestos work area and an adjacent area. This includes the decontamination unit, perimeter walls, ceilings penetrations and any temporary barriers between the work area and outside environment.

Curtained Doorway: A device to allow entry or exit from one room to another while permitting minimal air movement between the two rooms, typically constructed by placing two overlapping sheets of polyethylene over an existing or temporary framed doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway.

CSLB California Contractors State License Board

Decontamination Unit: A series of connected rooms, each room being an airlock, with curtained doorways between any two adjacent rooms, for the decontamination of workers or of materials and equipment.

Demolition: The wrecking or taking out of any non structural building material, casework, surface mounted items or surfaces of a facility together with any related transportation and disposal, and any related razing, removing, or stripping of asbestos products.

Debris Box/Dumpster: Synonymous with waste container. All debris boxes/dumpsters used on this project shall be hard sided including a hard lid, locked at all times when not in use and placed in an owner designated location.

DOP: Dioctylpthalate particles which are used to test the efficiency of HEPA filtration equipment. Substitutes such as Di [2-ethyhexyl] phthalate, PAO (Emery 3004), DOS (Dioctyl-sebacate) may be utilized with prior written permission from the Project Manager.

DOSH: California Department of Industrial Relations, Division of Occupational Safety and Health

Encapsulant : A liquid material that can be applied to ACM or surfaces stripped of ACM and that 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). When used, care must be taken that any re-insulation material will adhere to the encapsulant.

Encapsulant (*Lock-down*) : A liquid designed to mist the air within a containment area after the containment has passed visual clearance by the HazMat Doc Project Manager. Lock-down encapsulant is designed to bind asbestos fibers together and create a sticky surface, allowing asbestos fibers to adhere to it.

Encapsulation: All herein specified procedures necessary to coat surfaces from which ACM has been removed with sealing substance meeting applicable government standards. Encapsulation may also be referred to as "lock-down" encapsulation.



EPA: US Environmental Protection Agency.

Equipment Decontamination Unit: A decontamination unit for materials and equipment, typically consisting of a designated area of the work area, a washroom, holding area, and an uncontaminated area.

Equipment Room: A contaminated area or room that is part of the worker/equipment decontamination unit, with provisions for storage of contaminated clothing and equipment.

Friable ACM: Asbestos-containing material that can be crumbled, or reduced to a powder by ordinary hand pressure, or materials assessed as friable by an accredited asbestos abatement inspector.

Fixed Object: A piece of equipment or furniture in the work area that cannot or will not be removed from the work area, by Owner's decision.

Full Containment/Enclosure: Full containment/enclosures shall be constructed of two layers of 6-mil polyethylene sealing all surfaces, in all locations not being abated during the current phase of abatement. The sheeting must be secured in a manner that shall maintain the integrity of containment throughout removal and testing.

Glovebag Technique: A method with limited applications for removing small amounts of friable asbestoscontaining material(s) from ducts, short pipe-runs, valves, joints, elbows and other non-planar surfaces. The glovebag assembly is a manufactured or fabricated device consisting of a glove bag (typically constructed of 6-mil transparent polyethylene or polyvinylchloride sheeting), two inward projecting long sleeves, an internal tool pouch and an attached. Labeled receptacle for asbestos waste. The glove bag is constructed and installed in such a manner that it surrounds the object or material to be removed and contains all asbestos fibers released during the process. Glove bags must meet the specification requirements for glove bags as listed in 8 CCR 1529. All workers who are permitted to use the glove bag technique must be trained, experienced and skilled in this method. All techniques and procedures employed by the contractor shall be approved by the HazMat Doc Project Manager.

HEPA Filter: A High Efficiency Particulate Air (HEPA) filter that traps and retains at least 99.97% of monodispersed particles 0.3 microns in diameter or larger.

HEPA-Filtered Exhaust Unit: An exhaust fan that draws contaminated air through a HEPA filter and exhausts the filtered air to the outside of the building.

HEPA-Filtered Vacuum: High efficiency particulate air filtered vacuuming equipment with a filter system that collects and retains 99.97% of mono-dispersed particles 0.3 microns in diameter or larger.

Holding Area: A room between the washroom and an uncontaminated area in the equipment decontamination unit. The holding area has an airlock constructed at its entrance from an uncontaminated area.

HVAC: Heating, ventilation and air conditioning system

Manometer: Instrument for measuring the static air-pressure differential across a barrier. This project requires at least one properly calibrated and fully functional manometer at each containment. Manometer units shall, at a minimum, be factory calibrated once a year.

Mini-Containment/Enclosure: Mini-enclosures may be used where glove bag setups are not feasible. The use of these must be pre-approved by the HazMat Project Manager. 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 a maximum for two workers who can enter the enclosure one at a time, complete the abatement process, pass out the debris (appropriately contained) and exit. The workers shall have available a change room contiguous to the work area where they can remove their coveralls prior to leaving the area.



Monitoring: May include

- (i) Visual inspection for the presence of visible emissions; or
- (ii) Air monitoring performed in accordance with accepted methods;
- (iii) Collecting core samples or encapsulated or bridged materials;
- (iv) Collecting bulk samples of soil during and following abatement;

Moveable Object: A piece of equipment or furniture in the work area that can be removed from the work area.

Non-friable ACM: Asbestos-containing material that does not crumble, or become reduced to powder by ordinary hand pressure, or material that has been assessed as non-friable by an accredited asbestos abatement inspector.

Owner: Individual or entity that owns the property and its employees, representatives or agents.

PLM: Polarized Light Microscopy. Asbestos analysis of bulk material via EPA 600/R-93/116 Method using Polarized Light Microscopy.

Pressure Differential: A condition whereby the containment is maintained at a pressure differential of at least minus 0.02 inches of water relative to the adjacent unsealed areas.

Regulated Area: An area established by a contractor to demarcate areas where airborne concentrations of asbestos exceed, or could potentially exceed, the PEL.

Regulations: ALL relevant Local, State and Federal Regulations

Removal: All specified procedures necessary to strip all ACM from the designated areas and dispose of these materials at an acceptable site.

Renovation: The modifying of any existing structure, or portion (component) thereof.

Scope-of-Work: Project specific removal tasks to be utilized in conjunction with these specifications. If a conflict arises the most stringent requirement shall apply.

Shower Room: A room in the worker decontamination unit that is located between the clean room and equipment room, and is equipped with a functional shower stall with hot and cold water and a waste water filtering system.

Surfactant: A non-toxic, non-flammable, chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area.

Supervisor: An employee of Contractor who is accredited as a Supervisor for Asbestos Abatement Projects, qualifies as a competent person on asbestos abatement projects, and holds current applicable accreditation.

Structural Member: Any load-bearing member, such as a beam, load-bearing walls or non-load bearing members such as ceilings and non load-bearing walls.

TEM: Transmission Electron Microscopy performed by EPA 40 CFR part 763 Final Rule (AHERA). Per AHERA specifications a Level II analysis on all AHERA jobs.

Visible Emissions: Any emissions, whether containing particulate material or not, that are detectable without the aid of instrumentation. Not including condensed UNCOMBINED water vapor.



Waste Containers: Synonymous with debris boxes/dumpsters. All waste containers used on this project shall be labeled, hard sided including a hard lid, locked at all times when not in use and placed in an owner designated location.

Washroom: A room between the work area and the holding area in the equipment decontamination unit. The washroom has an airlock between it and the holding area.

Wet-Clean: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools that have been dampened with amended water, and by afterwards disposing of these cleaning tools as asbestos-containing waste.

Work Area: The area of a building where asbestos-containing materials will be, or are being, removed or abated.

Worker: An individual who has successfully completed and initial US EPA and/or State approved accreditation course and who has maintained that certificate by attending mandated refresher training and possesses valid and current AHERA-accreditation documents.

Worker Decontamination Unit: A decontamination enclosure system for workers, typically consisting of a clean room, a shower room, and an equipment room.



ABBREVIATIONS AND ACRONYMS

The following acronyms or abbreviations as referenced in this contract document are defined to mean these associated names. Both names and addresses are subject to change, and are believed to be, but are not assured to be, accurate and up-to-date as of date of this contract document:

ACM	Asbestos-Containing Materials >1%
ACCM	Asbestos Containing Construction Material greater than 1/10 th of 1 percent asbestos (i.e.
	0.10% or greater)
ACRM	Asbestos-Containing Roofing Materials
AHERA	Asbestos Hazard Emergency Response Act; refers to EPA regulation 40 CFR Part 763
	entitled "Asbestos-Containing Materials in Schools" in Vol. 52, No. 210, October 30, 1987.
AIA	American Institute of Architects
ASTM	American Society for Testing and Materials
ASHRAE	American Society for Heating, Refrigerating, and Air Conditioning Engineers
ASTM	American Society for Testing and Materials
Cal-OSHA	California Division of Occupational Safety and Health
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CS	Commercial Standard of NBS (U.S. Dept. of Commerce)
CSLB	Contractors State Licensing Board (California)
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency and by inference the local air pollution control agency
	or any other entity designated as a representative of the EPA
GSA	General Services Administration
HEPA	High Efficiency Particulate Air
HPM	Hazmat Project Manager
HVAC	Heating, Ventilating and Air-Conditioning
NBS	National Bureau of Standards
NEC	National Electrical Code (by NFPA)
NFPA	National Fire Protection Association
NESHAPs	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology, U.S. Dept. of Commerce
NVLAP	National Voluntary Laboratory Accreditation Program
OSHA	Occupational Safety & Health Administration
PAT	NIOSH Proficiency Analytical Testing Program
PCM	Phase Contrast Microscopy - Analytical Method used to determine airborne concentrations of
	asbestos fibers according to NIOSH Method 7400
PEL	Permissible Exposure Limit - OSHA allowable 8 hour TWA personal
	exposure above which employees are required to wear appropriate respiratory and personal
	protective equipment
PLM	Polarized Light Microscopy - Analytical method used to determine asbestos content in bulk
	material samples.
psi	Pressure expressed in pounds per square inch
ppm/v	Unit as expressed in parts per million by volume
SDS	Safety Data Sheet
STEL	Short Term Exposure Limit - OSHA allowable 30 minute TWA personal exposure above
	which employees are required to wear appropriate respiratory and personal protective
	equipment



TEM	Transmission Electron Microscopy - Analytical method used to identify and determine airborne concentrations of asbestos fibers according to EPA AHERA protocol.
TSCA	U.S. Toxic Substances Control Act of 1976
TWA	Time-Weighted-Average - Average unit of exposure to a substance over a general period of time
UL	Underwriters Laboratories



SUB-SECTION 01 GENERAL REQUIREMENTS

1.1 GENERAL

1.1.1 Description Of Work And Contractor Responsibilities

This specification covers removal and disposal of materials identified as Asbestos-Containing Material (ACM) and/or Asbestos Containing Construction Material (ACCM) in independently prepared bulk material analysis reports, and removal and disposal of related materials.

- A. Furnish all labor, tools, materials, equipment, employee training and testing, permits, waste disposal services necessary for and reasonably incidental to the completion of removal and disposal of all Asbestos-Containing Material (ACM) and/or Asbestos Containing Construction Material (ACCM)from within the subject Buildings as denoted in the attached scope of work section of these documents. All work shall be performed in accordance with prevailing Local, State and Federal Regulation, including but not limited to the US Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the State of California Division of Occupational Safety and Health (DOSH), the State of California Department of Industrial Relations (DIR), the recommendations of the National Institute of Occupational Safety and Health (NIOSH) and any and all other regulations. Where a conflict or overlap of regulations occurs, the MOST stringent shall apply.
- B. The asbestos abatement work as specified herein shall be performed as required to accommodate final aggressive air clearance testing of all interior work sites where standard negative air enclosures have been established, and satisfactory visual inspections for asbestos abatement which takes place on exterior building components. None of the negative air enclosures shall be removed until visual inspections and clearance testing results are satisfactory for the contained work site(s), nor the barricades removed until the final visual inspections are satisfactory for the exterior removal sites inspected.
- C. This is a calendar day contract. Weekends, holidays, etc., are regular working days for the purposes of this contract. The specific daily work schedules and timing for each area of asbestos-containing materials abatement in this project shall be coordinated with, and approved by the HPM, and then specified in the Contractor's asbestos abatement plan, prior to commencing work.
- D. Description of Asbestos-Containing Materials to be removed.

Known ACM/ACCM that must be removed under this contract are listed in the attached Appendix. Determination of the actual quantities of these ACM/ACCM and related ACM/ACCM debris shall be the responsibility of the selected Contractor. In addition to these ACM/ACCM described below, the selected Contractor shall be responsible for the proper abatement of any incidental ACM/ACCM that is necessary to accomplish work of this project. Contractors who chose to submit a bid to perform this work, shall estimate quantities of listed as well as incidental ACM/ACCM by a visual assessment of the ACM/ACCM within the building(s) as illustrated in the attached Appendix.

E. <u>Quantity of Asbestos-Containing Materials</u>.

The actual determination of quantities and measurements of the asbestos-containing materials, related debris and contaminated materials within this building will be the responsibility of the Contractor. The Contractor shall deal with any encounters of these asbestos-containing materials, related debris and contaminated materials in full accordance with all applicable federal, state and local laws, rules and regulations. All related costs shall be included in the basic contract price. If, during the course of work, the Contractor encounters other materials in these areas or other areas not specified above suspected to contain asbestos, which could require disturbance, clean-up or removal, he shall halt work and immediately notify the HPM for a positive determination of asbestos content and instruction as to procedure.



F. Suspect Asbestos-Containing Materials.

For any types of extensive, non-incidental asbestos-containing materials (ACM/ACCM) which are encountered during construction, and which are not specified above, if so directed by the HPM, the Contractor shall remove and dispose of such materials according to the methods specified herein by appropriate change order. All such materials shall be quantified by the HPM and the cost agreed upon by the Contractor and the Owner prior to commencing any asbestos abatement work.

G. Known ACM/ACCM to Remain in Place.

Other ACM/ACCM material may exist in locations not impacted by this scope of work. All ACM/ACCMs in the building(s) <u>may</u> not be designated for abatement and are to remain in their existing condition/location. The Contractor shall secure any known/suspect ACM/ACCM as may be impacted by their activities in the course of accomplishing the existing scope-of-work. The provisions for securing these materials shall be described in the Contractor's abatement plan, and approved by HPM prior to any activity.

H. <u>Construction Schedule.</u>

The construction schedule is attached elsewhere in these documents. The schedule may be corrected by addendum or otherwise in writing by the owner to the contractor. Work shall be accomplished in accordance with this schedule. Any delay in the completion of the work denoted in the attached Scope of Work may subject the contractor to financial and other damages as denoted in the bid section of these documents.

I. <u>Description of Work.</u>

Asbestos abatement work includes the complete and proper removal and disposal of all asbestos-containing materials, related ACM/ACCM debris and contaminated materials within the areas identified and using the procedures specified herein.

J. <u>Description of Work Sites.</u>

For each separately enclosed interior work site, provide a decontamination unit, negative air filtration system, negative pressure monitoring device, and all other requirements of these specifications.

K. <u>Project Conditions.</u>

Specific work areas of the building will not be occupied by the Owner or the general public during the work performed under this contract. The building is to be remodeled and/or renovated. If the Contractor hires any Sub-contractors (Subs) to perform any part of this work, all such Subs shall be notified of the locations of asbestos abatement activities and the schedule of such activities in accordance with these specifications, and as required by OSHA 29 CFR 1926.1101 (k). The Contractor shall coordinate with the Owner all activities such as waste load-out or periods of electrical power outage or usage that could effect nearby work areas or adjacent buildings. Sources for electricity and water will be discussed at the pre-bid conference.

The owner may or may not provide electricity, water and sanitation (toilet) facilities at the owners discretion. It is the contractors' responsibility to furnish all power, water and sanitation requirement for the project. All costs associated with this are to be built in to the contractors base cost.

1.1.2 Related Work

- A. Related work includes all work necessary for successful completion of removal and disposal of ACM/ACCM but not directly involving ACM/ACCM. This work includes but is not limited to:
 - 1. Protection of the building and property in the building from work related damage.
 - 2. Proper cleaning and/or disposal of contaminated and non-contaminated materials.
- B. Related work includes the maintenance of daily work logs by Contractor on the job site. These work logs shall be supplied to HazMat Project Manager by Contractor and must include:



- 1. The name of each person, and description of the type of respiratory protection worn by each person entering containment or work area.
- 2. Descriptions of meetings or discussions regarding the job, special or unusual events, records of daily containment inspections as required by 1926.1101(o)(2), records of waste removal from containment, the chart from the recording manometer, and air monitoring results.
- 3. HazMat Project Manager shall examine Contractor's daily work log for completeness, and sign each page at the end of each shift.
- 4. A copy of this daily work log, signed by Supervisor must be submitted to HazMat Project Manager at the end of the project as a condition for completion.

1.1.3 Project Completion

The project shall be deemed complete and Contractor released upon satisfaction of all terms and conditions of this specification, including:

- 1. All required forms, logs, and receipts and satisfactory completion of air testing and site inspection by HazMat Project Manager.
- 2. A release letter shall be provided to Contractor by HazMat Project Manager at this time.

1.1.4 Work Schedule

Upon receipt of notification to proceed with a specific project by Owner, Contractor must file all notices to the applicable regulatory agencies, and obtain all required permits to perform the asbestos abatement. Contractor must submit to Owner a notarized affidavit that notifications have been sent to the applicable regulatory agencies, as well as a copy of the notification of asbestos abatement. Upon commencement of work, Contractor must complete the project within the time specified in the schedule.

1.1.5 Contractor Responsibilities

- A. Contractor represents that Contractor and its employees are experts in asbestos removal with full knowledge of, and compliance with, all applicable Federal, State, and Local rules, regulations, and guidelines governing asbestos removal as well as state-of-the-art removal techniques.
- B. Contractor must furnish all permits, labor, material, services, insurance, tools, equipment, and notifications in accordance with EPA, OSHA, State, and all other applicable agencies to complete removal of ACM/ACCM.
- C. Contractor must attend a pre-construction meeting to be held at a mutually agreeable time and date. Attending this meeting will be Owner, Contractor, Supervisor, and HazMat Project Manager.
 - 1. Abatement Contractor Supervisor assigned to project must attend this meeting.
 - 2. All pre-construction submittals by Contractor will be reviewed at this meeting. Contractor shall be prepared to discuss and submit plans or documentation for:
 - a. Preparation of work area;
 - b. Personal protective equipment;



- c. Historical air monitoring data that shows levels of airborne fibers on similar jobs in the past;
- d. Employee training certificates;
- e. Decontamination procedures;
- f. Abatement methods and procedures;
- g. Handling and disposal procedures for ACM/ACCM;
- h. Final decontamination and cleanup procedures;
- i. Sequence and schedule of work;
- j. Emergency procedures;
- k. Respiratory Protection Program including evidence of respiratory protection training and current respirator fit tests;
- 1. Owner's Safety requirements;
- m. Any site specific owner requirements;
- 3. There will be a final walk-through of the building and discussion of plans, anticipated problems, and areas of special concern.
- D. If Owner permits Contractor to use any of its equipment, tools, utilities, or facilities, such use shall be gratuitous and Contractor shall release and hold harmless Owner from any responsibility arising from claims or personal injuries, including death, arising out of the use of such equipment, tools, or facilities irrespective of the condition thereof or any negligence on the part of Owner in permitting its use.
- E. Should Contractor fail or be unable to execute the contract and complete the work for any reason, then Contractor shall be penalized in accordance with agreements stated in contract documents.
- F. Owner retains the right to stop work by and/or dismiss Contractor for any breach of specified procedures, including but not limited to airborne fiber levels exceeding 0.01 fibers/cc outside the containment. Dismissal of Contractor may also result in claims against Contractor in accordance with agreements stated in contract documents.
- G. Inspections: Inspections of work area will be made by HazMat Project Manager at scheduled intervals during the course of the project. It is Contractor's responsibility to ensure that:
 - 1. Work area is initially cleaned and properly prepared for removal of ACM/ACCM.
 - 2. Asbestos-containing materials are being properly removed and disposed.
 - 3. Employees of Contractor are properly protected.
 - 4. All asbestos-containing materials have been removed and disposed in accordance with the procedures contained in these specifications and scope-of-work.
- H. The inspections will merely confirm that these conditions have been met. It is the sole responsibility of Contractor to correct any subsequent discoveries of inadequate initial cleaning, preparation, work procedures, or remaining ACM/ACCM encountered after an inspection, regardless of the outcome of such an inspection.



- I. Supervisory Personnel: Contractor must have an accredited Supervisor at each job site at all times, from mobilization to completion. Failure to have a Supervisor present shall result in termination of all asbestos abatement activities for the remainder of the day, or until an accredited Supervisor is again present. Contractor shall not begin work until an accredited Supervisor is present, and shall cease all work when Supervisor leaves the work site.
- J. Security of Containments: Contractor must secure all entrances to containments with a lockable plywood door. The door will be locked with a combination lock. The combination will be given to HazMat Project Manager and Owner's Security Representative. When decontamination units are located on the exterior of buildings, Contractor must cover the exterior portion of decontamination unit with 2" plywood, or suitable optional material to be approved by HazMat Project Manager and Owner.

1.2. SUBMITTALS, NOTICES, RECORDKEEPING, AND REFERENCES

1.2.1 Submittals

Note: At a minimum, the contractor performing any and all work as part of this contract must have a California Contractors State License Board (CLSB) 'B' License Classification or a 'C' License Classification <u>AND</u> must have a CSLB C-22 License <u>AND</u> be a California Department of Industrial Relations, Division of Occupational Safety and Health (DOSH) registered contractor to perform <u>any and all</u> work as part of this contract. Copies of valid and current CSLB licenses and DOSH registration certificate are to be provided by the contractor as part of the pre-job submittal. Contractors having endorsements, riders or qualifiers on any of their licenses such as (but not limited to) 'for bidding purposes only' etc. are ineligible to perform work as part of this contract.

- A. Submit the following to the HPM for approval within Ten (10) days of receiving the "Notice to Proceed" or at least Ten (10) Working Days prior to the start of work. These submittals are in addition to those required in any other section(s) or sub-section(s) of these documents. This document shall be submitted by the contractor performing the work and not by any other. Include at the very least the following:
 - 1. Notifications. All notifications shall be current and valid throughout the duration of the project. Any material changes to the notification, i.e., the quantity of materials being removed, the physical materials being removed, the duration of the project, etc. shall require revisions to the regulatory agencies, with copies provided to the HPM on site. Copies of the written notification and confirmations at least to/from the following regulatory agencies will be required:
 - a. Regional EPA and/or the local Air Quality Management District;
 - b. California Division of Occupational Safety and Health (Cal-OSHA) Temporary Worksite Notification for Asbestos and Methylenedianiline-related work;
 - c. Air Resources Board Office (*if 1a above is not applicable*);
 - d. Local Authority charged with the responsibility for the enforcement of Occupational Health & Safety, if any (*if 1b above is not applicable*);
 - e. Any other agency as and when necessitated by prevailing regulation(s).
 - 2. Waste Haulers Copies of :
 - a. Identification of the Waste Hauler(s) for both Hazardous and Non-Hazardous asbestos waste for this Project;
 - b. California Department of Toxic Substances Control (or DTSC) Hazardous Waste Transporter registration for each Waste Hauler;
 - c. California Department of Motor Vehicles (DMV) Motor Carrier Permit for each Waste Hauler;
 - d. U.S. Department of Transportation (DOT) Registration and U.S. Environmental Protection Agency (EPA) acknowledgement of Notification of Hazardous Waste Activity for each Waste Hauler (*only required if waste is to be transported out of State*);
 - e. Statement indicating that all waste generated on this specific site shall be transported by/disposed of by



licensed, insured and certified personnel/locations;

- f. Statement that the types of Waste Containers being used for this Project will be accepted by the Waste Hauler(s) for the storage and transport of both Hazardous and Non-Hazardous waste.
- 3. Landfills Copies of :
 - a. Identification of the Landfill(s) to be used for the disposal of both hazardous and non-hazardous asbestos containing waste generated at the Project site;
 - b. Permits for the Landfill(s) to be used for the disposal of both hazardous and non-hazardous asbestos waste generated at the Project site;
 - c. Identification of the Types of Waste accepted at the Landfill(s);
 - d. Identification of the Types of Waste Profiling required by the Landfill(s);
 - e. Statement that the types of Waste Containers being used for this Project will be accepted by the Landfill(s) for both hazardous and non-hazardous waste.
- 4. Licensure:
 - a. Copy of the current California Contractors State Board (CSLB) License (minimum requirement is a Class B License or a Class C License AND a CSLB C-22 License) for any and all contractor(s) or sub-contractor(s) involved in any facet of asbestos related work enumerated as part of this project;
 - b. Copy of the registration with the Division of Occupational Safety and Health, (Cal/OSHA) endorsement for Asbestos (ASB) work for any and all contractor(s) or sub-contractor(s) involved in any facet of asbestos related work enumerated as part of this project;

NOTE: Contractors having endorsements, riders or qualifiers on any of their licenses such as (but not limited to) 'for bidding purposes only' etc. are ineligible to perform work as part of this contract.

- 5. Work Plan. A detailed written asbestos work plan including, but not limited to, the following:
 - a. Identification of all Asbestos Scope of Work items that are part of this Project.
 - b. Identification of entire Work Sequence (schedule) for this Project, including specifics of materials being removed/stabilized and the correlation between work areas and Types of Work (Asbestos, Lead, PCB, etc. as applicable).
 - c. Identification of abatement duration.
 - d. Identification of dust control measures.
 - e. Identification of work area preparation.
 - f. Identification of construction of decontamination enclosure systems.
 - g. Identification of demarcation protocols. i.e., installation of barrier tape, barrier fence, asbestos signage, etc.
 - h. Identification of work area isolation protocols.
 - i. Identification of Site specific asbestos containing materials removal procedures.
 - j. Identification of asbestos-containing/contaminated debris cleanup and disposal procedures.
 - k. Identification of personal protection equipment to be utilized.
 - 1. Identification of waste handling, storage and disposal procedures.
 - m. Identification of construction of chutes, if required for this project.
- 6. HEPA Vacuums, HEPA Differential Pressure Unit air filtration devices, HEPA Filters and other local exhaust ventilation equipment. Copies of :
 - a. Manufacturer's certification that any and all HEPA Vacuums, HEPA Differential Pressure Unit air filtration devices, HEPA Filters and other local exhaust ventilation equipment to be used on this Project conform to ANSI Z9.2-79.
 - b. Notification that required onsite testing has been scheduled for any and all HEPA Vacuums, HEPA Differential Pressure Unit air filtration devices, etc., to be used on this Project, to ensure that the filtration efficiency meets the criteria for HEPA filtration devices, i.e., 99.97% efficiency at arresting mono-dispersed particulate matter greater than 0.03 micrometers in diameter.



- 7. SDS- The Contractor shall submit copies of the Safety Data Sheet, fire retardant certification or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each surfactant, encapsulating material, spray glue, mastic removal agent, plastic sheeting, adhesive/duct tape, etc. or other chemicals/products for use on this Project, including the specific worker protective equipment proposed for use with the material indicated.
- 8. Personnel Documentation Copies of :
 - a. Identification of the Project's Asbestos Related Demolition Supervisor/Competent Person who meets the requirements of 29 CFR Part 1926.1101 and 8 CCR Part 1529 and is experienced in administration and supervision of asbestos abatement projects, including work practices, protective measures for building and personnel, disposal procedures, etc.
 - b. Current and complete documentation that the Contractor's employees performing asbestos removal, disposal, etc., operations have received training which meets the criteria of Federal EPA Model Accreditation Plan (40 CFR Part 763, Subpart E, Appendix C). Training certification shall be provided prior to the start of work involving asbestos abatement, for all of the Contractor's workers, forepersons, and Asbestos-Related Demolition Supervisors/Competent Persons. Training shall meet the requirements of 29 CFR Part 1926.1101 and 8 CCR Part 1529 and the criteria of the Federal EPA Model Accreditation Plan (40 CFR Part 763, Subpart E, Appendix C). Training shall be provided prior to the time of job assignment and, at least, annually. Training will be in compliance with all current Cal/OSHA requirements.
 - c. Provide as part of the pre-job submittal a letter from the contractor, signed by a responsible and authorized officer of the contractor's company certifying the following "This is to certify that all our personnel who may be exposed to airborne asbestos fibers are subject to current and valid medical monitoring in accordance with 29 CFR Part 1926.1101 and 8 CCR Part 1529 and they will receive continued medical surveillance, including monitoring their ability to work while wearing required respiratory protection without suffering adverse health affects as required by 29 CFR Part 1926.1101 and 8 CCR Part 1529 and by state and local regulations pertaining to such work. Furthermore, we certify that all relevant records shall remain valid and current throughout the project and that historical records will be retained by us, in accordance with 29 CFR Part 1926.1101." The contractor may issue this letter and identify and list (by name) all of their employees who will be on site for this project or, alternatively issue an individual letter per employee.
 - d. Current and complete documentation of respirator fit-testing for Contractor employees and agents who must enter the work area. This fit-testing shall be in accordance with qualitative procedures as required by OSHA regulations or be quantitative in nature.
- Respirators and Filters Copies of Manufacturer's documentation and certification of NIOSH approvals for respiratory protective devices utilized on site, including manufacturer's certification of NIOSH approval of respirator cartridges (organic vapor, acid gas, mist, dust, high efficiency particulate) and High Efficiency Particulate Air (HEPA) filtration capabilities for all cartridges and filters.
- 10. Testing Laboratory. Submit the name, address and telephone number of the testing laboratory selected for analyzing personal air monitoring filters along with copies of certification that persons counting the samples have successfully completed NIOSH course #582 or a proven equivalent, that the lab has been judged proficient by successful participation in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing (PAT) Program.
- 11 Site Specific Documentation Copies of :
 - a. Identification of Work Area(s) at the site;
 - b. Identification of the nearest medical facility and route map/directions to the medical facility;
 - c. Emergency Contact Information and numbers for Emergency services as well as the contractors' emergency contact personnel and information;
 - d. Identification of on-site emergency meeting location;
 - e. Identification and procedure for personnel accounting during an emergency.



- 12. Contractor General Documents Copies of :
 - a. General Injury & Illness Prevention Program in compliance with 26 CCR 3203.
 - b. General Emergency Action Plan in compliance with 26 CCR 3220.
 - c. General Fire Prevention Plan in compliance with 26 CCR 3221
 - d. Respiratory Protection Program in compliance with 26 CCR 5144
- B. Hazardous waste manifests, non-hazardous waste data forms, trip tickets and disposal receipts for asbestos waste materials removed from the work area must be received within 24 hours of the transport
- C. Documents to be Provided on-site throughout the duration of the project:
 - 1. Provide on a DAILY basis, prior to the start of the shift, results from the personal air samples collected during the abatement process of the prior shift.
 - 2. Provide on a DAILY basis, prior to the start of the shift, copies of the containment entry log pertaining to the abatement process of the prior shift.
 - 3. Provide on a DAILY basis, prior to the start of the shift, copies of the Manometer logs pertaining to the abatement process of the prior shift.
 - 4. Copies of Safety Data Sheet (SDS) for solvents, encapsulants, wetting agents, neutralizers and any other chemicals/products used on site and replacement materials, as necessary.
- D. Upon completion of all asbestos abatement activities, submit to the HPM, documentation that includes, without limitation, the following:
 - 1. Work area entry/exit logbook. The logbook must record the name, affiliation, time in, and time out for each entry into the work site;
 - 2. Safety Data Sheet (SDS) for solvents, encapsulant(s), wetting agents and replacement materials, as necessary;
 - 3. OSHA required personal air monitoring results;
 - 4. Accident/incident reports where injury or damage has occurred on or to the client's property, if any;
 - 5. Safety Meeting Records;
 - 6. Daily Reports and Containment Manometer Log(s);
 - 7. Personnel documents for any and all personnel on site at anytime during the project

1.2.2 Notices to Contractor

The following section contains general notices applicable to Contractor for all asbestos abatement work for Owner.

- A. Employee Behavior
 - 1. All contractor employees shall be freshly shaved on a daily basis prior to the commencement of each work shift. The Hazmat Project Manager can direct the shift supervisor to have any and all employees removed from the work site if the Hazmat Project Manager determines that employees' facial hair may impede an adequate respirator seal.
 - 2. Contractor must provide its employees with a written policy of drug and alcohol abuse. No employee of Contractor shall be allowed to remain on Owner's property who is intoxicated by drugs (substance abuse) and/or alcohol, or who is observed using drugs or alcohol on Owner's property.
 - 3. Contractor is expected to enforce its drug and alcohol abuse policy at all times while conducting business.
 - 4. Weapons and other hazardous, dangerous, or otherwise disruptive items in the possession of Contractor or its employees are not allowed on Owner's property.



- 5. Contractor and its employees are required to display good manners to building staff and occupants at all times while on Owner's property. Complaints to HazMat Project Manager or Owner regarding harassment, threatening behavior, poor personal hygiene, or use of profanity or offensive language by any employee of Contractor may result in the suspension of abatement activities until the behavior problem is corrected or employee is removed from owner's property.
- B. Performance Standards:

Contractor shall perform all asbestos removal using techniques and procedures recognized by the asbestos removal industry as being safe and effective in the control of fiber release during removal of ACM/ACCM. Contractor is expected to perform all removal, cleaning, and disposal operations in a manner that would meet final air clearance standards for analysis by Transmission Electron Microscope (TEM).

- C. Pay Requests: All requests for payment by Contractor must be submitted to the owner directly..
- D. Analytical and Test Results
 - 1. Results of bulk sample analyses of ACM/ACCM pertaining to the scope of the asbestos abatement projects are available from Owner or HazMat Project Manager at Contractor's request.
 - 2. Results of background and previous air monitoring tests made by HazMat Project Manager prior to commencement of work will be available from HazMat Project Manager upon request prior to the beginning of asbestos removal project.
 - 3. Results of final air tests analyzed by phase contrast microscopy (PCM) will be made available to Contractor within, at least, 24 hours of collection of the sample. Results of final air tests analyzed by transmission electron microscopy (TEM) will be made available within, at least, 48 hours of completion of collection of the sample. HazMat Project Manager will make every reasonable effort to obtain these test results in a time and manner suitable to Contractor's work schedule.
- E. Condition of Building and Fixtures:

Contractor and HazMat Project Manager shall agree in writing on the condition of the building and fixtures, prior to commencement of work. A report on the "Condition of Building and Fixtures" must be signed and notarized by both Contractor and HazMat Project Manager prior to commencement of asbestos abatement. Damages incurred by Contractor must be repaired and/or damaged materials replaced at Contractor's expense.

F. Royalties and Patents:

All fees, royalties, and claims for any invention, or pretended invention, or patent on any article, material, arrangement, appliance or method that may be used upon or in any manner be connected with the construction of this work or appurtenances are hereby included in the prices stipulated in this contract for said work; Contractor hereby expressly binds himself or itself to indemnify and save harmless Owner from all such claims, fees, and from any and all suits and actions of every name and description that may be brought against Owner on account of any such claims, fees, royalties, or costs for any such invention or patent, and from any and all suits or actions that may be brought against Owner for the infringement of any and all patents or patent rights claimed by any person, firm or corporation.

G. Indemnification:

Contractor agrees to indemnify, defend, save and hold harmless Owner from all claims, demands, liabilities, and suits of any nature whatsoever to the extent they arise out of, or are due to the negligent or wrongful act or omission by Contractor or its employees.



1.2.3 Record keeping

- A. For each building where ACM/ACCM has been removed, all records concerning removal of asbestoscontaining materials shall be kept and a copy of these records given to HazMat Project Manager at the completion of the asbestos removal project. HazMat Project Manager shall submit all documentation to Owner.
- B. For each specific asbestos removal project, Contractor shall provide HazMat Project Manager with a written description of the asbestos removal measure that shall include:
 - 1. Methods used
 - 2. Location of removal project
 - 3. Start and completion dates
 - 4. Names and addresses of all contractors (and subcontractors) involved in the activity
 - 5. State Asbestos Abatement License number
 - 6. The name and location of the disposal site
- C. Furnish to HazMat Project Manager a copy of training records for each person used by Contractor that shall include:
 - 1. The person's name and job title
 - 2. Date of completion of training
 - 3. Location of the training
 - 4. Number of hours of training
- D. For each asbestos removal project, the name, signature, State of accreditation, and accreditation number of each person performing the removal shall be recorded and given to HazMat Project Manager.
- E. For each asbestos abatement project performed for Owner, Contractor shall certify that all asbestos-containing materials related to the scope-of-work have been removed and disposed of in accordance with all applicable federal, regional, state, and local regulations for asbestos abatement.



1.2.4 Applicable Reference Documents

The most recent issue of each document is applicable. In case of overlapping jurisdiction of documents or regulations, the most stringent requirements are applicable.

Applicable Regulations

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910	Occupational Safety and Health Standards for General Industry
29 CFR 1926	OSHA Construction Standards
29 CFR 1926.1101	Construction Standard for Asbestos, Tremolite, Anthophyllite & Actinolite
U.S. ENVIRONMENTAL PR	COTECTION AGENCY (EPA)
40 CFR 61 Subpart A & B	General Provisions
40 CFR 61 Subpart M,	National Emission Standards for Hazardous Air Pollutants (NESHAP)
40 CFR 241	Guidelines for the Land Disposal of Solid Wastes
40 CFR 257	Criteria for Classification of Solid Waste Disposal Facilities & Practices
40 CFR 260	Hazardous Waste Management Systems: General
40 CFR 261	Identification & Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners of Hazardous Waste treatment, Storage & Disposal Facilities
40 CFR 265	Interim Status Standards for Owners of Hazardous Waste Treatment, Storage & Disposal
	Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 763	Asbestos-Containing Materials in Schools Rule (AHERA)
40 CRF 763 Subpart G	Worker Protection Rule
U.S. DEPARTMENT OF TRA	ANSPORTATION (DOT)
49 CFR 171 & 172	Transportation of Hazardous Waste
AMERICAN NATIONAL ST	ANDARDS INSTITUTE (ANSI) PUBLICATIONS
Z9.2-79	Fundamentals Governing the Design and Operation of Local Exhaust Systems
Z88.2-80	Practices for Respiratory Protection
UNDERWRITERS LABORA	TORIES, INC. (UL) PUBLICATIONS
586-77 (R 1982)	Standard for Test Performance of High-Efficiency Particulate Air Filter Units
AMERICAN SOCIETY FOR	TESTING AND MATERIALS (ASTM) PUBLICATIONS
D 4240	Guide for Evaluation of Encapsulants for Friable Asbestos and Building Materials
D 1331-56(R80)	Surface and Interfacial Tension of Solutions of Surface Active Agents
U.S. ENVIRONMENTAL PR	COTECTION AGENCY (EPA) PUBLICATIONS
EPA 560/5-85-024	Guidance for Controlling Asbestos-containing Materials in Buildings



CALIFORNIA CODE OF REGULATIONS (CCR) PUBLICATIONS

Title 8 CCR	California Code of Regulations
Title 22 Div 4 Chapter 30	Hazardous Waste Handling

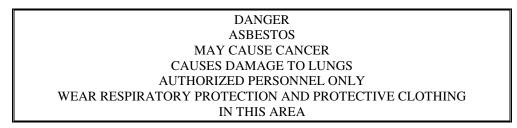
1.2.5 Warning Signs and Labels

A. Each disposal bag or waste container must be labeled with "Asbestos NA2212," the generator's name and location, and a class 9 label. Disposal bags shall be marked as follows:

DANGER	
CONTAINS ASBESTOS FIBERS	
MAY CAUSE CANCER	
CAUSES DAMAGE TO LUNGS	
DO NOT BREATHE DUST	
AVOID CREATING DUST	
RQ-ASBESTOS	
9-NA2212-PGIII	

The transport container must have a Class 9 label with the asbestos ID number 2212 in an orange rectangular or white square on point display on all four sides of the container.

B. Warning signs shall be posted at all entrances to the work area and shall be labeled as follows:



C. Barrier tape (Caution Tape) shall be placed at all hallways and corridors that lead to the work area and will display the following:

DANGER DO NOT ENTER OR: RESTRICTED AREA - AUTHORIZED PERSONNEL ONLY

1.3 EQUIPMENT REMOVAL, SITE SECURITY, AND SITE CONDITIONS

1.3.1 Equipment Removal Procedures

Clean external surfaces of contaminated containers and equipment thoroughly by wet-cleaning with sponges, or use HEPA-filtered vacuum before moving such items into equipment decontamination unit washroom for final cleaning and removal to uncontaminated areas. Ensure that personnel do not leave work areas through equipment decontamination unit.



1.3.2 Site Security

- A. Contractor shall provide site security during the hours when Supervisor and workers are on site at no additional cost to Owner. During the hours when Contractor is not on site, Owner will specify the time period during which security shall be required. Contractor may, at Contractor's option, employ a security service, or use employees of Contractor. Owner may, at Owner's option, provide "off-time" site security.
- B. The entrance to the containment must be locked at all times that an employee of Contractor is not present at the entrance. If any windows and/or door are removed as a part of the work assigned to the contractor, it is the contractor's responsibility and at the contractor's expense to secure these areas with plywood (or other acceptable material) door/window covers with locking devices as may be necessary.
- C. When decontamination units are located on the exterior of buildings, Contractor must cover the exterior portion of decontamination unit with 2" plywood, or other suitable material to be approved by HazMat Project Manager and Owner.
- D. Contractor is responsible for all damages to the building or its contents or occupants that result from the operation of Contractor's equipment or personnel within the building, except when specified by HazMat Project Manager or his agent. Damages include, but are not limited to cleanup of any areas contaminated by Contractor during his work and all liquidated damages as stated and agreed to by Owner and Contractor as a result of Contractor's activities.

1.3.3 Site Conditions

- A. Facilities: Domestic power and access to water may not be made available for Contractor's use for the duration of each specific abatement project. If made available and when these utilities are inadequate, Contractor must supply additional utilities. It is the contractor's responsibility to supply power, water and worker sanitation facilities for accomplishing the specified work. The contractor is also responsible for supplying electricity for the monitoring and air clearance equipment utilized by the HazMat Project Manager throughout the duration of the project.
- B. Extent of initial cleaning: When HazMat Project Manager has determined that friable or damaged asbestoscontaining materials have contaminated or potentially contaminated equipment and surfaces in the work area, all exposed surfaces in work area that will be protected by fire-retardant polyethylene sheeting shall be thoroughly cleaned with HEPA-filtered vacuums and wet-cleaned prior to installation of fire-retardant polyethylene sheeting over these surfaces.
- C. Equipment storage: Arrangement for equipment storage will be made during pre-construction meeting.
- D. Dumpster location: Arrangements for location of dumpsters to be made at pre-construction meeting. All dumpsters used on asbestos abatement projects for Owner must be secured with locks. Dumpsters must remain locked at all times while present on Owner's property, except when opened to receive waste. All debris boxes/dumpsters used on this project shall be hard sided including a hard lid, locked at all times when not in use and placed in an owner designated location.
- E. Contractor parking: Arrangements for Contractor employee parking to be made at the pre-construction meeting.



1.4 PERSONAL PROTECTION

1.4.1 Personal Protection

- A. Prior to commencement of work, the workers must be instructed, knowledgeable, and accredited by an EPAapproved training facility on the hazards of asbestos exposure, on the use and fitting of respirators, on protective clothing, and on all aspects of work practices and protective measures. This training must comply with all regulations applicable to worker training in the State of California, or State where the work will take place. All workers must have evidence of current accreditation in their possession, or I.D. cards issued by an EPA-approved training agency. Workers having expired accreditation certificates will not be allowed in work area.
- B. In accordance with 29 CFR 1926.150, Contractor shall supply fire extinguishers for use inside and outside the work area. Contractor shall ensure that all employees have been instructed in the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.
- C. Respiratory Protection
 - 1. All contractor employees shall be freshly shaved on a daily basis prior to the commencement of each work shift. The Hazmat Project Manager can direct the shift supervisor to have any and all employees removed from the work site if the Hazmat Project Manager determines that employees facial hair may impede an adequate respirator seal.
 - 2. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and suitable for asbestos exposure level in work area.
 - 3. Half-mask, dual cartridge, air purifying respirators must be worn by all personnel during the preparation of work areas having friable ACM/ACCM. Respiratory protection will not be required for preparation of work areas having only non-friable ACM/ACCM (only if a negative exposure assessment for that activity has been determined). Workers may use respiratory protection when not required, if they so desire. A sufficient supply of respirator filters shall be maintained at the work site to provide new filters to employees, Owner Employees, authorized visitors, and government regulator personnel throughout the duration of the project. Filters shall be replaced according to the manufacturer's recommendations, when breathing becomes difficult, or if the filter becomes wet. At any time during on-site work activity, the contractor shall maintain onsite and readily accessible three (3) new respirators, one in each size, small, medium and large along with the requisite filters/cartridges for the type of work being performed. These respirators will be kept in readiness for the Owner/Owner's representative or any governmental agency representative having jurisdiction over the project. Additionally, the contractor shall make available to HPM two (2) sets of new NorthTM 7700 Series Respirator Filter Cartridges throughout the duration of the project. These filter cartridges shall be appropriate to the work being conducted on site i.e., P100 HEPA Cartridge and/or stacked P100 HEPA + Organic Vapor Cartridge, etc.
 - 4. If Contractor personnel intend to use a respirator less efficient than a Powered Air Purifying Respirator (PAPR) for removal of friable ACM/ACCM, Contractor must make available air testing results that show that fiber levels for similar work performed in the past were less than 0.1 fibers/cc. When fiber counts in excess of 0.1 fibers/cc are anticipated, PAPR or Type C pressure demand respiratory equipment will be the minimum required respiratory equipment.
 - 5. When respirators with disposable filters are employed, Contractor must provide sufficient replacement filters as required by the worker or applicable regulations.
 - 6. Contractor shall begin removal of friable surfacing or thermal insulation ACM/ACCM with all personnel in work area using PAPR or Type C supplied air respirators unless documentation is submitted to HazMat Project Manager that shows permissible levels of airborne fibers (1.0 fibers/cc or less) on similar jobs in the



past. HazMat Project Manager must approve all documentation in writing, before use of PAPR or Type C respirators can be waived.

7. Unless the Contractor can supply the HPM with acceptable historical personal air monitoring data collected within the last six (6) months for similar ACM (similar asbestos material, mineral composition and concentration), the material being removed utilizing similar techniques, by the same workers; all work under this project, shall commence with all workers utilizing, at a minimum, Powered Air Purifying Respirators (PAPR's). Once the site conditions, work practices and engineering controls being utilized have demonstrated to the satisfaction if the HazMat Project Manger that the average ambient fiber concentration inside the work area, collected over a minimum of two (2) consecutive work shifts, is less than 0.05 fibers per cubic centimeter of air, the HazMat Project Manager may permit the contractors personnel to downgrade to Half-face Negative Pressure Respirators.

In the event that subsequent air monitoring shows an increase in the ambient fiber concentration level at or above 0.05 fibers per cubic centimeter of air, the Hazmat Project Manager will require the use of PAPR's until the conditions listed above have been met.

The minimum respiratory protection throughout the project shall be Half-face Negative Pressure Respirators with a protection factor of ten (10) times the Permissible Exposure Limit.

- D. Protective Clothing
 - 1. All employees of Contractor, and authorized visitors are required to wear protective clothing while inside work areas. The protective clothing must be worn properly. No modifications to the clothing may be made that exposes the wearer's skin, other than the hands and face. Protective clothing is to include steel toe safety shoes or rubber boots as applicable, hard hats, eye protection, hearing protection and appropriate gloves.
 - 2. Contractor must provide workers and authorized visitors with sufficient sets of protective full body clothing. Such clothing will consist of protective full body coveralls and headgear. Contractor must provide eye protection and hard hats to all employees and authorized visitors, when required by applicable safety regulations.
 - 3. Non-disposable protective clothing and footwear must be left in equipment room until the completion of the asbestos abatement work. At this time, such items must be disposed of as ACM/ACCM, or must be thoroughly cleaned of all ACM/ACCM. Disposable protective clothing, headgear, and footwear may be provided.
 - 4. The use of canvas or leather footwear is strictly prohibited in contaminated areas or work areas. All authorized personnel must wear rubber boots, or other approved footwear that is easily decontaminated. Footwear must be approved by HazMat Project Manager.
- E. Provide and post, in equipment room and clean room, the decontamination procedures, work procedures, and personal protection procedures to be followed by workers, as described in these specifications.
- F. Provide and post, in clean room, the a map and clearly marked route of the location of the nearest hospital, telephone, applicable emergency phone numbers, and any other emergency information and procedures for this work.
- G. Worker Protection Procedures
 - 1. Each worker and authorized visitor must, upon entering the job site: remove street clothing in clean room and put on a respirator with functional filters and clean protective clothing before entering equipment room or work area. Workers intending to re-wear contaminated protective clothing stored in equipment room must enter



equipment room wearing only respirators (workers will be permitted to wear tight-fitting, nylon swimsuits beneath their protective clothing).

- 2. Each worker and authorized visitor must, each time he leaves work area:
 - a. Remove gross contamination from clothing with a HEPA-filtered vacuum before leaving work area.
 - b. Proceed to equipment room, remove all clothing except respirators and optional swimsuit, and proceed directly to shower room.
 - c. Wet the outside of the respirator with water while showering.
 - d. Remove the respirator and thoroughly shampoo and wash them.
 - e. If worker intends to change filters, remove filters, wet them, and dispose of them in the container provided for this purpose.
 - f. Wash and rinse the inside of the respirator.
- 3. After showering, each worker and authorized visitor must:
 - a. Proceed directly to clean room, dry off, and dress in uncontaminated street clothes at the end of each day's work, or before eating, smoking, or drinking.
 - b. Before re-entering work area from clean room, each worker and authorized visitor must put on a respirator equipped with functional filters and must dress in clean protective clothing.
- 4. Workers intending to re-wear contaminated protective clothing stored in equipment room must enter equipment room wearing only respirators and optional swimwear.
- 5. Workers removing waste containers from equipment decontamination unit must enter holding area from outside wearing a respirator and dressed in clean protective clothing. No worker shall use this unit as a means to leave or enter washroom or work area.
- 6. Workers must not eat, drink, smoke, chew gum or tobacco, or apply cosmetics at the worksite except outside the controlled area. Smoking will not be permitted in the School Buildings or on School Property at any time.

H. Type C Air Supplied System

When a Type C Supplied Air System is to be used, the following specifications apply:

- 1. Grade D Air: Compressed air must be at least Grade D quality. Certification of Grade D air quality must be supplied by an independent testing lab after the system has been installed on site.
- 2. Compression: When supplied air is required, compressors shall be used throughout removal project to generate the air supply. The following specifications apply to compressor procedures:
 - a. Compressor Shut Down: Interconnect monitors, alarms and compressor so that compressor is automatically shut down and the alarms sounded if any of the following occur:
 - 1) Carbon Monoxide (CO) concentrations exceed 5 ppm/v in the air line between the filter bank and backup air supply,
 - 2) Compressor temperature exceeds normal operating range.



- b. Compressor Location: Locate compressor in a location that will not impede access to the building and that will not cause a nuisance by virtue of noise, exhaust gases, or fumes to occupied portions of the building.
- c. Air Intake: Locate air intake remotely from any source of automobile exhaust or any exhaust from motors or buildings.
- 3. Purification: Supplied air must be purified using the following system of equipment:
 - a. Aftercooler
 - b. A coalescing filter
 - c. Two adsorption filters consisting of:
 - 1) A molecular sieve to remove water vapor
 - 2) An activated charcoal filter
 - d. A mechanical filter capable of removing particles greater than 10 microns in diameter.
 - e. A carbon monoxide monitor equipped with a visual and audible alarm.
- 4. Storage: Provisions must be made to store a volume of air sufficient for safe exit from work area in the event of compressor failure. Stored air may not be necessary when respirators are equipped with a HEPA egress filter. HEPA egress filters may be used for emergency egress only in asbestos abatement containments.
- 5. Delivery: The air supply system must deliver air at a pressure sufficient to meet the respirator manufacturer's flow requirements. Any air-line respirators chosen must be of the Positive Pressure, Pressure Demand type, and approved by NIOSH. No unapproved respirators may be used at any time. The maximum air-line length must not exceed 300 feet, and maximum inlet pressure at the mask must not exceed 125 psi.
- I. Protection from Heat Stress: In work areas where heat stress to workers is inevitable, such as roofs and hot mechanical rooms Contractor must provide adequate work breaks in cool areas outside work area, and/or body vests with ice pack inserts, depending on the site conditions.



SUB-SECTION 2.0 LABOR, MATERIALS, AND EQUIPMENT

2.1 MATERIALS

- A. Contractor must furnish all labor, materials, equipment, and subcontractors necessary for removal and disposal of ACM in a manner consistent with these specifications. These materials include but are not limited to:
 - 1. Plastic (Polyethylene) Sheeting: Provide 6-mil thickness or greater polyethylene sheeting as specified in sizes to minimize the frequency of joints. Fire retardant polyethylene sheeting is required.
 - 2. Tape: Provide two inch or wider duct tape capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheets to finished or unfinished surfaces of dissimilar materials. Duct tape shall be capable of adhering under both dry and wet conditions, including use of amended water.
 - 3. Spray Cement: Provide aerosol based spray cement specifically formulated to stick tenaciously to sheet polyethylene.
 - 4. Surfactant: Provide a 50 percent polyoxyethylene ether and 50 percent polyoxyethylene ester, or equivalent and mix with water to provide a concentration of one ounce surfactant to 5 gallons of water.
 - 5. Impermeable Containers: Provide impermeable containers suitable to receive and retain any asbestos-containing or contaminated materials until disposal at Disposal Site labeled in accordance with OSHA Regulation 29 CFR 1910.1101, DOT 49 CFR 171-177, Title 8 CCR and BAAQMD. Containers must be both air and watertight and must be resistant to damage and rupture. Plastic bags shall be a minimum of 6-mil thick.
 - 6. Warning Labels and Signs: Provide warning labels and signs as required by OSHA Regulation 29 CFR Part 1910.1101, Title 8 CCR Part 1529 and the local air pollution agency, as required.
 - 7. Other Materials: Provide all other materials, such as lumber, nails and hardware, which may be required to construct and dismantle the decontamination area and the barriers that isolate the work area.
 - 8. Solvents used for the removal of resilient flooring mastics/adhesives shall be low-odor. Regardless of the solvent utilized, the contractor may have the waste profiled for RCRA composition by the HPM all costs involved with this testing shall be borne directly by the contractor and not by the owner.
- B. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name.
- C. Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.
- D. Damaged or deteriorated materials shall not be used and must be removed from the premises. Material that becomes contaminated with asbestos must be disposed of in accordance with the applicable regulations.



2.2 TOOLS AND EQUIPMENT

- A. Provide suitable tools for asbestos removal, including but not limited to scrapers, brushes, razor knives, wrenches, tools for constructing containment and decontamination units, brooms, carts, and safety equipment.
- B. Provide suitable air moving and exhaust equipment, including but not limited to:
 - 1. A method for maintaining pressure differential of 0.02 inches of water column inside containment than outside.
 - 2. HEPA-filtered vacuums.
 - 3. Recording manometers for monitoring the pressure inside containment relative to outside
 - 4. Portable lighting and power supplies as necessary.
- C. No equipment shall cause suspension of ACM within work area or discharge of asbestos fibers outside of work area.
- D. <u>Electricity, Water and Sanitation Facilities.</u>

ELECTRICITY, WATER AND SANITATION FACILITIES ARE THE CONTRACTORS' RESPONSIBILITY. The owner may or may not provide electricity, water and sanitation (toilet) facilities at the owners discretion. It is the contractors' responsibility to furnish all power, water and sanitation requirement for the project. All costs associated with this are to be built in to the contractors base cost.

Additionally it is the contractors' duty and responsibility to provide the HPM with all their electricity requirements, in each work area, for the HPM to run their air sampling and other equipment. This supply of electricity is to be maintained uninterrupted for the entire duration of the project



SUB-SECTION 3.0 EXECUTION

This section applies to the preparation, removal, cleanup, and disposal of asbestos-containing materials that are friable, non-friable, and mastic materials. Refer to SUB-SECTION 4.0 for SPECIAL PROCEDURES to be used for removal of exterior roofing materials, exterior asbestos cement panels, glove bag removal, mini-containment, and decontamination of contaminated areas.

3.1 **PREPARATION**

This part is intended to be used as a general specification for preparation of work area for any particular asbestos abatement project for Owner. Consult the Scope of Work for each individual building for more specific preparation requirements.

3.1.1 General and Full Containment Procedures

Proper preparation of the work area prior to asbestos abatement is crucial. The general aspects of preparation of the work area, as required by Owner for this project are discussed below:

- A. Critical Barriers: All asbestos abatement work involving friable ACM/ACCM and non-friable ACM/ACCM shall require the installation of critical barriers at all penetrations to the work area. Any and all HVAC vents (supply or return) that are inside the work area shall be sealed with a minimum of two layers of 6-mil polyethylene and tape. Removable components of the HVAC system shall be removed, HEPA Vacuumed and wet wiped prior to being tagged and placed in 6-mil plastic bags and removed from the work area. Removed components shall be stored securely or handed over to the facility manager for eventual re-installation.
- B. HVAC and Electrical Shut Down: HVAC systems serving the work area must be either shut down or temporarily capped on all asbestos abatement projects. Electrical systems serving the work area shall be shut down and secured, or special provisions with Owner must be made to ensure the safety of abatement workers while asbestos abatement is performed. All electrical equipment used by Contractor in the work area must be protected by GFI circuits. The electrical supply to the work area must be located outside the containment. All electrical and HVAC system alterations or shut-downs shall be performed in conjunction with and at the direction of the owner, occupant and facility manager.
- C. Pre-cleaning: When The HazMat Project Manager has determined that friable or damaged asbestos-containing materials have contaminated or potentially contaminated equipment and surfaces in the work area, Contractor must HEPA vacuum and wet-wipe these items before application of protective covering.
- D. Polyethylene Sheeting: In general, all fixed objects and all (*architectural*) surfaces within (*in*) the work area must be protected from contamination during asbestos removal or from damage from application of encapsulants after asbestos removal. In certain instances, the HazMat Project Manager and Owner may not require a covering for walls, floors, or ceilings if the wall, floor, or ceiling material is smooth, non-porous, easily cleaned, and will not be aesthetically affected or damaged by application of amended water and encapsulants.
- E. Pressure Differential: All work areas must be placed under a pressure differential of at least minus 0.02 inches of water column, with respect to outside areas, prior to disturbance of asbestos-containing materials. The pressure differential equipment utilized shall be, at a minimum, capable of performing four (4) complete air exchanges per hour. For the purposes of this project, each pressure differential unit shall be evaluated at 75% of the manufacturers rated capacity. For example, if the manufacturers rated capacity for a differential pressure unit is 2,000 cfm., for the purpose of this project, that particular unit will be evaluated as having a maximum capacity of 1,500 cfm. The contractor shall provided the necessary equipment to maintain the required minus 0.02 inches of water column PLUS 20% additional equipment in the event of equipment malfunction work area changes, etc. The unused



equipment shall be tested, installed in the work area, sealed and kept in a state of readiness to be brought on line, if necessary, in a very short period of time.

3.1.2 Preparation for Asbestos Containing Materials / Asbestos Containing Construction Material (ACM/ACCM); Full Containment Procedures

- A. Preparation
 - 1. Post warning signs and barrier tape in and around work area as required by all applicable regulatory agencies, and restrict access to work area to personnel approved by Contractor or The HazMat Project Manager.
 - 2. Shut down electric power when necessary. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electric code requirements. Use ground-fault interrupter circuits (GFIC) at all temporary power sources in work area. Locate power source for temporary power panels and electrical equipment outside work area. All modifications to the electrical power systems must be performed by a licensed electrician. Additional precautions shall be taken when enclosing live electrical panels or circuit breaker boxes. A rigid enclosure shall be built around the panels and covered with 6-mil plastic with a minimum of 12 inches of clearance or as indicated on the panel. This enclosure shall be kept under positive pressure using a HEPA filter equipped device (i.e., vacuum, differential pressure machine, etc.) to keep the panel adequately ventilated. All electrical panels or breaker boxes inside the work area shall be accessible to the workers within the area and access to them shall not be blocked or restricted. The location and usage of these panels shall form a part of the contractors' emergency plan and shall also be discussed as a part of the periodic site safety meeting. All electrical equipment used within the containment shall be routed through ground-fault interrupter circuits (GFIC).
 - 3. Shut down and isolate heating, cooling and ventilating air systems to prevent contamination and fiber dispersal to other areas of the structure. During the work, vents within work area must be sealed with, at least, tape and fire-retardant polyethylene sheeting, unless otherwise indicated in the Scope of Work.
 - 4. Clean supply and return air grilles, remove filters and dispose of filters as ACM.
 - 5. Clean moveable objects and carpeting within the proposed work areas using HEPA-filtered vacuums and/or wet-cleaning methods as appropriate, and remove such objects from work area to a suitable temporary location.
 - 6. Clean fixed objects within the proposed work area using HEPA-filtered vacuums and/or wet-cleaning methods as appropriate, and enclose objects with 6 mil fire-retardant polyethylene sheeting sealed with tape.
 - 7. Clean proposed work areas using HEPA-filtered vacuums or wet-cleaning methods as appropriate. Methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters must not be used.
 - 8. Seal off all openings, including but not limited to: corridors, doorways, elevators, skylights, ducts, grills, diffusers, and any other penetrations of work areas. Doorways and corridors that will not be used for passage during work must be sealed with critical barriers. These seals must be left in place until final air testing is complete and the results received and approved. The work area may require isolation from occupied areas of the building as determined by the owner and/or the HazMat Project Manager. This isolation may include the construction of rigid or "hard barriers".

"Hard barriers" shall be constructed of wood or metal framing to support barriers in all openings larger than 4 feet by 8 feet. Plywood or drywall sheets shall be affixed to the work side of the barrier. The work area side of the hard barrier shall be covered with a double layer of 6-mil plastic sheeting sealed in place. The other side of the hard barrier shall be covered with a single layer of 6-mil plastic sheeting sealed at the ceiling, walls and floor level. The entire barrier shall be airtight and may be require a "smoke test" to confirm its integrity. Allowances must be made for emergency exits.



- 9. Cover surfaces in the proposed work area, which do not require asbestos removal, with fire-retardant polyethylene sheeting in the following manner:
 - a. Cover walls or erect temporary walls with 2 layers of (4-mil minimum thickness) fire-retardant polyethylene sheeting sealed with tape. This sheeting must be secured by staples and tension nails as necessary to maintain the integrity of containment throughout removal and testing process. The two layers of fire-retardant polyethylene sheeting must be placed so the upper layer can be removed without damaging the integrity of the lower layer.
 - b. Cover floors with 2 layers of (6-mil minimum thickness) fire-retardant polyethylene sheeting sealed with tape, when appropriate. The floor covering must extend at least 12" up the wall to contain leakage. The wall covering must overlap the floor covering.
 - c. Cover ceilings or erect temporary ceilings with 2 layers of (4-mil minimum thickness) fire-retardant polyethylene sheeting, sealed with tape, when appropriate. This sheeting must be secured in a manner that shall maintain the integrity of containment throughout removal and testing.
 - d. For work areas that do not have an adequately flat surface, or have extensive mechanical and/or electrical fixtures attached to the ceiling, Contractor shall perform initial cleaning of the exposed surfaces at the ceiling prior to removal, and perform wet-cleaning and HEPA-vacuuming during final cleanup. The ceiling area shall be encapsulated prior to final air testing.
- 10. Cover, isolate, or remove and clean ceiling-mounted objects, such as lights and other items not previously sealed off, or covered, that interfere with asbestos abatement. Use localized water spraying or HEPA-filtered vacuums during fixture removal to reduce fiber dispersal.
- 11. Maintain marked emergency and fire exits from work areas, or establish alternative exits satisfactory to the fire code.
- 12. Adequate illumination for the entire work area shall be provided for the entire duration of the project, during the working hours of the project shall be maintained until final clearance results are obtained.
- 13. The Contractor shall secure all windows and access points to the work area to prevent against break-ins and vandalism.
- 14. Two (2) Activated Charcoal Filters shall be used on each differential pressure units in the work area. The first of the two Activated Charcoal Filters shall be placed between the pre-filter and the secondary filter on the machine. The second Activated Carbon Filters shall be similar to the secondary air filters employed on the differential pressure units and shall be placed between units' secondary filter and the HEPA filter. All pre-filters, secondary filters and Activated Charcoal Filters shall be replaced on site prior to the commencement of any on-site filter/unit challenge testing.
- 15. Provide a minimum of two (2) easily accessible view ports to each work area. The view ports shall be a minimum of 18" x 18" clear, see-through plastic or plexiglass with no scratches, tape or glue marks that would impede viewing of the work area from an uncontained area. The contractor shall refer to the owner and/or the on-site the HazMat Project Manager for the location of the view ports. It may be necessary for the contractor to provide additional view ports to ensure that all sections of the work area are visible from an uncontaminated area at all times.
- 16. Seal all unused elevator doors on floors where work is in progress with fire-retardant polyethylene sheeting and plywood.



B. Decontamination Units

- 1. Use pre-constructed decontamination units or build suitable framing and line with double layer of fire-retardant polyethylene sheeting sealed with tape at all lap joints in the fire-retardant polyethylene sheeting for all containments and decontamination unit rooms.
- 2. Construct a worker decontamination unit contiguous to work area consisting of three totally enclosed rooms as follows:
 - a. An equipment room with two curtained doorways, one to work area and one to shower room.
 - b. A shower room with two curtained doorways, one to equipment room and one to clean room. Shower room must contain at least one shower with hot and cold water for each 10 persons in the work area. Water must be mixed at point of use (29 CFR 1910.141).
 - 1) Careful attention must be paid to shower room to insure against leaking of any kind and to insure proper drainage of shower water. There must be no standing water in the shower stall or shower room. Insure a supply of soap, shampoo and clean disposable towels at all times in shower room.
 - 2) Waste water must be filtered through a medium that is capable of removing suspended particles of a diameter greater than or equal to 3 microns. Filtered waste water must be discharged into public sanitary sewer systems. Discharge of filtered water onto surface soil, asphalt, concrete, or any other porous surface shall not be permitted.
 - 3) Permits from local sate and federal government agencies, the local water pollution control district, public sanitary sewer entity, etc. will be required on site prior to any filtered waste water being discharged from the work area or the decontamination unit's shower system. Under no circumstances shall waste water (filtered or otherwise) be discharged into a storm water drain or runoff.
 - 4) Filtration devices' filter element or accumulation tank contents shall be removed, manifested and disposed off as friable Asbestos Containing Material at the contractors' expense.
 - c. A clean room with one curtained doorway into shower room and one entrance or exit to noncontaminated areas of the building. Clean room must have sufficient space for storage of the workers street clothes, towels, and other non-contaminated items.
- 1. When required or directed to by the owner and/or the HazMat Project Manager, provide or construct an equipment decontamination unit consisting of two totally enclosed rooms as follows:
 - a. A washroom, consisting of an airlock, with a curtained doorway to a designated area of work area and a curtained doorway to holding area.
 - b. A holding area, consisting of an airlock, with a curtained doorway to an uncontaminated area.
 - c. When the uncontaminated area is an elevator, a lockable plywood door must also be constructed and placed in front of the elevator door to restrict access to the contaminated areas.
 - d. Worker decontamination unit may be used as an equipment decontamination unit when deemed appropriate by the HazMat Project Manager.
- C. Establish Pressure Differential and Ventilation



- 1. Install HEPA-filtered differential pressure unit in work area to lower concentration of airborne fibers in work area and contain airborne fibers. All differential pressure units shall be challenge tested on site to verify the efficiency of the HEPA Filtration Units to ensure that the units are filtering at a minimum of 99.97% efficiency for mono-dispersed particulate 0.3 micrometers in diameter. Challenge testing shall be performed using DOP or equivalent by persons conversant and experienced in the usage and testing of HEPA filtration units. Testing certificates shall be presented on site to the HazMat Project Manager or affixed to the machines. No differential pressure unit or other HEPA filter equipped equipment shall be used on site until and unless it has been tested and passed this challenge test.
- 2. All work areas must be placed under a pressure differential of at least minus 0.02 inches of water column, with respect to outside areas, prior to disturbance of asbestos-containing materials. The pressure differential equipment utilized shall be, at a minimum, capable of performing four (4) complete air exchanges per hour. For the purposes of this project, each pressure differential unit shall be evaluated at 75% of the manufacturers rated capacity. For example, if the manufacturers rated capacity for a differential pressure unit is 2,000 cfm., for the purpose of this project, that particular unit will be evaluated as having a maximum capacity of 1,500 cfm. The contractor shall provided the necessary equipment to maintain the required minus 0.02 inches of water column PLUS 20% (or a minimum of one machine which ever is greater) additional equipment in the event of equipment malfunction work area changes, etc. The unused equipment shall be tested, installed in the work area, sealed and kept in a state of readiness to be brought on line, if necessary, at very short notice.
- 3. Locate HEPA-filtered exhaust units so that make-up air enters work area through decontamination unit, or other suitable source of make-up air. Place HEPA-filtered exhaust units as far as possible from the entrance/exit or other make-up air sources.
- 4. Exhaust ducts shall be attached plywood cut-outs and placed through opening window, door, or wall, then sealed with tape and vented to the outside of the building. Exhausts ducts shall not be placed adjacent to ventilation or HVAC units. The plywood cut-outs shall be attached to the building securely to prevent entry, theft or vandalism to the owners' property.
- 5. Start HEPA-filtered exhaust units prior to removal and continue operating continuously until final air clearance of work area has been successfully obtained.
- 6. Replace air filters in HEPA-filtered exhaust unit when the unit's manometer indicates that a pressure drop across the filters exceeds 1.0 inch of water, replace pre-filter first, then the secondary filter and finally the HEPA filter.
- 7. HEPA-filtered exhaust units will be inspected daily by The HazMat Project Manager to ensure proper maintenance, and correct placement of filters. The inspection results will be noted in the HazMat Project Manager's daily logs.
- 8. Pressure differential recorders (manometers) equipped with an acceptable method of self-recording, i.e., circular recorders, strip charts, print-out, etc. are required in each work area to monitor the pressure difference between the work area and the ambient conditions in the surrounding areas. The recording system shall be accurate to the nearest 0.001 inches of water column differential and be equipped with a functioning audible alarm that sounds if the difference becomes less than minus 0.020-inches water column. The recorders must be calibrated prior to their use and re-calibrated on a daily basis prior to the commencement of the work shift. The daily record produced by the machine is to be marked with the project name, location, date, and time handed over to the HazMat Project Manager or the owners' on-site representative at the conclusion of each work shift.
- 9. When pressure differential system is shut down at the end of the project, the filters must be left in HEPAfiltered exhaust unit and HEPA-filtered vacuums, and openings on these items must be sealed with polyethylene sheeting and duct tape. Exhaust tubes and vacuum tubes for the HEPA-filtered must be sealed with duct tape in



double bags or 2 layers of fire-retardant polyethylene sheeting. Filters on these pieces of equipment must not be replaced after final cleanup is complete to avoid any risk of re-contaminating the area.

- D. Separation of Work Areas from Occupied Areas
 - 1. Maintenance of Containment:
 - a. Ensure that barriers and fire-retardant polyethylene sheeting are effectively sealed and taped. Repair damaged barriers and sheeting, and remedy defects immediately upon discovery. Maintenance is to continue until clearance to dismantle containment is given by The HazMat Project Manager.
 - b. Supervisor shall frequently inspect containment during each work shift. Any breaks, breaches, delamination of plastic sheeting, etc., shall be repaired instantly.
 - c. Monitor effectiveness of barriers with recording manometer. A pressure differential must be maintained at all times, prior to the first disturbance of ACM/ACCM and ending only when final air testing results show that fiber concentrations are acceptable by whichever method has been specified in the SCOPE OF WORK for final air clearance. In the event that pressure differential falls below minus 0.020-inches water column all removal activity in the work area shall cease and the contractor shall devote all resources to tracing and rectifying the fall in pressure prior. Removal shall be suspended until minus 0.020-inches water pressure is restored and permission has been obtained from the HazMat Project Manager to recommence the removal. While pressure is being restored the contractor shall direct that accumulated waste in the work area be bagged and the work area be cleaned.
 - 2. Asbestos abatement work shall not be permitted until:
 - a. Documentation for all on-site supervisors and workers has been submitted to, reviewed and accepted by the HazMat Project Manager. Supervisor and worker documents include current training certification(s), current medical surveillance certification and current respirator fit-testing certification. One copy of each of the aforementioned documents is to be submitted to the on site the HazMat Project Manager or their representative along with a copy of the notification to Cal/OSHA and the local air pollution control district, if required. A second copy is to be maintained on-site by the supervisor. It is the supervisors' responsibility to maintain current on-site documentation for all personnel substitutions or alterations.
 - b. All HEPA filter equipped differential pressure units and vacuum cleaners have been challenge tested and passed on site and are certified for use. Di (2-ethylhexyl) phthalate (DOP, DEHP) POLY-ALPHA OLEFIN (PAO) or an equivalent challenge agent must be used to certify all HEPA filter equipped units.
 - c. Arrangements have been made for the transportation and disposal of waste at the selected and approved landfill, as identified in Contractor submittals.
 - d. Arrangements have been made to contain, filter or properly dispose of contaminated waste water. Permits from local sate and federal government agencies, the local water pollution control district, public sanitary sewer entity, etc. will be required on site prior to any filtered waste water being discharged from the work area or the decontamination unit's shower system. Under no circumstances shall water (filtered or otherwise) be discharged into a storm water drain or runoff.

Waste water must be filtered through a medium that is capable of removing suspended particles of a diameter greater than or equal to 3 microns. Filtered waste water must be discharged into public sanitary sewer systems. Discharge of filtered water onto surface soil, asphalt, concrete, or any other porous surface shall not be permitted.

e. Decontamination units are in place and the work area is effectively isolated from the remainder of the building.



- f. All other preparatory steps have been taken and applicable notices posted and permits obtained.
- g. Only when all the above conditions have been met will Contractor be allowed to begin the disturbance of any ACM/ACCM. An inspection of each containment by the HazMat Project Manager will be performed prior to the start of removal. Removal shall not be performed until the condition of each containment is approved by the HazMat Project Manager.

3.2. ASBESTOS REMOVAL

This section is intended to be used as a general specification for asbestos removal in work area for any particular asbestos abatement project for Owner. Consult the Scope of Work for each individual building for more specific asbestos removal requirements.

Removal of Vinyl Floor Tile (or equivalent) and/or its associated adhesive/mastic shall be removed by manual means without the use of any electro-mechanical device unless the contractor can prove that it is operationally infeasible to remove the material(s) manually. Infeasible, in this instance, shall not include fiscal or schedule considerations.

A. For the purposes of these specifications and for this project, the use of mechanical means for the removal of any materials, mastics or adhesives shall render the removal to be construed as that of a friable material. All containment, personnel protection, removal and disposal means, methods, local, state and federal regulations for friable materials removal shall be observed and adhered to. If solvents are used for the removal of mastics, adhesives, etc., in addition to the procedures enumerated herein, all of the solvent manufacturers procedures are also to be followed pertaining to transportation, storage, use, personal protective equipment requirements, disposal, etc. Solvents used shall be low-odor. All solvent waste material shall be placed in impervious barrels prior to being removed from the work area. In the event of a conflict between these specifications and those of the solvent manufacturer's, the more stringent shall apply. Depending on the chemical composition of the materials being removed, and the SDS of the solvent used, the ensuing amalgam of the solvent and the ACM/ACCM containing material may require disposal as a RCRA hazardous waste. Regardless of the solvent utilized, the contractor may have the waste profiled for RCRA composition by the HPM – all costs involved with this testing shall be borne directly by the contractor and not by the owner.

3.2.1 Asbestos Removal, Friable Materials

- A. Prepare site as per section 3.1.1 and 3.1.2. In areas where ACM/ACCM is greater than 2" thick, wetting would begin the day before removal is to take place.
- B. The use of mechanical means for the removal of any material (including but not limited to putty, caulks, mastics, adhesives, etc.) shall render the removal to be construed as that of a friable material under this contact. All containment, personnel protection, removal and disposal means, methods, local, state and federal regulations for friable materials removal shall be observed and adhered to.
- C. Spray asbestos material with amended water using spray equipment capable of providing a mist application to reduce the release of fibers. Saturate friable material sufficiently to wet the substrate without causing excessive wetting, dripping, or delamination of the material.
- D. Spray the asbestos material repeatedly during removal process to maintain wet condition and minimize asbestos fiber dispersion. The spraying must not be used as a technique to remove or dislodge ACM/ACCM.
- E. Remove saturated asbestos material in small sections. As it is removed, the saturated asbestos material shall be packed in plastic bags of 6-mil minimum thickness and placed in appropriately labeled (29 CFR



1926.1101(k)(8)(iii)) container for transport. Fixtures designated for total demolition may be wrapped in double layers of 6-mil plastic, appropriately labeled and placed in labeled containers for transport. The Contractor shall adhere to disposal authorities' size and weight requirements for containers (bags or packages).

F. If solvents are used for the removal of mastics, adhesives, etc., in addition to the procedures enumerated herein, all of the solvent manufacturers procedures are also to be followed pertaining to transportation, storage, use, personal protective equipment requirements, disposal, etc. Solvents used shall be low-odor. All solvent waste material shall be placed in impervious barrels prior to being removed from the work area. In the event of a conflict between these specifications and those of the solvent manufacturer's, the more stringent shall apply. Depending on the chemical composition of the materials being removed, and the SDS of the solvent used, the ensuing amalgam of the solvent and the ACM/ACCM containing material may require disposal as a RCRA hazardous waste. Regardless of the solvent utilized, the contractor may have the waste profiled for RCRA composition by the HPM – all costs involved with this testing shall be borne directly by the contractor and not by the owner.

G. Waste Load-out Procedure

- 1. Seal bags or containers. Clean external surfaces of containers thoroughly by wet cleaning in the designated area of work area that is part of equipment decontamination unit.
- 2. Move containers to washroom, wet-clean each container thoroughly, and move to clean room area pending removal to uncontaminated areas. The material must be placed in a clean bag or container as it exits the equipment washroom and enters clean room area.
- 3. Ensure that containers are removed from clean room areas by workers who have entered from uncontaminated areas, dressed in clean coveralls. Ensure that workers do not enter from uncontaminated areas into washroom or work area. Ensure that contaminated workers do not exit work area through equipment decontamination unit.
- 4. When disposal bags are used, the bagged material must be placed within a second bag in the equipment decontamination unit. The second, outer bag must be labeled with all applicable warnings, including D.O.T. labeling. Double bagged material shall then be passed through clean room to a covered cart for removal from the building. When larger pieces of material are to be disposed of, the material must be wrapped in 2 layers of fire-retardant polyethylene sheeting and properly labeled in the equipment decontamination unit.
- 5. All bags, containers and drums must be tagged with the manifest number and the numbering system provided by Owner, if any.
- F. Secondary Removal
 - 2. After completion of gross removal work, all surfaces from which asbestos has been removed must be wetbrushed with a nylon or plastic brush and/or wet-cleaned by an equivalent method to remove all visible material. During this work the surfaces being cleaned must be kept wet.
 - 3. The HazMat Project Manager will individually approve each area of encapsulation prior to commencement of encapsulation.
 - 4. Encapsulant is to be applied only to surfaces from which ACM/ACCM has been removed and the HazMat Project Manager has approved off. Encapsulation is not to be construed as a method for sealing dust on surfaces.



3.2.2 Asbestos Removal, Non-friable Materials

- A. Prepare site as per section 3.1.1 and 3.1.2.
- B. Wet non-friable material with amended water and remove with appropriate equipment. Dispose of material according to waste load-out procedure.
- C. Spray the asbestos material repeatedly during removal process to maintain wet condition and minimize asbestos fiber dispersion. The spraying must not be used as a technique to remove or dislodge ACM/ACCM.
- D. Remove saturated asbestos material in small sections. As it is removed, the saturated asbestos material shall be packed in plastic bags of 6-mil minimum thickness and placed in appropriately labeled (29 CFR 1926.1101(k)(8)(iii)) container(s) for transport. Fixtures designated for total demolition may be wrapped in double layers of 6-mil plastic, appropriately labeled and placed in labeled containers for transport. The Contractor shall adhere to disposal authorities' size and weight requirements for containers (bags or packages).
- E. If solvents are used for the removal of mastics, adhesives, etc., in addition to the procedures enumerated herein, all of the solvent manufacturers procedures are also to be followed pertaining to transportation, storage, use, personal protective equipment requirements, disposal, etc. Solvents used shall be low-odor. All solvent waste material shall be placed in impervious barrels prior to being removed from the work area. In the event of a conflict between these specifications and those of the solvent manufacturer's, the more stringent shall apply. Depending on the chemical composition of the materials being removed, and the SDS of the solvent used, the ensuing amalgam of the solvent and the ACM/ACCM containing material may require disposal as a RCRA hazardous waste. Regardless of the solvent utilized, the contractor may have the waste profiled for RCRA composition by the HPM all costs involved with this testing shall be borne directly by the contractor and not by the owner.
- F. Waste Load-out Procedure
 - 1. Seal bags or containers. Clean external surfaces of containers thoroughly by wet cleaning in the designated area of work area that is part of equipment decontamination unit.
 - 2. Move containers to washroom, wet-clean each container thoroughly, and move to clean room area pending removal to uncontaminated areas. The material must be placed in a clean bag or container as it exits the equipment washroom and enters clean room area.
 - 3. Ensure that containers are removed from clean room areas by workers who have entered from uncontaminated areas, dressed in clean coveralls. Ensure that workers do not enter from uncontaminated areas into washroom or work area. Ensure that contaminated workers do not exit work area through equipment decontamination unit.
 - 4. When disposal bags are used, the bagged material must be placed within a second bag in the equipment decontamination unit. The second, outer bag must be labeled with all applicable warnings, including D.O.T. labeling. Double bagged material shall then be passed through clean room to a covered cart for removal from the building. When larger pieces of material are to be disposed of, the material must be wrapped in 2 layers of fire-retardant polyethylene sheeting and properly labeled in the equipment decontamination unit.
 - 5. All bags, containers and drums must be tagged with the manifest number and the numbering system provided by Owner, if any.
- F. Secondary Removal
 - 1. After completion of gross removal work, all surfaces from which asbestos has been removed must be wetbrushed with a nylon or plastic brush and/or wet-cleaned by an equivalent method to remove all visible



material. During this work the surfaces being cleaned must be kept wet. After the area has been clean, it shall be vacuumed with a HEPA vacuum prior to the HazMat Project Manager being informed that the area is ready for a visual inspection.

- 2. The HazMat Project Manager will individually approve each area of encapsulation prior to commencement of encapsulation.
- 3. Encapsulant is to be applied only to surfaces from which ACM/ACCM has been removed and the HazMat Project Manager has approved off. Encapsulation is not to be construed as a method for sealing dust on surfaces.

3.3 CLEANUP

This part is intended to be used as a general specification for cleanup of work area for any particular asbestos abatement project for Owner. Consult the Scope of Work for each individual building for more specific cleanup requirements.

3.3.1 Cleanup

- A. Remove visible accumulations of asbestos material and debris. Wet-clean all surfaces within work area.
- B. Remove the upper layer of fire-retardant polyethylene sheeting from walls and floors only. The windows, doors, and HVAC vents must remain sealed and any HEPA-filtered exhaust units, air filtration, and decontamination unit must remain in place and in service.
- C. Clean all surfaces in work area and any other contaminated areas with wet-cleaning methods using amended water, and/or using HEPA-filtered vacuums. After cleaning work area, allow for settlement of dust, and again wetclean or clean with HEPA-filtered vacuums, all surfaces in work area. After completion of the second cleaning operation, perform a complete visual inspection of work area to ensure that work area is free of dust and/or visible asbestos debris.
- D. Time for settlement of dust between initial cleaning and final cleaning will be determined by The HazMat Project Manager. Typical settling times for various types of ACM/ACCM are: 12-16 hours for friable materials, and 3-6 hours for non-friable materials.
- E. Sealed containers and all equipment in use in work area must be included in the cleanup and must be removed from work area via equipment decontamination unit, at an appropriate time in the cleaning sequence.

3.4 INSPECTIONS AFTER REMOVAL

This part is intended to be used as a general specification for inspections of work area for any particular asbestos abatement project for Owner. Consult the SCOPE OF WORK for each individual project for more specific inspection requirements.

3.4.1 Inspections After Removal (see also SUB-SUB-SECTION 5.1)

- A. If the HazMat Project Manager finds visible accumulations of asbestos debris in work area after the completion of step 3.3.1 (C), Contractor shall repeat wet-cleaning until work area is in compliance, at Contractor's expense.
- B. When an inspection by the HazMat Project Manager in the presence of Contractor determines that the area is free of accumulations of dust and visible asbestos debris and the final air clearance has been met, decontamination unit shall be removed, the area thoroughly wet-cleaned, and materials from equipment room and shower room disposed of as contaminated waste.



C. A final inspection will be carried out by The HazMat Project Manager in the presence of Contractor to ensure that no dust or debris remains on surfaces as a result of dismantling operations.

3.5 DISPOSAL

This part is intended to be used as a general specification for disposal of asbestos-containing materials for any particular asbestos abatement project for Owner. Consult the SCOPE OF WORK for each individual building for more specific disposal requirements.

3.5.1 Disposal

- A. Preparation and Security of Waste Holding Areas
 - 1. Prepare enclosed transport vehicles and/or enclosed dumpsters/containers with at least 2 layers of 6 mil fireretardant polyethylene sheeting. The floor and interior wall surfaces shall be covered with one layer of 6-mil. plastic sheeting sealed with tape to a minimum height of 6 feet above the floor surface or to the roof line of the waste container.
 - 2. Secure transport vehicles and dumpsters with padlocks. Dumpsters/containers and waste transport vehicles must be locked and appropriately labeled at all times while engaged in asbestos disposal on Owner's property, except when waste materials are being loaded into them.
- B. Storage and Disposal of Containers
 - 1. Containers of ACM/ACCM shall not be stored in uncontaminated areas, but must be moved directly from work area to a labeled, enclosed dumpster in enclosed carts.
 - 2. ACM/ACCM must be disposed of at the selected and approved disposal site in accordance with requirements of all applicable disposal authorities. Solvents used for the removal of resilient flooring mastics/adhesives shall be low-odor. All adhesives/mastics shall be disposed of as a RCRA waste. Regardless of the solvent utilized, the contractor may have the waste profiled for RCRA composition by the HPM all costs involved with this testing shall be borne directly by the contractor and not by the owner.
 - 3. Disposal documents and receipts must be submitted to The HazMat Project Manager prior to final clearance of Contractor.
- C. Contractor must tag each container with a waste manifest label and a numbering system provided by Owner, if any.
- D. Discharge of Waste Water
 - 1. Waste water must be filtered through a medium that is capable of removing suspended particles of a diameter greater than or equal to 3 microns. Filtered waste water must be discharged into public sanitary sewer systems. Discharge of filtered water onto surface soil, asphalt, concrete, or any other porous surface shall not be permitted.
 - 2. Permits from local sate and federal government agencies, the local water pollution control district, public sanitary sewer entity, etc. will be required on site prior to any filtered waste water being discharged from the work area or the decontamination unit's shower system. Under no circumstances shall waste water (filtered or otherwise) be discharged into a storm water drain or runoff.
 - 3. Filtration devices' filter element or accumulation tank contents shall be removed, manifested and disposed off as friable Asbestos Containing Material at the contractors' expense.



SUB-SECTION 4.0

SPECIAL PROCEDURES

This section is intended to be used as a general specification for special procedures for any particular asbestos abatement project for The Owner. Contractor should consult the Scope of Work for each individual building for more specific requirements pertaining to this section.

4.1 EXTERIOR ASBESTOS REMOVAL

This part applies only to removal of non-friable exterior roofing materials, non-friable asphalt-based exterior mastic materials, or non-friable exterior asbestos cement panels. Where exterior components have a direct impact on the interior of the buildings or share a common surface with the interior of the building, or in the event of a conflict with interpretation, all procedures enumerated in section 3 of these specifications shall apply.

4.1.1 Personal Protection

- A. Exterior work may be performed using half-mask, dual cartridge, air purifying respirators. Organic vapor cartridges placed in tandem with HEPA filters shall be required when any solvents or materials that produce vapors are used as part of the removal process
- B. All workers engaged in exterior removal must wear disposable full body coveralls, disposable head covers, disposable footwear, hard hats, goggles and gloves as required by OSHA/Cal-OSHA for the complete protection of the workers.
- C. Shoes may be worn for exterior work, provided the shoes are stored in sealed bags at the decontamination area at the end of the day, and properly decontaminated after completion of the work.

4.1.2 Protection from Heat Stress

In exterior areas where heat stress to workers is inevitable, Contractor must provide frequent work breaks in cool areas outside work area, and/or body vests with ice pack inserts, depending on the site conditions.

4.1.3 Decontamination Area

- A. Locate decontamination areas in an exterior or interior area when access from the work area can be accomplished at ground level with exterior access.
- B. Contractor shall establish a decontamination area that is adjacent to the work area for the decontamination of employees and their equipment, which is contaminated with asbestos that consists of an area covered by an impermeable drop cloth on the ground or horizontal working surface.
- C. The area must be of sufficient size as to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination beyond the area.
- D. Protective clothing must be cleaned with a HEPA vacuum before it is removed.
- E. All equipment and surfaces of containers filled with ACM/ACCM must be cleaned prior to removing them from the equipment room or area.
- F. Contractor shall ensure that workers enter and exit the work area through the decontamination area.



4.1.4 Respirator Decontamination Facilities

A respirator decontamination facility consisting of a water hose equipped with a spray nozzle, an adequate supply of 6 mil bags, and an adequate supply of disposable towels may be used in a remote section of work area so workers may replenish body fluids with GatoradeTM, or a similar electrolyte replenishing drink.

- A. Each person who uses the respirator decontamination facility shall rinse the exterior of the respirator while holding head over an open 6 mil bag.
- B. After thoroughly rinsing the respirator each person shall wipe the excess water off the exterior of the respirator with a disposable towel, and dispose of the towel in the bag.
- C. After removing excess water from the exterior of the respirator, the respirator may be removed.
- D. Waste water that has accumulated in the rinse bag shall be disposed of as ACM or properly filtered in the decontamination area.

4.1.5 Exterior Asbestos Removal

- A. Provide suitable tools for removal of asbestos cement panels, roof felts, tar, and mastics. Roof cutters are permissible only when proper steps are taken to ensure dust-free removal conditions, and the building or facility owner, the HazMat Project Manager and local regulatory agencies permit the use of such equipment.
- B. For asbestos cement panels, the perimeter of the work area shall be clearly delineated and labeled with caution tape. Prior to the start of any work prepare the surrounding area by clearing and cleaning all debris and trash to a minimum of 10 feet from the exterior work area. The surrounding areas shall then be covered with one layer of 6-mil plastic sheeting. The plastic sheeting shall be sized so that it will cover a drop area with a minimum of 10 feet from the work area. Spray panels with amended water using spray equipment capable of providing a mist application to reduce the release of fibers. Saturate the material sufficiently to wet the material without causing excess dripping.
- C. Remove wet asbestos cement material in small sections. As it is removed wrap the material in 6-mil fire-retardant polyethylene sheeting and place in appropriately labeled (29 CFR 1926.1101(k)(8)(iii)) containers lined with 6-mil fire-retardant polyethylene sheeting and enclosed truck or closed dumpster for transport.
- D. Asbestos cement panels must be removed carefully and in complete sections. Breakage of the panels must be minimized, and must not be used as a method of removal without prior written approval of the HazMat Project Manager.
- E. For removing roofing material which contains ACM/ACCM Contractor shall ensure that the following work practices are followed:
 - 1. The perimeter of the building shall be clearly delineated and labeled with caution tape. Prior to the start of any work on the roof, prepare the surrounding area below by clearing and cleaning all debris and trash to a minimum of 15 feet from the exterior walls of the building. The surrounding areas shall then be covered with one layer of 6-mil plastic sheeting. The plastic sheeting shall be sized so that it will cover a drop area with a minimum of 15 feet from the exterior wall. The interior of the building shall be appropriately and adequately protected from debris that may fall through the roof decking during removal.
 - 2. Roofing material shall be removed in an intact state to the extent feasible.
 - 3. Wet methods shall be used to remove roofing materials that are friable, or that will be rendered friable during removal, unless such wet methods are not feasible or will create safety hazards.



- 4. Cutting machines, if permitted for use, shall be continuously misted during use, unless a competent person determines that misting substantially decreases worker safety.
- 5. When removing built-up roofs with asbestos-containing roofing felts and an aggregate surface using a power roof cutter, all dust resulting from the cutting operation shall be collected with a HEPA-filtered dust collector, or shall be HEPA vacuumed by vacuuming along the cut line.
- 6. When removing built-up roofs with asbestos-containing roofing felts and a smooth surface using a power roof cutter, if permitted for use, the dust resulting from the cutting operation shall be collected either by a HEPA dust collector or HEPA vacuuming along the cut line, then carefully and completely wipe up the still-wet dust and debris left along the cut line.
- F. Asbestos-containing material that has been removed from a roof shall not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it shall be lowered to the ground via covered, dusttight chute, crane or hoist:
 - 1. Any ACM/ACCM that is not intact shall be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift. While the material remains on the roof it shall either be kept wet, placed in an impermeable waste bag, or wrapped in plastic sheeting.
 - 2. Intact ACM/ACCM shall be lowered to the ground as soon as is practicable, but in any event no later than the end of the work shift.
- G. Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such manner so as to preclude the dispersion of dust.
- H. Roof level heating and ventilation air intake sources shall be isolated after these ventilation systems have been shut down.
- I. After completion of removal work, all surfaces from which asbestos has been removed must be wet-cleaned, and the entire surface must be vacuumed with a HEPA-filtered vacuum.
- J. Any adhesive materials such as mastic, asphalt, or tar must be removed using a suitable (non-toxic) solvent. The residue must be bagged and properly disposed of as ACM. On porous or irregular surfaces where all traces of ACM/ACCM cannot be removed, encapsulant may be applied. Prior to encapsulation, however, these areas must be inspected and approved by the HazMat Project Manager.

4.2 GLOVE BAG PROCEDURE

The glove bag is a specialty procedure that shall be utilized only when specified in the SCOPE OF WORK of these specifications. Glove bag procedures may only performed when access and preparation limit possibilities for removal. The procedure shall only be utilized when circumstances dictate this type of removal, as determined by The HazMat Project Manager.

4.2.1 Personal Protection

A. The glove bag procedure may be performed using half-mask, dual cartridge, air purifying respirators, provided Contractor shows previous, similar work has not produced airborne fiber levels in excess of 0.01 fibers/cc during the glove bag removal procedure. If the contractor cannot produce the required negative exposure assessment, the HazMat Project Manager may require the contractor's personnel to utilize Powered Air Purifying Respirators (PAPR's).



- B. All workers engaged in exterior removal must wear disposable full body coveralls, disposable head covers, disposable footwear, hard hats, goggles and gloves as required by OSHA/Cal-OSHA for the complete protection of the workers.
- C. Shoes may be worn for exterior work, provided the shoes are stored in sealed bags at the decontamination area at the end of the day, and properly decontaminated after completion of the work.

4.2.2 Preparation for Glove Bag Procedure

- A. Post warning signs and barrier tape in and around work area as required by all applicable regulatory agencies, and restrict access to work area to personnel approved by The HazMat Project Manager.
- B. Shut down electric power when necessary. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electric code requirements. Use ground-fault interrupter circuits (GFIC) at power receptacles in work area.
- C. Seal vents within work area with, at least, tape and fire-retardant polyethylene sheeting during the work.
- D. Cover moveable objects within the proposed work areas using 6-mil fire-retardant polyethylene sheeting, as appropriate, or remove such objects from work area to a suitable temporary location.
- E. Cover areas beneath and adjacent to the proposed work using 6 mil fire-retardant polyethylene sheeting, as appropriate. Cover scaffolding with at least one layer of 6 mil fire-retardant polyethylene sheeting, when appropriate.
- F. Prepare curtained doorways at entrances to and exits from work area.

4.2.3 Decontamination Room or Area

- A. Contractor shall establish an equipment room or area that is adjacent to the glove bag work area for the decontamination of workers and equipment contaminated with asbestos. The decontamination area shall consist of an area covered by an impermeable drop cloth on the floor or horizontal working surface, and be of sufficient size as to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination beyond the area.
- B. Workers may use double suits, or decontaminate a single suit with a HEPA-filtered vacuum. Before leaving work areas each worker must remove and dispose of the outer suit (if double suits are used) and dispose of this suit in a suitable container (see **SUB-SUB-SECTION 3.5.1, DISPOSAL**), or thoroughly vacuum the suit using a HEPA-filtered vacuum (if single suits are used) before leaving the glove bag work area to enter decontamination room or area.
- C. All equipment and surfaces of containers filled with ACM/ACCM must be cleaned prior to removing them from the decontamination room or area.
- D. Contractor shall ensure that employees enter and exit the regulated glove bag work area through the decontamination room or area.



4.2.4 Separation of Work Areas from Occupied Areas

- A. Maintenance of Critical Barriers
 - 1. Ensure that barriers and fire-retardant polyethylene linings are effectively sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery. Maintenance is to continue until clearance to remove critical barriers is given by the HazMat Project Manager.
 - 2. Supervisor shall visually inspect critical barriers continually for the duration of each work shift.
- B. Asbestos abatement work shall not begin until:
 - 1. Documentation for all on-site supervisors and workers has been submitted to, reviewed and accepted by the HazMat Project Manager. Supervisor and worker documents include current training certification(s), current medical surveillance certification and current respirator fit-testing certification. One copy of each of the aforementioned documents is to be submitted to the on site the HazMat Project Manager or their representative along with a copy of the notification to Cal/OSHA and the local air pollution control district, if required. A second copy is to be maintained on-site by the supervisor. It is the supervisors' responsibility to maintain current on-site documentation for all personnel substitutions or alterations.
 - 2. All HEPA filter equipped differential pressure units and vacuum cleaners have been DOP tested and passed on site and are certified for use.
 - 3. Arrangements have been made for the transportation and disposal of waste at the selected and approved landfill, as identified in Contractor submittals.
 - 4. Decontamination units are in place and the work area is effectively isolated from the remainder of the building
 - 5. All other preparatory steps have been taken and applicable notices posted and permits obtained.
 - 6. Only when all the above conditions have been met will Contractor be allowed to begin the disturbance of any ACM/ACCM. An inspection of each containment by the HazMat Project Manager will be performed prior to the start of removal. Removal shall not be performed until the condition of each containment is approved by the HazMat Project Manager.

4.2.5 Asbestos Removal

- A. Install glove bag according to manufacturers recommendations, and in accordance with 29 CFR 1926.1101(g)(5)(ii).
- B. Cut covering on insulation along the top seam to allow wetting of the insulation, and cut cover all around section to be removed.
- C. Remove ACM/ACCM in small sections. Lower the insulation carefully in the bottom of the glove bag. Do not drop material. One glove bag must be used for each section of ACM/ACCM to be removed. Sliding or re-use of a single glove bag is strictly prohibited. Use appropriate size bag for the dimensions of the material to be removed to ensure economy of materials.
- D. Prior to removal of the glove bag, ensure that all surfaces from which asbestos has been removed are clean of all visible material, and that the upper portion of the bag is clean of all visible waste. Spray all surfaces and tools in the glove bag with amended water. Wipe all sections of pipe with rag or appropriate material. Wipe upper section of bag as well.



- E. Use appropriate encapsulant on all surfaces inside the bag. Cover exposed insulation remaining on pipes with wettable fiberglass or other suitable material. Duct tape is not suitable for this purpose.
- F. Place tools inside sleeves of glove bag and isolate from interior of glove bag. Collapse bag using HEPA-filtered vacuum. Squeeze and twist bag at mid-level to isolate waste from upper portion of bag. Seal bag with duct tape or locking ties. Vacuum the unsealed upper portion. Keep the HEPA-filtered vacuum connected until the glove bag is removed. Cut the glove bag along the top and sides, then remove from pipe. Cut off isolated sleeves containing any tools or supplies from the bag and place in bucket of water. Clean the tools in equipment room of decontamination unit. Place the glove bag inside a 6-mil waste bag and seal the top of the waste bag by "goose necking" it and sealing it with duct tape.
- G. Disposal of glove bag, material, and wastewater (see SUB-SUB-SECTION 3.5.1 DISPOSAL).

4.3. MINI-CONTAINMENT PROCEDURE

The mini-containment may be specified in certain instances, such as removal of ACM/ACCM from a small ventilation system or from a short length of duct where a glove bag may not be appropriate to adequately contain the asbestos fibers during removal. The procedure shall only be utilized when circumstances dictate this type of removal, as determined by the HazMat Project Manager.

4.3.1 Personal Protection

- A. The mini-containment procedure may be performed using half-mask, dual cartridge, air purifying respirators, provided Contractor shows previous, similar work has not produced airborne fiber levels in excess of 0.01 fibers/cc during mini-containment removal procedures in the past. If the contractor cannot produce the required negative exposure assessment, the HazMat Project Manager may require the contractor's personnel to utilize Powered Air Purifying Respirators (PAPR's).
- B. All workers engaged in exterior removal must wear disposable full body coveralls, disposable head covers, disposable footwear, hard hats, goggles and gloves as required by OSHA/Cal-OSHA for the complete protection of the workers.
- C. Shoes may be worn for this work, provided the shoes are stored in sealed bags at the decontamination area at the end of the day, and properly decontaminated after completion of the work.

4.3.2 Preparation for Mini-Containment Procedure

- A. Post warning signs and barrier tape in and around work area as required by all applicable regulatory agencies, and restrict access to work area to personnel approved by The HazMat Project Manager.
- B. Shut down electric power when necessary. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electric code requirements. Use ground-fault interrupter circuits (GFIC) at all power receptacles in work area. Locate power source for electrical equipment outside work area.
- C. Seal off all openings, including but not limited to: vents, ducts, grills, diffusers, and any other penetrations of work area within mini-containment with, at least, tape and fire-retardant polyethylene sheeting.
- D. When appropriate, clean moveable objects within the proposed work areas using HEPA-filtered vacuums and/or wet-cleaning methods as appropriate, or remove such objects from work area to a suitable temporary location.
- E. When appropriate, clean fixed objects within the proposed work area using HEPA-filtered vacuums and/or wetcleaning methods as appropriate, and cover objects with 6 mil fire-retardant polyethylene sheeting.



- F. Construct mini-containment using a single layer of fire-retardant polyethylene sheeting placed over a temporary frame constructed with 2"x 4" lumber, PCV tubing or other suitable material, as determined by the HazMat Project Manager. When permanent walls are present, and will suffice for containment barriers, cover walls and ceilings with a single layer of fire-retardant polyethylene sheeting.
- G. Construct a decontamination room contiguous to the mini-containment consisting of a single layer of fire-retardant polyethylene sheeting attached to 2"x 4" lumber, PCV tubing or other suitable material, as determined by the HazMat Project Manager. The decontamination room shall be of sufficient size as to accommodate cleaning of equipment and removing personal protective equipment, and shall have curtained doorways at the entrance to work area and exit to uncontaminated areas.
- H. Place HEPA-filtered vacuum or low-volume HEPA-filtered exhaust unit in such a manner that a pressure differential can be established in the change room.
- I. Doorways and corridors outside the mini-containment that will not be used for passage during work must be barricaded with barrier tape.

4.3.3 Decontamination Room or Area

- A. Contractor shall establish an equipment room or area that is contiguous with the mini-containment work area for the decontamination of workers and equipment contaminated with asbestos. The decontamination area shall consist of an area covered by a impermeable drop cloth on the floor or horizontal working surface, and be of sufficient size as to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination beyond the area.
- B. Workers may use double suits, or decontaminate a single suit with a HEPA-filtered vacuum. Before leaving work areas each worker must remove and dispose of the outer suit (if double suits are used) and dispose of this suit in a suitable container (see **SUB-SUB-SECTION 3.5.1, DISPOSAL**), or thoroughly vacuum the suit using a HEPA-filtered vacuum (if single suits are used) before leaving the decontamination room.
- C. All equipment and surfaces of containers filled with ACM/ACCM must be cleaned prior to removing them from the decontamination room or area.
- D. Contractor shall ensure that employees enter and exit the regulated mini-containment work area through the decontamination room or area.

4.3.4 Separation of Work Areas from Occupied Areas

- A. Contractor shall ensure that barriers and fire-retardant polyethylene linings are effectively sealed and taped. Damaged barriers shall be repaired and defects remedied immediately upon discovery. Maintenance is to continue until clearance to remove mini-containment is given by The HazMat Project Manager.
- B. Asbestos abatement work shall not begin until:
 - 1. Arrangements have been made for disposal of waste at the selected and approved landfill, as identified in Contractor submittals.
 - 2. Mini-containment and decontamination unit are in place and work area is effectively isolated from the remainder of the building.
 - 3. All other preparatory steps have been taken and applicable notices posted and permits obtained.



4. Only when all the above conditions have been met will Contractor be allowed to begin disturbance of ACM/ACCM. An inspection of the mini-containment by the HazMat Project Manager will be performed prior to the start of removal. No removal shall be performed until the condition of the mini-containment is approved by the HazMat Project Manager.

4.3.5 Asbestos Removal

- A. Mist materials with amended water and remove materials in small sections. Place in bag immediately.
- B. Wipe down exposed surfaces with amended water and rags.
- C. Seal bags or containers. Clean external surfaces of containers thoroughly by wet-cleaning in the mini-containment.

4.3.6 Waste Load-out Procedure

See SUB-SUB-SECTION 3.2.1, PARAGRAPH E, WASTE LOAD-OUT PROCEDURES, STEPS 1-5.

4.3.7 Cleanup and Encapsulation

- A. After completion of removal work, all surfaces from which asbestos has been removed must be brushed and/or wetcleaned by an equivalent method to remove all visible material. During this work the surfaces being cleaned must be kept wet with solvent, unless otherwise noted in the Scope of Work
- B. The HazMat Project Manager will individually approve each area for encapsulation in writing prior to commencement of encapsulation.
- C. Encapsulant is to be applied only to surfaces from which ACM/ACCM has been removed and shall not be used as a method for sealing dust on surfaces.

4.4 DECONTAMINATION OF CONTAMINATED AREAS

In the event that an area of a building is determined by the HazMat Project Manager or The Owner as being contaminated with asbestos dust or debris, the area must be decontaminated using the procedures included in this part of the specification.

4.4.1 Personal Protection

- A. All personnel entering an area that is visibly contaminated with assumed, suspected, or known ACM/ACCM must wear half-mask, dual cartridge, air purifying respirators and protective clothing to install temporary barriers and begin preparation of the contaminated area.
- B. When area or personal air samples indicate a level of airborne fibers to be in excess of 0.1 fibers/cc, all personnel in the contaminated area must use PAPR until fiber concentrations are consistently measured below 0.1 fibers/cc.
- C. When area or personal air samples indicate a level of fiber concentrations to be in excess 1.0 fibers/cc, all personnel in the contaminated area must use a PAPR or Type C, pressure demand respirator until fiber concentrations are measured below 1.0 fibers/cc.
- D. All personnel entering the contaminated area must wear protective clothing and use decontamination units upon leaving the contaminated area.



4.4.2 Preparation

- A. Immediately shut down and isolate heating, cooling and ventilating air systems to prevent contamination and fiber dispersal to other areas of the structure. Adequately wet all visible asbestos debris in the contaminated area. Cover vents within the contaminated area with tape and fire-retardant polyethylene sheeting.
- B. Seal off contaminated area with temporary barriers constructed with 6-mil fire-retardant polyethylene sheeting. Construct curtained doorway for temporary access to contaminated area.
- C. Construct a worker decontamination unit contiguous to the contaminated area consisting of three totally enclosed rooms as follows:
 - 1. An equipment room with two curtained doorways, one to the contaminated area and one to shower room.
 - 2. A shower room with two curtained doorways, one to equipment room and one to clean room. Shower room must contain at least one shower with hot and cold water. Water must be mixed at point of use (29 CFR 1910.141)
 - a. Careful attention must be paid to shower room to insure against leaking of any kind and to insure proper drainage of shower water. There must be no standing water in the shower stall or shower room. Insure a supply of soap at all times in shower room.
 - b. Waste water must be filtered through a medium that is capable of removing suspended particles of a diameter greater than or equal to 3 microns. Filtered waste water must be discharged into public sanitary sewer systems. Discharge of filtered water onto surface soil, asphalt, concrete, or any other porous surface shall not be permitted. Permits from local sate and federal government agencies, the local water pollution control district, public sanitary sewer entity, etc. will be required on site prior to any filtered waste water being discharged from the work area or the decontamination unit's shower system. Under no circumstances shall waste water (filtered or otherwise) be discharged into a storm water drain or runoff.
 - 3. A clean room with one curtained doorway into shower room and one entrance or exit to uncontaminated areas of the building. Clean room must have sufficient space for storage of the workers street clothes, towels, and other uncontaminated items.
- D. Seal off all openings, including but not limited to: corridors, doorways, elevators, skylights, ducts, grills, diffusers, and any other penetrations to the contaminated areas. Doorways and corridors that will not be used for passage during work must be sealed with barriers. These seals are barriers critical to the integrity of containment and must be left in place until final air testing is complete and the results received and approved.

4.4.3 Establish Pressure Differential

- A. Install HEPA-filtered differential pressure unit in work area to lower concentration of airborne fibers in work area and contain airborne fibers. All differential pressure units shall be challenge tested on site to verify the efficiency of the HEPA Filtration Units to ensure that the units are filtering at a minimum of 99.97% efficiency for mono-dispersed particulate 0.3 micrometers in diameter. Challenge testing shall be performed using DOP or equivalent by persons conversant and experienced in the usage and testing of HEPA filtration units. Testing certificates shall be presented on site to the HazMat Project Manager or affixed to the machines. No differential pressure unit or other HEPA filter equipped equipment shall be used on site until and unless it has been tested and passed this challenge test.
- B. All work areas must be placed under a pressure differential of at least minus 0.02 inches of water column, with respect to outside areas, prior to disturbance of asbestos-containing materials. The pressure differential equipment utilized shall be, at a minimum, capable of performing four (4) complete air exchanges per hour. For the purposes of



this project, each pressure differential unit shall be evaluated at 75% of the manufacturers rated capacity. For example, if the manufacturers rated capacity for a differential pressure unit is 2,000 cfm., for the purpose of this project, that particular unit will be evaluated as having a maximum capacity of 1,500 cfm. The contractor shall provided the necessary equipment to maintain the required minus 0.02 inches of water column PLUS 20% (or a minimum of one machine – which ever is greater) additional equipment in the event of equipment malfunction work area changes, etc. The unused equipment shall be tested, installed in the work area, sealed and kept in a state of readiness to be brought on line, if necessary, at very short notice.

- C. Locate HEPA-filtered exhaust units so that make-up air enters work area through decontamination unit, or other suitable source of make-up air. Place HEPA-filtered exhaust units as far as possible from the entrance/exit or other make-up air sources.
- D. Exhaust ducts shall be attached plywood cut-outs and placed through opening window, door, or wall, then sealed with tape and vented to the outside of the building. Exhausts ducts shall not be placed adjacent to ventilation or HVAC units. The plywood cut-outs shall be attached to the building securely to prevent entry, theft or vandalism to the owners' property.
- E. Start HEPA-filtered exhaust units prior to removal and continue operating continuously until final air clearance of work area has been successfully obtained.
- F. Replace air filters in HEPA-filtered exhaust unit when the unit's manometer indicates that a pressure drop across the filters exceeds 1.0 inch of water, replace pre-filter first, then the secondary filter and finally the HEPA filter.
- G. HEPA-filtered exhaust units will be inspected daily by The HazMat Project Manager to ensure proper maintenance, and correct placement of filters. The inspection results will be noted in the HazMat Project Manager's daily logs.
- H. Pressure differential recorders (manometers) equipped with an acceptable method of self-recording, i.e., circular recorders, strip charts, print-out, etc. are required in each work area to monitor the pressure difference between the work area and the ambient conditions in the surrounding areas. The recording system shall be accurate to the nearest 0.001 inches of water column differential and be equipped with a functioning audible alarm that sounds if the difference becomes less than minus 0.020-inches water column. The recorders must be calibrated prior to their use and re-calibrated on a daily basis prior to the commencement of the work shift. The daily record produced by the machine is to be marked with the project name, location, date, and time handed over to the HazMat Project Manager or the owners' on-site representative at the conclusion of each work shift.
- I. When pressure differential system is shut down at the end of the project, the filters must be left in HEPA-filtered exhaust unit and HEPA-filtered vacuums, and openings on these items must be sealed with polyethylene sheeting and duct tape. Exhaust tubes and vacuum tubes for the HEPA-filtered must be sealed with duct tape in double bags or 2 layers of fire-retardant polyethylene sheeting. Filters on these pieces of equipment must not be replaced after final cleanup is complete to avoid any risk of re-contaminating the area.

4.4.4 Decontamination of Contaminated Surfaces

- A. Clean moveable objects and carpeting within the contaminated areas using HEPA-filtered vacuums and/or wetcleaning methods as appropriate, and remove such objects from the contaminated area to a suitable temporary location. Refer to SUB-SECTION 5.4(B) for Re-establishing object and systems.
- B. Clean fixed objects, including ceiling and wall fixtures, within the contaminated area using HEPA-filtered vacuums and/or wet-cleaning methods as appropriate.
- C. Clean all exposed surfaces in the contaminated area using HEPA-filtered vacuums or wet-cleaning methods as appropriate. Methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters shall not be used.



SUB-SECTION 5.0

INSPECTIONS, PROJECT MANAGEMENT, AIR MONITORING AND COMPLETION

5.1 INSPECTIONS

This section is intended to be used as a general specification for inspections, air monitoring, and completion for any particular asbestos abatement project for the owner. Consult the Scope of Work for each individual building, for more specific requirements pertaining to this section, if any.

5.1.1 Inspections Prior to and During Work

- A. Contractor shall make all work areas available to inspection throughout the project.
- B. Each work area will be inspected by HazMat Project Manager accompanied by Contractor:
 - 1. Immediately after initial cleaning has been completed and prior to the application of fire-retardant polyethylene sheeting to exposed surfaces.
 - 2. Immediately prior to the commencement of removal of ACM/ACCM (after preparation of work area is complete).
 - 3. Periodically throughout the project.
 - 4. After removal is complete but prior to the application of any encapsulant to the exposed substrates, and pre-encapsulation air testing.
- C. Regular inspections of the HEPA-filtered ventilation system will be performed by HazMat Project Manager to ensure filters are excessively loaded with particulate debris, and are properly seated in HEPA-filtered exhaust units. If deemed necessary by the HazMat Project Manager, the contractor will be required to change the filters.

5.1.2 Inspection of Non-asbestos Containing Materials

HazMat Project Manager may inspect all materials from work area that are being disposed of as Non-asbestos Containing Materials.

5.1.3 Final Visual Inspections

- A. A final visual inspection will be made after all Contractors' materials have been removed from work area and all removal, encapsulation, disposal, and related work is completed.
- B. Work area must be well lighted for inspection by HazMat Project Manager. Insufficient lighting may result in delay of the final visual inspection.
- C. All fire-retardant polyethylene sheeting must be removed from work area, with the exception of critical barriers, and decontamination unit. HEPA-filtered exhaust units must remain operational, and pressure differential maintained until final clearance by TEM or PCM is obtained.



5.2 PROJECT MANAGEMENT

5.2.1 Project Management

- A. The owner will employ HazMat Project Manager to conduct on-site Project Management for all phases of the asbestos abatement work.
- B. HazMat Project Manager will be responsible for:
 - 1. Approval of all submittals by Contractor, including pay requests.
 - 2. Conducting all inspections at the job site, as required. Monitoring job site performance and progress.
 - 3. Performing all personal, area, and final air testing throughout the course of each project. Personal testing by the HazMat Project Manager will be for the owners use and records only. The contractor is responsible for collecting all personnel samples as may be required by these specifications, local, state and federal regulations, etc.
 - 4. Submitting final report to the owner that will include all documents, logs, charts, photographs, and test results pertaining to each project.

5.3 AIR MONITORING

5.3.1 General

- A. The Asbestos Contractor is responsible for the personal air sampling. All other air sampling will be performed by HazMat Project Manager. Personal, area, and pre-encapsulation air samples will be analyzed by an NVLAP-accredited laboratory using NIOSH method 7400 using phase contrast microscopy (PCM) or by an individual possessing a valid NIOSH-582 equivalency qualifications. If deemed appropriate be the HazMat Project Manager, PCM may be used for final air testing.
- B. Final air samples will be analyzed by a laboratory accredited by NVLAP for Transmission Electron Microscopy (TEM), using the AHERA Mandatory Transmission Electron Microscopy Method in Appendix A of 40 CFR 763, subpart E.

5.3.2 Background Air Testing

- A. Background Air Testing will be carried out by HazMat Project Manager prior to initiation of work by Contractor in order to establish background levels of contamination.
- B. If air monitoring, during work by Contractor, shows an increase in airborne fiber concentrations outside containment system, work shall cease until the source of the contamination is found and remedied to HazMat Project Manager's satisfaction. Any areas that have been contaminated as a result of Contractor's work shall be cleaned by Contractor at his expenses and without impact to the schedule agreed to by the owner and the contractor.
- C. Background air samples will be analyzed by PCM. TEM analysis of questionable samples will be made available at the expense of Contractor should he request it. All such requests are to be made in writing.

5.3.3 Personal Air Sampling

A. The personal air monitoring will consist of:



- 1. An 8 hour Time Weighted Average (TWA) for samples collected on 25% of the work force during each eight hour shift for the duration of the project.
- 2. Continuous personal monitoring to be conducted during preparation, removal, and final cleanup, unless Type C pressure demand respiratory protection is used.
- 3. Excursion Limit or Short Term Exposure Limit (STEL) sampling shall be performed during all phases of the asbestos abatement project to establish the STEL for each job function. The STEL shall be for a duration of 30 minutes and be collected midway through the work shift.
- 4. All personal air samples shall be analyzed by NIOSH method 7400 (PCM) or NIOSH method 7402 (TEM) only.

5.3.4 The Pre-encapsulation Test

- A. After successful completion of the pre-encapsulation inspection, but prior to removal of the wall and floor coverings, critical barriers, decontamination unit, and use of any encapsulant, HazMat Project Manager may conduct pre-encapsulation air testing.
- B. This will consist of filtered air samples of sufficient volume to yield a detection limit of less than 0.01 fibers/cc.
 - 1. The sampling will not begin until work area is dry.
 - 2. Sampling will utilize aggressive techniques (a 1 HP leaf blower and electric fans) to re-suspend any dust or material that has settled in work area.
 - 3. The pre-encapsulation air testing will be analyzed by PCM (NIOSH 7400) with a concentration of 0.01 fibers/cc being acceptable (see **SUB-SUB-SECTION 5.3.6** for discussion of confidence limits).

5.3.5 Conditions for Final Air Testing

- A. Final air testing shall take place when removal is complete, the fire-retardant polyethylene sheeting not necessary to the integrity of containment removed, and a visual inspection of work area shows that work area is clean and dry.
- B. Contractor should expect a delay of at least 24 hours from the time the samples reach the laboratory to the time the results are known for all PCM analyses. HazMat Project Manager will make every reasonable effort to obtain these results in a time period suitable to Contractor's work schedule.
- C. Contractor should expect at least a 48 hour delay from the time the samples reach the laboratory to the time the results are known for samples analyzed by TEM. HazMat Project Manager will make every reasonable effort to obtain these results in a time period suitable to Contractor's work schedule.

5.3.6 Air Clearance Criteria

A. HazMat Project Manager and Contractor recognize the samples taken for all PCM clearance or preencapsulation samples must meet a standard that allows HazMat Project Manager 95% certainty that the sample does not in fact meet the 0.01 fibers/cc final air standard. Ninety-five percent certainty is defined by the equation: MC + 1.645 (CV) (FAS) = 95% confidence level

where: MC = measured concentration of fibers CV = coefficient of variation FAS = final air standard



- B. The results of this equation must be less than the final air standard for any sampled area to pass the test.
- C. For samples analyzed by the Transmission Electron Microscope Method, the arithmetic mean of the measured airborne asbestos concentration for the five inside samples must be less than or equal to 70 structures per square millimeter (70 s/mm²).

5.3.7 Final Air Testing

- A. After work area has met the 0.01 fibers/cc standard for the pre-encapsulation test (if performed), final air testing will be conducted and analyzed by Transmission Electron Microscopy (TEM), when the amount of ACM/ACCM removed in work area is greater than 160 square feet, or 260 linear feet. Final air testing will consist of five TEM samples inside work area the arithmetic mean of the measured airborne asbestos concentration for the five inside samples must be less than or equal to 70 structures per square millimeter (s/mm²). The sampling procedures and guidelines in EPA 40 CFR 763 part III will be followed.
- B. When the amount of ACM/ACCM removed in work area is less than 160 square feet or 260 linear feet, the results of the pre-encapsulation (PCM) air test will be considered as the criteria for Contractor compliance, unless TEM analysis is required by the owner.
- C. The HazMat Project Manager shall, after evaluation site conditions and at his/her discretion chose and perform the appropriate air testing.

5.3.8 Final Air Testing: Exterior Areas

Final air testing may not be required for exterior, open work areas. Instead, a thorough and meticulous inspection will be performed by HazMat Project Manager to determine Contractor compliance.

5.3.9 Final Air Testing: Glove Bag Procedure

- A. Each work area in which glove bag removal has occurred shall be visually inspected by HazMat Project Manager prior to final air testing.
- B. Aggressive sampling procedures will not be used unless work areas are fully contained by critical barriers.
- C. Each work area may be tested and analyzed by the PCM method, using static sampling procedures, unless conditions allow aggressive testing (see B. above).
- D. A TEM final air test of the general areas of glove bag removal may be performed at the owner's discretion upon failure of a PCM final.

5.3.10 Failure of Final Air Tests

- A. When the results of the final air test show values of airborne asbestos in excess of the final air standard, Contractor must re-clean work area.
- B. The final air testing procedure shall then be repeated at Contractor's expense. This shall include, but not be limited to, the sampling and analysis costs for the monitoring air samples during re-cleaning and the final air clearance, HazMat Project Manager's costs and expenses, any and all contractual penalties, liquidated damages, etc., levied by the owner and/or other trades that may be impacted by the change in schedule.



5.3.11 Availability of HazMat Project Manager

- A. The HazMat Project Manager will be on-site or on-call and available within 2 hours at all times.
- B. Contractor must notify HazMat Project Manager of the work schedule both at the start of the job and on a daily basis.
- C. Departures from this schedule may result in charges for waiting or unnecessary site visits and shall be charged to Contractor.
- D. Calls that require HazMat Project Manager to work overtime are subject to the approval by the owner.

5.4 COMPLETION

5.4.1 Completion

- A. Completion Criteria
 - 1. After final inspections and final air testing are complete and the results known, HazMat Project Manager will advise Contractor of the test results.
 - 2. When a work area fails either the inspection or the final air testing, the area must be re-cleaned, re-inspected and re-tested. The sequence of re-cleaning and re-testing shall continue until the area passes the inspection and the final air test. Refer to paragraph 5.3.10 *et seq.* above for additional information.
 - 3. When work area has passed final air test, Contractor will be informed immediately.
 - 4. The contractor shall remove all plastic sheeting, critical barriers, decontamination units, etc. All plastic sheeting, and other consumables shall be disposed of as asbestos contaminated waste.
- B. Re-establishment of Objects and Systems

When the project is complete:

- 1. Relocate all objects moved to temporary locations in the course of the work to their former positions.
- 2. Where HVAC, mechanical, and electrical systems have been shut down or disconnected, restore these systems to proper working order.
- 3. Any areas or finishes where damage may have occurred by the actions of the contractor including, but not limited to tape, staples, nails, spray-poly, water damage to Ceiling, Wall and Floor finishes Furniture and Fixtures, Exterior Areas landscaping, shrubbery, trees, pots, ornaments, etc. shall be restored to their original condition by the contractor at his expense and without adversely impacting the schedule for the project. All restoration shall be to the satisfaction of the owner. The owner reserves the right to withhold payment for the lack of restoration of any property destroyed or damaged by the contractor.
- 4. Submit to the HazMat Project Manager or his designee the contractors "close out" submittal to included, all manifests, waste hauler trip tickets, work area entry and exit logs, personnel air monitoring sample results, differential pressure recorders print-outs/charts, accident reports if any or a confirmation statement form the site supervisor stating that there were no accidents on this project, a confirmation statement from the site supervisor enumerating the type, location quantity of asbestos containing material removed throughout this project, etc.



SUB-SECTION 6.0

ALTERNATE PROCEDURES AND VIOLATIONS OF SPECIFICATIONS

This section is intended to be used as a general specification for alternate procedures for all projects for Owner. Consult the specific scope-of-work sheet, for each individual building, for more specific requirements pertaining to this section, if any.

6.1 Alternate Procedures

- A. Procedures described in this specification must be utilized at all times.
- B. When specific procedures cannot be utilized, a request must be made in writing to HazMat Project Manager providing details of the problem encountered and recommended alternatives.
- C. Alternative procedures must provide equivalent or greater protection than procedures that they replace.
- D. Any alternative procedure must be approved in writing by HazMat Project Manager prior to implementation.

6.2 Violations of Specifications

- A. Owner will enforce these specifications through HazMat Project Manager.
- B. HazMat Project Manager/Owner shall issue cease work orders upon discovery of any violation of these specifications.
- C. Minor infractions of the specifications may result in cessation of work until the infraction is corrected.
- D. Major violations of this specification may result in the dismissal of the contractor from all asbestos abatement work, and application of liquidated damages as stated and agreed to by Contractor in contract documents.



SUB-SECTION 7.0

EMERGENCY PLANNING

- A. Emergency planning must be developed by Contractor and approved by Owner and HazMat Project Manager.
- B. Emergency procedures must be in written form and prominently posted in clean room and equipment room of worker decontamination unit. Prior to entering work area everyone must read and sign these procedures to acknowledge receipt and understanding of work site layout, location of emergency exits, and emergency procedures.
- C. Emergency planning must include:
 - 1. Written notification of police, fire and emergency medical personnel of planned abatement activities, work schedule, and layout of work area.
 - 2. An employee safety meeting must be conducted by Contractor prior to the commencement of each work shift. The meeting shall be attended by all Contractor employees on site, and HazMat Project Manager. All aspects of emergency planning shall be covered in the meeting.
 - 3. Access to fire extinguishers both inside and outside the work area.
- D. Emergency planning must include:
 - 1. Considerations of fire, explosion, toxic atmospheres, electrical hazards, slips, falls and trips, confined spaces and heat related injury.
 - 2. A copy of the emergency procedures and evidence employee training in these procedures shall be provided to Owner.
- E. Evacuation and Emergency Decontamination Procedures
 - 1. Employees must be trained in evacuation procedures in the event of workplace emergency.
 - 2. For non-life threatening situations, employees injured or otherwise incapacitated must decontaminate following normal procedures, with assistance from fellow workers if necessary, before exiting the workplace to obtain proper treatment.
 - 3. For life-threatening injury or illness, worker decontamination shall take least priority after measures to stabilize the injured worker, remove him from the workplace and secure proper medical treatment.
- F. Telephone numbers of all emergency response personnel must be prominently posted in the clean room and equipment room, along with the a map of, and clearly marked route to, the location of the nearest hospital emergency room.



SUB-SECTION 8.0

FIRE SAFETY AND SAFE EGRESS

8.1 FIRE PROTECTION AND PREVENTION

8.1.1 Fire Protection Program

- A. Contractor shall be responsible for the development of a fire protection program to be followed throughout all phases of demolition and abatement work, and shall provide firefighting equipment as specified in this section.
- B. As fire hazards occur, there shall be no delay in providing the necessary equipment.

8.1.2 Fire Extinguishers

- A. Contractor shall provide a fire extinguisher, rated not less than 2A, for each 3,000 square feet of demolition/abatement work area.
- B. Travel distance from any point of the protected area to the nearest extinguisher shall not exceed 100 linear feet. This distance shall decrease in areas of limited mobility.
- C. A fire extinguisher may be substituted with a 2" diameter garden hose not exceeding 100 linear feet in length.

8.1.3 Sprinkler Systems

- A. During renovation, abatement, or alterations, the existing fire sprinkler system shall be maintained in service at all times.
- B. If building is scheduled for complete demolition, existing sprinkler system shall be retained in service as long as reasonable.

8.1.4 Fire Alarm Devices

An Alarm System consisting of an active telephone system and warning alarm (e.g. siren) shall be established by Contractor to alert workers and fire department in case of fire emergency.

8.2 SAFE EMERGENCY EGRESS

8.2.1 Application

This part contains general fundamental requirements essential to providing a safe means of egress from fire and similar emergencies. Nothing in this part shall be construed to prohibit a better type of containment construction, more exits, or otherwise safer conditions than the minimum requirements specified in this part.

8.2.2 Fire Alarm Facilities

- A. In each work area, provide fire alarm facilities to workers and other building occupants so they may escape.
- B. These fire alarm facilities shall be provided where necessary to warn worker and building occupants of the existence of fire, as a fire itself may not provide adequate warning.



8.2.3 Protection of Workers and Building Occupants

- A. No existing building shall be occupied during demolition/abatement unless all existing exits and any existing fire protection are continuously maintained, or in lieu thereof, other measures are taken to provide equivalent safety.
- B. No flammable or explosive substances or equipment for demolition/abatement shall be introduced in a building of normally low or ordinary hazard classification while building is occupied, provided the condition of use and safeguards do not create any additional danger or handicap to egress beyond the normally permissible conditions in the building or work area.
- C. Each exit, way of approach, and way of travel from an exit to the street or open space shall be continuously maintained free of all obstruction or impediments to instant use in the case of fire or other emergency.

8.3 MEANS OF EGRESS 8.3.1 Definitions

- A. Exit Access: That portion of a means of egress that leads to an entrance to an exit.
- B. An Exit: That portion of a means of egress that is separated from all other spaces of demolition /abatement or equipment as a way of travel to the street or open area.
- C. High Hazard Contents: High hazard contents shall be classified as those materials, substances, or equipment that are able to rapidly burn or from which toxic gases, fumes, or explosions may occur in the event of fire.

8.3.2 Means of Egress

- A. If a door is present at the exit to the decontamination unit, from a work area to an exit, or to a way of exit access, it shall be of the side-hinged, swinging type. It shall swing in the direction of exit travel.
- B. The minimum width of any way of exit access shall in no case be less than 28 inches. Where a single way of exit access leads to an exit, its capacity in terms of width shall be at least equal to the required capacity of the exit to which it leads. Where more than one way of exit access leads to an exit, each shall have a width adequate for the number of persons it must accommodate.

8.3.3 Emergency Exits

- A. For each work area, Contractor shall provide an alternate emergency exit.
- B. The alternate emergency exit shall consist of a door that leads to a way of exit access. The door shall be covered and sealed with fire-retardant polyethylene sheeting.
- C. Fire-retardant polyethylene sheeting covering the emergency exit shall be clearly outlined and attached in a manner that allows "tear away" in case of emergency and marked as an emergency exit. A utility knife shall be permanently attached to the fire-retardant polyethylene sheeting to provide access to the emergency exit.
- D. Contractor shall install arrows throughout the work area at 2 feet and 5 feet above the floor indicating the direction to the nearest exit.

8.3.4 Emergency Lighting

- A. In case of electrical failure during fire, Contractor shall provide battery-operated lights or lamps in the work area.
- B. There shall be at least one battery-operated light or lamp for every five workers present in the work area.



SECTION 02 83 00 LEAD ABATEMENT

SUB-SECTION 01 GENERAL LEAD REMOVAL SPECIFICATIONS

1.0 GENERAL

1.1 Description

- A. This section consists of furnishing all work necessary to perform the removal, packaging, handling, transportation, and disposal of lead-containing materials and lead-contaminated materials located within the project limits. All work shall be performed in accordance with all federal, state, and local requirements and statutes.
- B. The work specified herein shall be the removal of lead-containing materials by persons knowledgeable, qualified, and trained in the removal, treatment, handling, packaging, transportation, and disposal of lead-containing materials, and the subsequent cleaning of the affected environment. These persons shall comply with all federal, state and local regulations and mandated work practices, and shall be capable of performing the work in the Contract.

1.2 Scope of Work

- A. General Requirements: Work of this section includes, but is not limited to, the following:
 - 1. See the attached appendix entitled Lead Abatement Scope of Work
 - 2. Providing dust control as required to protect the Contractor's employees, Owner Staff, visitors/guests, and passers-by from lead exposure. The lead concentration in the air outside of the lead work control area but inside of the work area (inside of the construction fence) shall not exceed 10 micrograms per cubic meter (μ g/m³). The airborne lead concentration outside of the work area shall not exceed the background airborne lead concentration as tested by the HazMat Project Manager (HPM) prior to the commencement of any on-site activity.
 - 3. The work includes protecting the site (specifically the soil surrounding the building and landscaping), the building structure, facility, any and all furniture, fixtures, etc., from further lead contamination.
 - 4. The Contractor shall perform employee exposure monitoring as required by Cal-OSHA during the project
- B. The following precautions should be taken prior to initiating demolition activities involving any lead-containing material.
 - 1. The Contractor shall not perform any lead-related demolition activities until an initial exposure assessment has been performed and submitted to the Owner's Representative.
 - 2. The Contractor shall install lead dust control measures, lead waste and debris retention areas, worker protection, and decontamination areas in accordance with this Section, the Contractor's work plan, and lead exposure assessment data.
- C. Pre-Project Initial Exposure Assessment and Test Section: Prior to performing any lead-related demolition work, the Contractor shall perform an initial exposure assessment as described in 8 CCR 1532.1. The initial exposure assessment shall be performed through the preparation of "Lead-Related Construction Demolition Test Sections", if deemed necessary. The Test Section work shall be performed a minimum of two weeks prior to initiating lead-related demolition work at the building. During work on the Test Section, all Supervisors/Competent Persons shall



be certified as Lead-Related Construction Supervisors and all workers shall be certified as Lead-Related Construction Workers in accordance with 17 CCR, Division 1, Chapter 8.

- D. Lead-Related Demolition Scope of Work: The Contractor shall remove, package, transport, and properly dispose of the lead-containing and lead-contaminated items referred to in Appendix A for specific locations. Quantities shall be field verified.
- E. Where exterior lead containing material is encountered:
 - 1. Remove or protect bushes and landscaping from the perimeter of the building out to 15 feet from the base of the buildings as required for soil protection. When necessary, cut the bushes and landscaping flush with the ground. Dispose of the bushes and landscaping as construction debris following removal.
 - 2. Remove, package, transport, and properly dispose of all lead-containing painted exterior components on the Buildings including but not limited to exterior wood cladding (siding), door components, window components, fascia boards and roof overhang components. Remove, package, transport, and properly dispose of the lead-containing window glazing located on the Buildings. Remove, package, transport, and properly dispose of all lead-containing painted interior doors in the Buildings. The Owner may have performed waste characterization sampling of these items. If not the contractor shall be responsible for the same. All work associated with the removal of the exterior components and interior doors shall be performed in accordance with this Section, the Contractor's lead-related demolition work plan, and the procedures utilized during the Test Section work.
 - 3. Remove, package, transport, and properly dispose of all lead-containing painted components located on the interior of Buildings. These components include, but are not limited to, gypsum wall and ceiling board systems, wood wallboard, wood base cove, and interior door frame components. The Owner may have performed waste characterization sampling of these items. If not the contractor shall be responsible for the same. All work associated with the removal of the exterior components and interior doors shall be performed in accordance with this Section, the Contractor's lead-related demolition work plan required by Article 1.08, and the procedures utilized during the Test Section work.
 - 4. The Owner has sampled the soil around the perimeter of the buildings. The Contractor is responsible for protecting the soil on the perimeter of the building from becoming contaminated with lead in excess of 350 ppm or established 'baseline' levels which ever is lower. After completion of the lead-related demolition work the Owner will again sample the soil. The testing and analysis of the soil samples will require five to eight working days to complete. If the lead concentration in the soil exceeds 350 ppm, or established 'baseline' levels which ever is lower, the Contractor shall perform the following work at no additional cost to the Owner.
 - a. The Contractor shall remove the top six inches of soil from the base of the building/ point of work to a minimum distance of ten feet from the point of work and extending out to the perimeter of the work area. The contractor shall perform the removal of the soil in two days or less.
 - b. The waste soil shall be packaged and placed into waste containers in accordance with the requirement of the waste transporter and disposal facility.
 - c. The contractor shall retain the HazMat Project Manager that was on-site during the lead-related demolition project to perform perimeter air monitoring.
 - d. At the completion of the soil removal project, the HazMat Project Manager will collect representative waste characterization samples of the soil waste. The soil waste samples will be evaluated for their conformance with the requirements of Title 22 and the requirements of the waste transporter and disposal facility.



e. The testing and analysis of the soil waste characterization samples will require five to eight business days to complete. The Contractor shall leave the waste containers on the project site until receipt of the waste sample characterization sample results.

1.3 Related Work

SECTION 02 82 13 – ASBESTOS RELATED DEMOLITION WORK

1.4 Required Licensure and Certification

- A. Licensure For all Contractor(s) or Sub-Contractor(s) involved in any facet of lead related work enumerated as part of this project the following license(s) shall be current and be maintained in current status throughout the duration of the project.
 - a. A copy of the current California Contractors State License Board (CSLB) License (minimum requirement is a Class B license or a Class C license) for any **and**
 - b. US EPA Certification under the Toxic Substances Control Act (TSCA) Section 402 Repair, Renovation and Painting activities (RRP) pursuant to 40 CFR Part 745.89.

Contractors having endorsements, riders or qualifiers on any of their licenses such as (but not limited to) 'for bidding purposes only' etc. are ineligible to perform work as part of this contract.

B. Transportation of Lead-Containing Materials: Contractor shall be a registered hazardous waste transporter with State of California, Department of Toxic Substances Control. If the Contractor is not a registered hazardous waste transporter, the Contractor shall have a listed subcontractor that is a registered hazardous waste transporter with State of California, Department of Toxic Substances Control. Copies of the current, relevant registration certificate(s) shall be submitted as a part of the pre-job submittal.

Throughout the duration of the project, all Supervisors/Competent Persons shall be certified as Lead-Related Construction Supervisors and all workers shall be certified as Lead-Related Construction Workers in accordance with 17 CCR, Division 1, Chapter 8.

1.5 Applicable Documents and Regulations

- A. It is the responsibility of the Contractor to know the current regulations controlling work and to perform all project related work in accordance with such regulations that provide for worker and public safety against lead exposure.
- B. The publications listed below form a part of this specification to the extent referenced. The current issue of each document shall govern. Where conflict among requirements or with these Specifications exists, the more stringent requirements shall apply. The publications are referenced in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR Part 1910	Occupational Safety and Health Standards for General Industry
29 CFR Part 1910.134	Respiratory Protection
29 CFR Part 1926	Occupational Safety and Health Regulations for Construction
29 CFR Part 1926.62	Lead

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

40 CFR Part 148	Hazardous Waste Injection Restrictions
40 CFR Part 260	Hazardous Waste Management Systems: General
40 CFR Part 261	Identification and Listing of Hazardous Waste
40 CFR Part 262	Standards Applicable to Generators of Hazardous Waste
40 CFR Part 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR Part 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage,
	and Disposal Facilities



40 CFR Part 265	Interim Status Standards for Owners and Operators of Hazardous Waste
	Treatment, Storage, and Disposal Facilities
40 CFR Part 268	Land Disposal Restrictions

 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

 NFPA 701
 (1989) Methods of Fire Test for Flame-Resistant Textiles and Films

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)NIOSH OSHA Booklet 3142Lead in Construction

CALIFORNIA CODE OF REGULATIONS (CCR)

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8 CCR Part 1532.1	Lead
8 CCR Part 5194	Hazard Communication
17 CCR, Div. 1, Cpt. 8	Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead
	Hazards
22 CCR, Div. 4, Cpt. 30	Hazardous Waste Handling
26 CCR Part 3203	Illness and Injury Protection
26 CCR Part 3220	Emergency Action Plan
26 CCR Part 3221	Fire Prevention
26 CCR Part 5144	Respiratory Protection

CALIFORNIA HEALTH AND SAFETY CODE Section 25157.8 (from AB 2784 Strom-Martin, 1998)

UNDERWRITERS LABORATORIES (UL) UL 586 (1990) High-Efficiency, Particulate, Air Filter Units

CALIFORNIA LABOR CODE Section 6501.5-6505.5

ALL OTHER FEDERAL, STATE, COUNTY AND LOCAL CODES AND ORDINANCES AS APPLICABLE.

1.6 Notifications and Permits

- A. Contractor shall make all required written notifications or applications to regulatory agencies including the following:
 - California Division of Occupational Safety and Health (Cal-OSHA) -Lead Work Pre-Job Notification shall be accordance with 8 CCR Part 1532.1. California Department of Public Health (CDPH) Form CDPH 8551
 - 2. Local or facility agencies as applicable.

1.7 Supervisor/Competent Person and Workers

All valid and current Supervisor/Competent Person and Workers documentation shall be physically present on site, prior to any lead related work being performed by that person. Failure to comply with this requirement shall render the person ineligible to work until the required documentation is available on site.

A. The Contractor shall have a California Department of Public Health (CDPH) Lead-Related Demolition Supervisor/Competent Person present at all times while work on this Contract is in progress. The Lead-Related Construction Supervisor/Competent Person shall possess the following training and certifications regardless of the results of the Test Section work. All certificates are to remain current and complete throughout the duration of the project.



- B. The Lead-Related Demolition Supervisor/Competent Person shall have successfully training meeting the requirements of 8 CCR Part 1532.1 and 17 CCR, Division 1, Chapter 8. Training shall be provided prior to the time of job assignment and, at least, annually. The Supervisor/Competent Person shall be thoroughly familiar and experienced with lead removal and related work, and shall be familiar with and enforce the use of all safety procedures and equipment. He/she shall be knowledgeable of all EPA, OSHA, and NIOSH requirements and guidelines. Additionally, the Supervisor/Competent Person shall be certified as a Lead-Related Construction Supervisors in accordance with 17 CCR, Division 1, Chapter 8.
- C. Throughout the duration of the project, including during work on the Test Section, all workers shall have received training in accordance with 8 CCR Part 1532.1 and 17 CCR, Division 1, Chapter 8. The training shall be provided prior to the time of job commencement and, at least, annually. Additionally, all workers performing work shall be certified as Lead-Related Construction Workers in accordance with 17 CCR, Division 1, Chapter 8. All certificates are to remain current throughout the duration of the project. Throughout the duration of the project the lead-related worker training and certification requirements listed below will be required. The Contractor shall submit documentation that the workers have received the training. The training shall be for a minimum of eight hours. Worker training including the following information is required at a minimum. All certificates are to remain current and complete throughout the duration of the project.
 - 1. An employee's right to access to records under 29 CFR Part 1910.1020.
 - 2. The contents and requirements of 29 CFR Part 1926.62 and 8 CCR 1532.1.
 - 3. The specific nature of the operation that could result in exposure to lead.
 - 4. The purpose, proper selection, fitting, use, and limitations of respirators.
 - 5. Purpose and description of the medical surveillance program and the medical removal protection program, including information concerning the adverse health affects associated with excessive exposure to lead (with particular attention to the adverse reproductive effects on both males and females and hazards to the fetus and additional precautions for employees who are pregnant).
 - 6. Relevant engineering controls and good work practices.
 - 7. The contents of any compliance plan in effect.
 - 8. Instructions that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.
 - D. If the Contractors means and methods change from those presented in the lead-related demolition work plan and during the work of the Test Section, the Contractor shall perform another exposure assessment to determine the training requirements for the lead-related demolition workers.
 - E. If the ongoing personal air monitoring performed by the Contractor indicates that the Action Level is being exceeded, the contractor shall provide lead-related demolition workers with the training and certifications required above.
- F. Current and complete documentation from a Physician that all employees or agents who may be exposed to airborne lead in excess of the action level have received a comprehensive medical examination as required by 29 CFR Part 1926.62 and 29 CFR Part 1910.1200 and will receive continued medical surveillance, including biological monitoring, as required by 29 CFR Part 1926.62 and 29 CFR Part 1910.1200 and 29 CFR Part 1910.1200 and by the state and local regulations pertaining to such work. Records shall be retained, at Contractor's expense, in accordance with 29 CFR Part 1910.1020. Biological monitoring is to include Blood Lead Level (BLL) and Zinc Protoporphyrin (ZPP). These tests



are to be performed not more than 30 calendar days PRIOR to the commencement of work and results be presented prior to the commencement of the removal of <u>any lead containing materials</u>. If the work schedule is phased, the tests are to be repeated prior to the commencement of <u>each phase of work</u>; unless the close of one phase, and the commencement of the next phase, are less than 30 calendar days apart.

- G. Current and complete documentation from a Physician that all employees or agents who may be exposed to airborne lead in excess of the action level have received medical monitoring in accordance with 29 CFR Part 1926.62 to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health affects. 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, and chemical contaminants) that may impact on the employee's ability to perform work activities.
- H. Current and complete documentation of respirator fit-testing, performed within the last twelve months, for all Contractor employees and agents who must enter the work area. This fit testing shall be in accordance with qualitative procedures as required by OSHA regulations or be quantitative in nature

1.8 Submittals

- A. Submit, as applicable, the following to the Owner's Representative for approval within Ten (10) days of receiving the "Notice to Proceed" or at least Ten (10) Working Days prior to the start of work. These submittals are in addition to those required in any other section(s) or sub-section(s) of these documents. This document shall be submitted by the contractor performing the work and not by any other. Include at the very least the following:
 - 1. Notifications. All notifications shall be current and valid throughout the duration of the project. Any material changes to the notification, i.e., the quantity of materials being removed, the physical materials being removed, the duration of the project, etc. shall require revisions to the regulatory agencies, with copies provided to the HPM on site. Copies of the written notification and confirmations at least to/from the following regulatory agencies will be required:
 - a. California Division of Occupational Safety and Health (Cal-OSHA) Lead Work Area Pre-Job Notification.
 - b. Notification to the California Department of Public Health (Form 8551).
 - 2. Waste Haulers Copies of:
 - a. Identification of the Waste Hauler(s) for both Hazardous and Non-Hazardous Lead Waste for this Project.
 - b. California Department of Toxic Substances Control (DTSC) Waste Transporter registration for each Waste Hauler.
 - c. California Department of Motor Vehicles (DMV) Motor Carrier Permit for each Waste Hauler.
 - d. U.S. Department of Transportation (DOT) Registration and U.S. Environmental Protection Agency (EPA) acknowledgement of Notification of Hazardous Waste Activity for each Waste Hauler (*only required if waste is to be transported out of State*).
 - e. Statement indicating that all waste generated on this specific site shall be transported by/disposed of by licensed, insured and certified personnel/locations.
 - f. Statement that the types of Waste Containers being used for this Project will be accepted by the Waste Hauler(s) for the storage and transport of both Hazardous and Non-Hazardous Waste.
 - 3. Waste Disposal Facility Landfill and/or Recycling Facility Copies of:
 - a. Identification of the Landfill(s)/Recycler(s) to be used for the disposal of both Hazardous and Non-Hazardous Lead containing Waste generated at the Project site.
 - b. Permits for the Landfill(s)/Recycler(s) to be used for the disposal of both Hazardous and Non-Hazardous Lead waste generated at the Project site.
 - c. Identification of the Types of Waste accepted at the Landfill(s)/Recycler(s).
 - d. Identification of the Types of Waste Profiling required by the Landfill(s)/Recycler(s).
 - e. Statement that the types of Waste Containers being used for this Project will be accepted by the Landfill(s)/Recycler(s) for both Hazardous and Non-Hazardous Waste.



- 4. Licensure For all Contractor(s) or Sub-Contractor(s) involved in any facet of lead related work enumerated as part of this project the following license(s) shall be current and be maintained in current status throughout the duration of the project.
 - a. A copy of the current California Contractors State License Board (CSLB) License (minimum requirement is a Class B license or a Class C license) for any **and**
 - b. US EPA Certification under the Toxic Substances Control Act (TSCA) Section 402 Repair, Renovation and Painting activities (RRP) pursuant to 40 CFR Part 745.89.

Contractors having endorsements, riders or qualifiers on any of their licenses such as (but not limited to) 'for bidding purposes only' etc. are ineligible to perform work as part of this contract.

- 5. Work Plan A detailed written lead-related demolition work plan including, but not limited to, the following:
 - a. Identification of all Lead Scope of Work items and Trigger Tasks that are part of this Project, as well as, the Waste Streams the contractor anticipates generating during the course of performing the work listed in the Scope of Work;
 - b. Identification of entire Work Sequence (schedule) for this Project, including specifics of materials being removed/stabilized and the correlation between work areas and Types of Work (Lead, Asbestos, PCB, etc. as applicable);
 - c. Identification of abatement duration;
 - d. Identification of dust control measures;
 - e. Identification of work area preparation;
 - f. Identification of construction for decontamination enclosure systems;
 - g. Identification of demarcation protocols. i.e., installation of Lead barrier tape, barrier fence, Lead Work signage, etc.;
 - h. Identification of work area isolation protocols;
 - i. Identification of detailed specific Lead containing materials removal procedures;
 - j. Identification of Lead containing/contaminated debris clean-up and disposal procedures;
 - k. Identification of Personnel Protective Equipment (PPE) to be utilized as part of this project;
 - 1. Identification of waste handling, storage and disposal procedures;
 - m. Identification of construction for chutes, (if required for this project).
- 6. <u>HEPA vacuums, differential pressure air filtration devices and other local exhaust ventilation equipment</u>. Copies of:
 - a. Manufacturer's certification that HEPA vacuums, differential pressure air filtration devices, filters and other local exhaust ventilation equipment conforms to ANSI Z9.2-79.
 - b. Notification that required onsite testing has been scheduled for any and all differential pressure units, HEPA vacuum cleaners, etc. to ensure that the filtration efficiency meets the criteria for HEPA filtration devices, i.e., 99.97% efficiency at arresting mono-dispersed particulate matter greater than 0.03 micrometers in diameter.
- 8. SDS The Contractor shall submit copies of the Safety Data Sheet, fire retardant certification or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each surfactant, encapsulating material, spray glue, mastic removal agent, plastic sheeting, adhesive/duct tape, etc. or other chemicals/products for use on this project, including the specific worker protective equipment proposed for use with the material indicated.
- 9. Personnel Documentation
 - a. Identification of the project's Lead-Related Supervisor who is experienced in administration and supervision of lead-containing material demolition projects, including work practices, protective measures for building and personnel, disposal procedures, etc. including a legible photocopy of the California Department of Public Health (CDPH) Certified Lead Construction Supervisor's card.
 - b. Current and complete documentation that the Contractor's Lead-Related Construction Supervisor/Competent Person and Lead-Related Demolition Workers performing Lead-related demolition,



disposal, and air sampling operations have received training and are certified including a legible photocopies of the California Department of Public Health (CDPH) Certified Supervisor and Certified Lead Worker cards.

- c. Provide as part of the pre-job submittal a letter from the contractor, signed by a responsible and authorized officer of the contractor's company certifying the following "This is to certify that all our personnel involved with affecting any lead containing or coated materials/surfaces are subject to current and valid medical monitoring in accordance with 29 CFR Part 1926.62 and 29 CFR Part 1910.1200 and that they will receive continued medical surveillance, including (a) the ability to work while wearing required respiratory protection without suffering adverse health affects and (b) biological monitoring [include Blood Lead Level (BLL) and Zinc Protoporphyrin (ZPP)], as required by 29 CFR Part 1926.62 and 29 CFR Part 1910.1200 and by all state and local regulations pertaining to such work. Furthermore, we certify that all relevant records shall remain valid and current throughout the project and that historical records will be retained by us, in accordance with 29 CFR Part 1910.1020." The contractor may issue this letter and identify and list (by name) all of their employees who will be on site for this project or, alternatively issue an individual letter per employee.
- d. Current and complete documentation of respirator fit-testing for Contractor employees and agents who must enter the work area. This fit-testing shall be in accordance with qualitative procedures as required by OSHA regulations or be quantitative in nature
- Respirators and Filters Copies of Manufacturer's documentation and certification of NIOSH approvals for respiratory protective devices utilized on site, including manufacturer's certification of NIOSH approval of respirator cartridges (organic vapor, acid gas, mist, dust, high efficiency particulate) and High Efficiency Particulate Air (HEPA) filtration capabilities for all cartridges and filters.
- 10. Testing Laboratory Identification of the Independent Testing Laboratory (name, address, and telephone number) selected to perform analysis of personal air samples. Documentation shall be provided that the laboratory selected to perform the analyses is an EPA National Lead Laboratory Accreditation Program (NLLAP) accredited laboratory and is rated proficient in the NIOSH/EPA Environmental Lead Proficiency Analytical Testing Program (ELPAT), including accreditation for heavy metal analysis. The documentation shall list experience relevant to the analysis of lead in air and include a Quality Assurance and Quality Control Program. Currently, the American Association for Laboratory Accreditation (AALA) and the American Industrial Hygiene Association (AIHA) are the EPA recognized laboratory accreditation agencies. Documentation must also be provided that the laboratory is certified by the California Department of Public Health (CDPH).
- 11. Site Specific Documentation Copies of:
 - a. Identification of Work Area(s) at the site;
 - b. Identification of the nearest medical facility and route map/directions to the medical facility;
 - c. Emergency Contact Information and numbers for Emergency services as well as the contractors' emergency contact personnel and information;
 - d. Identification of on-site emergency meeting location;
 - e. Identification procedures for personnel accounting during an emergency.
- 12. Contractor General Documents Copies of:
 - a. General Injury & Illness Prevention Program in compliance with 26 CCR 3203.
 - b. General Emergency Action Plan in compliance with 26 CCR 3220.
 - c. General Fire Prevention Plan in compliance with 26 CCR 3221
 - d. Respiratory Protection Program in compliance with 26 CCR 5144.
- B. Hazardous Waste Manifests, Non-Hazardous Waste Data forms, trip tickets and disposal receipts for lead waste materials removed from the work area must be received within 24 hours of the transport.
- C. On-Site Documentation Documents to be provided on-site throughout the duration of the project:



- 1. Provide on a DAILY basis, prior to the start of the shift, results from the personal air samples collected during the abatement process of the prior shift.
- 2. Provide on a DAILY basis, prior to the start of the shift, copies of the containment entry log pertaining to the abatement process of the prior shift.
- 3. Provide on a DAILY basis, prior to the start of the shift, copies of the Manometer logs pertaining to the abatement process of the prior shift.
- 4. Copies of the Safety Data Sheets (SDS) for solvents, encapsulants, wetting agents, neutralizers, any other chemicals/products used on site and replacement materials, as necessary.
- D. Following completion of work on the Test Sections, submit to the Owner's Representative documentation that includes the following (the submittals required shall be submitted no later than five business days following completion of the Test Section work):
 - 1. All personal air sampling performed by the contractor during the Test Section work. The personal air sampling results shall be provided as 8-hour TWA results.
 - 2. A description of the Trigger Tasks utilized during the Test Section work.
 - 3. Proposed changes in work procedures, if any, from those that were proposed in the original work plan.
- E. Upon completion of all lead-related demolition activities, submit to the Owner's Representative documentation that includes, without limitation, the following (the submittals required shall be submitted no later than 20 business days following the Contractor's demobilization from the project site):
 - 1. Work area entry/exit logbook. The logbook must record name, affiliation, time in, and time out for each entry into the work site.
 - 2. The log of manometer readings showing the pressure differential maintained throughout the project.
 - 3. OSHA, Cal-OSHA, California Department of Public Health (CDPH) required personal exposure air monitoring results.
 - 4. Post project Biological monitoring for each employee who has worked at the site during any phase of lead related work is to include Blood Lead Level (BLL) and Zinc Protoporphyrin (ZPP). These tests are to be performed not more than 7 calendar days AFTER the conclusion of work
 - 5. Accident/incident reports where injury or damage has occurred on or to the Owner's property.
 - 6. Hazardous waste manifests, non-hazardous waste data forms, trip tickets and disposal receipts for lead waste materials removed from the work area within 24 hours of the transport.

1.9 Notices and Postings

- A. Post in the wash station/decontamination station, a list containing the names, addresses, and telephone numbers of the Contractor, Owner Representative, HazMat Project Manager, and emergency contact numbers.
- B. Post at the job site a list of persons authorized to enter the lead-related demolition work area.
- C. Additional postings shall include:
 - 1. Visitor entry and exit log.
 - 2. Employee daily sign in/out log.
 - 3. Work area entry and exit procedures.
 - 4. Emergency procedures.



- D. One copy of Cal-OSHA and Department of Health Services regulations.
- E. Posted Warnings and Notices: The following regulations, warnings, and notices shall be posted at the work site in accordance with 29 CFR Part 1926.62 and 8 CCR Part 1532.1.
 - 1. Warning Signs and Labels: Warning signs shall be provided at building entrances and approaches to lead work control areas containing airborne lead debris. Signs shall be located at a sufficient distance from the lead work control areas that will allow personnel to read the sign and take the necessary protective actions required before entering the lead work control area.
 - 2. Post at least two (2) safety warning signs, in English and Spanish, which follow the "Sample Format Warning Sign" shown below:

Sample Format Warning Sign Minimum Size – "24" x 36" Material – Aluminum or Fiberglass Script:

<u>WARNING</u> LEAD WORK AREA POISON NO SMOKING OR EATING AUTHORIZED PERSONNEL ONLY RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

F. Posting required by local, state and federal agencies exercising jurisdiction over the work area. These are to include, but not be limited to, warning notices, notices of proposed work activity, copies of notifications to local and state agencies, etc.

1.10 Work Area Security

- A. The lead work control area shall be restricted only to authorized personnel, including Contractor, Contractor's employees, Owner's Representative(s), and federal, state, and local inspectors.
- B. Entry into the lead work control area by unauthorized individuals shall be reported immediately to the Owner's Representative.
- C. Contractor shall be responsible for Project site security during lead-related demolition operations in order to protect work efforts and equipment.

1.11 Personal Protection and Safety

- A. The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his/her appliances, methods, and for any damages that may result from his/her operations, improper construction practices, or maintenance. He shall erect and properly maintain at all times as required by the conditions and progress of the work, proper safeguards for the protection of workmen and the public and shall post warning signs around the job site and at any and all entrances / entryways to the work area(s).
- B. Work shall be performed in accordance with the requirements of applicable regulations including, but not limited to 29 CFR Part 1926.62, 8 CCR Part 1532.1, and 17 CCR, Division 1, Chapter 8. Matters of interpretation of the standards shall be submitted to the appropriate agency for resolution before starting work. Where these



requirements vary or conflict, the most stringent shall apply. In the event that work practice variances are granted by the governmental agency having jurisdiction over the work, these variances will be forwarded to the Owner and/or the Owner's representative as soon as the variance has been issued. A copy of the variance must also be posted at the entryway to the work area or if this is not possible, in a prominent place.

- C. Respiratory Protection Requirements: A respiratory protection program shall be established as required by 29 CFR Part 1926.103 and 29 CFR Part 1926.62 and in accordance with 29 CFR Part 1910.134. An approved respirator shall be furnished to each employee and visitor required to enter a lead work control area. A fit test shall be conducted in accordance with 29 CFR Part 1926.62.
 - 1. Air-purifying respirators shall be approved by NIOSH for use with dust, fumes, and mists having permissible exposure limits less than 0.005 milligrams per cubic meter (i.e., have P-100 filters) and for other hazardous airborne contaminants that may be encountered, as determined by the Competent Person. Respirators shall comply with the requirements of 29 CFR Part 1926.62 and shall be used in accordance with 29 CFR Part 1926.103, and 29 CFR Part 1910.134.
 - 2. A sufficient supply of respirator filters shall be maintained at the work site to provide new filters to employees, Owner Employees, authorized visitors, and government regulator personnel throughout the duration of the project. Filters shall be replaced according to the manufacturer's recommendations, when breathing becomes difficult, or if the filter becomes wet. At any time during on-site work activity, the contractor shall maintain onsite and readily accessible three (3) new respirators, one in each size, small, medium and large along with the requisite filters/cartridges for the type of work being performed. These respirators will be kept in readiness for the Owner/Owner's representative or any governmental agency representative having jurisdiction over the project.

Additionally, the contractor shall make available to HPM two (2) sets of new NorthTM 7700 Series Respirator Filter Cartridges throughout the duration of the project. These filter cartridges shall be appropriate to the work being conducted on site i.e., P100 HEPA cartridge and/or stacked P100 HEPA + Organic Vapor cartridge, etc.

- 3. Respirators shall be fit-tested utilizing irritant smoke or isoamyl acetate a minimum of every 6-12 months. Either the standard Irritant Smoke Protocol or Isoamyl Acetate Protocol may be used.
- D. A Hazard Communication Program shall be implemented in accordance with 29 CFR Part 1926.59.
- E. The Contractor, the HazMat Project Manager, and the Owner's Representative shall arrange and hold a preparatory inspection meeting immediately prior to beginning the Test Section, following completion of the Test Sections to discuss the results, following completion of the waste characterization sampling and analysis, and prior to beginning the lead-related demolition work.
- F. Right-to-know notices shall be placed in clearly visible areas of the work site in compliance with Federal, State, and local regulations.
- G. Daily personnel air monitoring results shall be placed in a clearly visible area of the work site and shall be prepared so as to be easily understood by the workers.
- H. A list of emergency telephone numbers shall be posted at the site. The list shall include numbers of the local hospital, poison control center, police and fire departments, Government, Contractor, and Owner representatives who can be reached 24 hours per day, and professional consultants directly involved in the project.
- I. Sufficient quantities of health and safety equipment and supplies as required by 29 CFR Part 1926.62 and 8 CCR Part 1532.1, and other materials and equipment needed to complete the project, shall be available and kept on site. Specific health and safety equipment to be utilized at all times during performance of lead-related demolition work includes the following.



- 1. Disposable full body suits. The disposable full body suits shall have head and foot covers and shall be of a sufficient size to prevent tearing during performance of the work.
- 2. Disposable rubber gloves.
- 3. Hard hats.
- 4. Safety shoes or boots.
- 5. Eye and hearing protection.
- J. A wash/decontamination station shall be provided on the site at all times that lead-related demolition work is being performed.

1.12 Hazmat Project Manager Services

- A. The Owner has contracted with the HazMat Project Manager (HPM) to perform contractor and project monitoring services including the following:
 - 1. Collect side-by-side Contractor employee exposure air samples during the lead-related demolition work.
 - 2. Collect perimeter air samples during the lead-related demolition work.
 - 3. Collect waste characterization samples during the lead-related demolition work.
- B. Stop Work Orders. The HPM will stop work in the following situations:
 - 1. If the airborne lead concentration exceeds $10 \,\mu g/m^3$ outside the lead-related demolition work area but inside the construction zone.
 - 2. If the airborne lead concentration outside of the lead-related demolition work area exceeds background levels established before the commencement of work.
 - 3. If the Contractors means and methods change, work will be stopped to establish a new exposure assessment.
 - 4. If personal air monitoring indicates that new respiratory protection is required.
 - 5. If the written specifications are being violated or if the owner issued instructions are being circumvented.



SUB-SECTION 02 MATERIALS AND EQUIPMENT

2.0 MATERIALS and EQUIPMENT

2.1 Materials

- A. General: Contractor shall adhere to the following:
 - 1. All plastic, spray-on strippable coatings, electrical equipment, mechanical equipment and structural materials used shall be UL-certified as fire retardant or non-combustible.
 - 2. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer, brand name (where applicable), and model.
 - 3. Polyethylene sheeting utilized for worker decontamination and barriers shall be black or opaque in color and shall be a minimum of 6-mil in thickness. All polyethylene shall be fire retardant.
 - 4. Waste containers utilized during the project shall be properly labeled as required by 29 CFR Part 1926.62, 8 CCR Part 1532.1, and, if applicable, 22 CCR 66504.
 - 5. Warning signs as required by 8 CCR Part 1532.1 and 29 CFR 1926.62 shall be utilized during lead-related demolition activities.
 - 6. PVC Safety/Barrier Fence (minimum of 4' high) to isolate the work area shall be utilized during any lead-related activities.

2.2 Equipment

- A. General:
 - 1. HEPA vacuums equipped with HEPA filtration and operated in accordance with ANSI Z9.2-79.
 - 2. Differential pressure (negative pressure) air filtration devices and other local exhaust ventilation equipment conform to ANSI Z9.2-79. On site testing will be required for any and all differential pressure units, HEPA vacuum cleaners, etc. to ensure that the filtration efficiency meets the criteria for HEPA filtration devices, i.e., 99.97% efficiency at arresting monodispersed particulate matter greater than 0.03 micrometers in diameter.
 - 3. Respirators shall be furnished to the workers by the Contractor. The respirators shall have been tested and approved by National Institute of Occupational Safety and Health (NIOSH) for use in lead contaminated atmospheres. Respirator usage during the project shall be determined by the results of the sampling and analysis performed during the Test Section and shall be in accordance with the requirements of 8 CCR 1532.1 and the work plan submitted by the Contractor. The respiratory requirements below shall be utilized at a minimum:
 - a. Half-face air purifying respirators equipped with P-100 filters at a minimum shall be utilized during the Test Section Work.
 - b. If the Test Section work, or periodic personal monitoring indicates that the airborne lead concentration will exceed the Action Level, the Contractor shall utilize respiratory protection as indicated by the actual airborne lead concentration.
 - c. If the Test Section work indicates that the airborne lead concentration will not exceed the Action Level, the



Contractor at his discretion may downgrade the respiratory requirements for the project. The minimum permissible respiratory protection throughout the project, permitted by these specifications is a half-face (half-mask) negative pressure respirator equipped with P-100 respirator. This minimum standard shall be adhered to even in the event that the Test Phase of the project determines that respiratory protection is not required. This supercedes any and all instructions to the contrary that may be found in these documents.

- 4. Contractor shall provide full body disposable protective clothing, including head, body, and foot coverings to workers and visitors in sizes adequate to accommodate movement without tearing. Full body disposable protective clothing shall be utilized at all times during lead-related demolition activities.
- 5. Additional safety equipment (e.g. hard hats meeting the requirements of ANSI Standard Z89.1-1981, eye protection meeting the requirements of ANSI Standard Z87.1-1979, safety shoes meeting the requirements of ANSI Standard Z41.1-1967, disposable gloves), as necessary, shall be furnished to all workers and authorized visitors. This safety equipment shall be utilized at all times during lead-related demolition activities.
- 6. Non-skid footwear shall be furnished to all workers. Disposable clothing shall be adequately sealed to the footwear to prevent body contamination.
- 7. Furnish disposable mops, rags, and sponges for work area decontamination.
- B. Removal:
 - 1. Scaffolds, ladders, lifts, and hand tools (e.g., scrapers, wire cutters, brushes, utility knives, wire saws, etc.) shall be furnished as needed.
 - 2. Rubber dustpans and rubber squeegees shall be furnished for cleanup.
 - 3. Brushes utilized for removing loose lead-containing materials shall have nylon or fiber bristles. Metal bristles shall not be utilized.



SUB-SECTION 03 EXECUTION

3.0 EXECUTION

3.1 Lead-Containing Material Removal Preparation

A. Exterior Lead-Related Demolition Work Area Preparation:

- 1. Prepare a lead work control area by placing 4' high PVC Safety/Barrier Fence and lead warning tape and proper signage around the area where work will be performed. The PVC Safety/Barrier Fence and warning tape should be placed a sufficient distance away from the removal area to allow persons who are not properly trained or who are not wearing personal protective equipment to avoid the work/contaminated area.
- 2. Install remote worker decontamination unit described in Article 3.2 or as agreed upon with the Owner's HPM.
- 3. Lead Workers shall don personnel protective equipment as required in Article 2.2.
- 4. Place one layer of 6-mil polyethylene sheeting on the ground as close as possible to the foundation, or the exterior floors (i.e., deck or porch) when applicable.
- 5. Extend plastic sheeting a minimum of ten feet out from the foundation.
- 6. Weight down the polyethylene sheeting at the foundation, and along all edges and seams.
- 7. The Contractor shall take extra care when performing exterior lead-related demolition on days when the constant wind speed is 15 mile per hour or over. If the removal procedure is producing dry waste in which visible movement along polyethylene sheeting is evident or if dust or debris is present outside of the lead work control area, the Contractor shall change the methods used for dust control to eliminate the problem. In any event, when visible emissions from the work activity are observed crossing the property line/ work area perimeter, all removal work will cease immediately. The contractor will implement emergency dust control measures and work shall not recommence until permission is granted by the Hazardous Project Monitor.
- 8. Perform lead removal in accordance with Article 3.06 Lead-Related Demolition.
- B. Interior Lead-Related Demolition Work Area Preparation:
 - 1. Prepare a lead work control area by placing 4' high PVC Safety/Barrier Fence and lead warning tape and proper signage around the area where work will be performed. The PVC Safety/Barrier Fence and warning tape should be placed a sufficient distance away from the removal area to allow persons who are not properly trained or who are not wearing personal protective equipment to avoid the work/contaminated area.
 - 2. Install remote worker decontamination unit described in Article 3.2 or as agreed upon with the Owner's HPM.
 - 3. Lead Workers shall don personnel protective equipment as required in Article 2.2.
 - 4. Place one layer of 6-mil polyethylene sheeting over all critical barriers including HVAC vents, windows, doorways, and corridor openings.
 - 5. Place a drop cloth constructed of one layer of 6-mil polyethylene sheeting in all areas where interior leadrelated demolition is to be performed. This drop cloth is to be sized and affixed in such a manner as to prevent any dust and debris landing on it from escaping. Precautions must be taken to prevent slips, trips and falls of personnel walking on this plastic surface.
 - 6. A pressure differential system may be required, refer to the scope of work attached and/or consult with the HPM. If required, the pressure differential system shall produce a minimum of four filtered air changes per hour in the contained work area (work area to include a wood chipper and/or dumpster) and maintains a pressure differential of 0.02-inch water gauge between the inside and outside of the work area on a continuous basis.
 - 7. Perform lead-containing material removal in accordance with Article 3.6 Lead-Related Demolition.
- C. Wood Chipper: The following procedures shall be utilized if a wood chipper is proposed to be used by the Contractor:
 - 1. Construct a contained work area around the wood chipper and waste dumpster. The contained work area shall



be constructed of two layers of 6-mil polyethylene sheeting that is mechanically supported.

- 2. Install worker decontamination unit described in Article 3.2 or as agreed upon with the Owner's HPM.
- 3. Lead Workers shall don personnel protective equipment as required in Article 2.2.
- 4. A pressure differential system shall be established that produces a minimum of four filtered air changes per hour in the contained work area (including the wood chipper and dumpster) and maintains a pressure differential of 0.02-inch water gauge between the inside and outside of the work area.
- 5. Perform lead-containing material removal in accordance with Article 3.6 Lead-Related Demolition.

3.2 Remote Worker Decontamination Systems

- A. A minimum of one three-stage decontamination system is required to be operational on the site at all times that lead-related demolition is being performed. The decontamination system shall comply with the following requirements.
 - 1. Worker decontamination enclosure systems shall be provided at a location near or adjacent to the lead work control areas. As a minimum, one system at a single location is required.
 - 2. Worker decontamination enclosure systems constructed at the Project site shall utilize 6-mil black or opaque polyethylene sheeting, or other approved materials for privacy.
 - 3. The personnel decontamination unit shall not be located inside the work area unless otherwise authorized by the Owner's HPM.
 - 4. The worker decontamination enclosure system shall consist of at least a clean room, a shower room and an equipment room, each separated from the other and from the work area by flaps comprised of three sheets of 6-mil polyethylene sheeting.
 - 5. Clean rooms shall be sized to adequately accommodate the work crew. Space for storing respirators shall be provided in this area. Clean work clothes; clean disposable clothing, replacement filters for respirators, towels and other necessary items shall be provided in adequate supply at the clean room. Posting of notices shall also be in this area or in an area immediately adjacent to the clean room. Postings shall be sited in a manner to ensure line of site visibility prior to approaching/entering the clean room.
 - 6. Shower rooms shall contain at least a Hudson sprayer for washing the workers hands, face, and respirator. The shower enclosure shall be constructed to ensure against leakage of any kind. Shower water shall be drained, collected and either filtered through a system with at least 0.5-1.0 micron particle sizes collection capability or disposed of as contaminated waste. Additionally, the contractor and their personnel shall make themselves conversant of the requirements of any local water pollution agency or municipal waste water treatment agency prior to discharging any filtered or treated waste water. In no event shall the waste water be discharged without adequate filtration.

3.3 Maintenance of Construction/Lead-Related Work Area Barriers

At any time during the lead related work activities after barriers have been erected, if visible material is observed outside of the work area or if damage occurs to barriers, work shall immediately stop, repairs made to barriers, and debris/residue cleaned up using appropriate procedures. In addition, the barriers shall be moved farther away from the lead-related work area.



3.4 Commencement of Work Shall Not Occur Until

- A. Test Section: Work on the Test Section shall not occur until the following items have been completed.
 - 1. Pre-work submissions, notifications, and permits required and submittals have been provided and approved by the Owner's Representative.
 - 2. Construction and lead work control area barriers are in place.
 - 3. At least one wash station/decontamination station is operational.
- B. Interior Work Areas: Work on the interior of the building shall not occur until the following items have been completed.
 - 1. The removal of the asbestos-containing floor tile and mastic has been completed.
 - 2. Results from the interior Test Section have been submitted and the work practices for the interior work have been approved by the Owner's Representative.
 - 3. Construction and lead work control area barriers are in place.
 - 4. At least one wash station/decontamination station is operational.
- C. Exterior Work Areas: Work on the exterior of the building shall not occur until the following items have been completed.
 - 1. The interior asbestos-related demolition has been completed.
 - 2. The interior lead-related demolition has been completed.
 - 3. Results from the exterior Test Section have been submitted and the work practices for the exterior work have been approved by the Owner's Representative.
 - 4. Construction and lead work control area barriers are in place.
 - 5. At least one wash station/decontamination station is operational.
- D. No work task shall be performed without an initial assessment.

3.5 Workplace Entry and Exit Procedures

- A. General: The following procedures shall be followed prior to entrance into any lead-related work area:
 - 1. Personnel, before entering the lead-related work area, shall read and be familiar with posted regulations, personal protection requirements (including workplace entry and exit procedures), and emergency procedures.
 - 2. Personnel shall wear respirators, disposable coveralls, head covering, and foot covering. Hardhats, eye protection, and gloves shall also be utilized, as required. Clean protective clothing shall be provided and utilized by each person for each separate entry into the work area.
 - 3. To exit the work area, personnel shall proceed to the wash station/decontamination station where they shall remove protective equipment and deposit disposable clothing into appropriately labeled containers for disposal and wash their hands, face, and any other exposed portions of their body.



3.6 Lead-Related Demolition

A. General - REMOVAL OF LEAD CONTAINING COATINGS

- 1. The Contractor will be required to remove paints and coatings as identified in areas scheduled for demolition or architectural renovations, as applicable. Do not remove lead-containing coatings with a torch or flame, except as an unavoidable result of welding or torching operations.
- 2. Grinding/Cutting, Welding or Torching Operations: To the extent feasible, and to avoid direct grinding/cutting, welding, or torching on surfaces containing lead in concentrations greater than 0.64 μ g/cm², by manually or chemically removing all layers of the coating to a distance of:
 - For at least four inches (4") on ALL side from the point at which mechanical abrasion or grinding is proposed,
 - at least eighteen inches (18") on ALL side from the point at which heat is proposed to be applied. To prevent the vaporization of lead from the surrounding areas the contractor shall endeavor to keep these surrounding areas cool.
- 3. Removal of Surface Coatings with Power Tools: Where mechanical removal of surface coatings constitutes an Activity Level II activity, provide power tools with local HEPA exhaust or dust collection systems to capture the aerosolized lead.
- 4. Maintain all work area surfaces as free as practicable from accumulated dust or debris. Dry sweeping or use of compressed air to remove dust or debris is not permitted. Clean all equipment, tools and containment structures within regulated areas, at a minimum, with HEPA vacuums or wet methods.
- 5. Conduct operations to prevent injury to adjoining facilities, persons, motor vehicles, etc., as applicable. Prevent chemical cleaning agents from coming into contact with pedestrians, motor vehicles, landscaping, buildings, and other surfaces that could be injured or damaged by such contact. Do not spray or scrape outdoors during winds of sufficient force to spread cleaning agents to unprotected surfaces.
- 6. For areas where full abatement is not required, the Contractor shall ensure that the paint that remains on interior walls, ceilings or other area surfaces in areas of active work as applicable, shall be adhered to the substrate sufficiently to support eventual repainting. Paints that peel or loosen during wetting will become part of the scope of work scheduled for abatement.

In areas where substrate stabilization is called for, the contractor shall smoothen the edges from which paint has been removed (i.e., 'feather') and apply at least three (3) coats of a non-lead containing paint primer to the removed substrate plus at least two feet (in every direction) from the edges of the area of partial removal. The primer used for stabilization shall be suitable for application on the specific substrate. NOTE, THIS OPTION IS NOT AVAILABLE FOR IMPACT OR FRICTION SURFACES WHERE ALL LEAD CONTAINING MATERIALS ARE TO BE REMOVED IN THEIR ENTIRETY TO THE SUBSTRATE.

- 7. In areas where damaged or other asbestos-containing materials will be disturbed during lead paint abatement, the Contractor shall handle this material in accordance with specification Section 02 82 13 Removed asbestos materials shall be placed in two 6-mil disposal bags and fiber drums and disposed of as asbestos waste. Lead and asbestos wastes shall not be combined, where practical. Mixed debris containing both lead and asbestos needs to be disposed at a landfill licensed to accept both types of waste with proper manifests. Only personnel trained, certified and meeting all criteria of both the asbestos abatement specification (section 02 82 13) and the lead abatement specifications (section 02 83 00) shall be permitted to attempt any removal that impacts both these materials.
- 8. Non-paint waste items found on floors are to be separated out and disposed of or cleaned by the Contractor. Small pieces of debris, such as broken glass, paper, etc., may be disposed of with the lead paint. - Large



items, such as equipment, furnishing, etc., are to be cleaned by HEPA vacuuming at the same time as the floors and stored on-site as directed by the Owner.

- 9. Seal all floor openings and protect the floor with polyethylene drop cloths or other acceptable means to prevent contamination or damage to other building surfaces and finishes.
- 10. Provide HEPA-filtered exhaust units for area ventilation during removal, minimum 1,500-cfm capacity per unit. Provide one unit for each 3,500-sq. ft. of floor space to be covered per workday. Units must be portable and placed in the vicinity of removal operations. Exhaust units outside building. Provide temporary shoring as necessary to support equipment and workers. Establish a minimum of 0.025 inches water gauge negative pressure between the work area and the adjacent areas, as applicable, measured at a location approved by the Environmental Consultant.
- 11. Work areas may require full or partial scaffolding to allow for continued expiation of the facilities during the construction period. Segregate areas by erecting solid plywood platforms on movable scaffolding and erecting 2 layers of 6-mil polyethylene sheeting to the structure above for full isolation of the assembly.
- 12. Shoveling, wet sweeping, and brushing may be used only where vacuuming or other equally effective methods have been tried and are found to be ineffective.
- 13. The use of steam cleaning and compressed air removal methods is not permitted. Abrasive removal equipment shall be equipped with local HEPA exhausts or dust collectors.
- 14. The use of abrasive mechanical cleaning will generally not be permitted, unless approved in advance by the Owner and the Environmental Consultant; this prohibition includes sanding discs, sand blasting, or other abrasive compounds.
- 15. Strictly conform to the approved cleaning procedures as recommended by the product manufacturer. Should a modification to the cleaning method specified be proposed, submit the proposal in writing for consideration and review by the Owner and its representative. These individuals will have the right to ask for test samples before final approval. Any such modification or change shall be at no additional cost to the Owner.
- 16. Begin cleaning only after all sample panels and other required submissions are approved and protective means and methods are in pace.
- 17. Where complete removal is required, finished work shall show no signs of stains, scratches, streaks, or runs of discoloration from use of cleaners. Leave all substrate surfaces neat and clean, including removal of all primers as well as surface coats. All surfaces should be uniformly cleaned.
- B. Interior Lead-Related Demolition: The Contractor shall utilize the following procedures in addition to those proposed during the Test Sections and in the lead-related demolition work plan required by Article 1.08 when performing lead-related demolition on the interior of the building. Airborne lead concentrations outside the lead work control area but inside of the work area shall be kept below $10 \,\mu g/m^3$. Airborne lead concentrations outside of the work area shall be kept below the background level measured prior to the commencement of construction activities. If the airborne lead concentration outside of the work area exceeds background levels, then work shall cease and new engineering controls and work procedures shall be utilized.
 - 1. Interior lead-related demolition shall be performed in a manner that reduces the amount of airborne lead particulate generated.
 - 2. While performing manual demolition, the material shall be kept wet to reduce airborne lead concentrations.



The material shall only be wetted to a point that dust control is maintained. The Contractor shall take care not to produce runoff or excess water waste. Waste generated during manual demolition shall not be allowed to dry out and shall be quickly packaged and placed into the waste containers required by the waste hauler and landfill.

- 3. If mechanical methods (power equipment) are used such as saws or grinders, this equipment should be used in a manner that reduces airborne lead concentrations. The area to be cut or ground shall be free of all lead coatings, paints, primers etc. PRIOR to cutting or grinding. The Contractor shall take care not to produce runoff or excess water waste. Waste generated during mechanical demolition shall not be allowed to dry out and shall be quickly packaged and placed into the waste containers required by the waste hauler and the landfill. The equipment shall be decontaminated prior to removing it from the lead work control area.
- 4. If machinery/open flame is used to perform lead-related demolition, the lead-containing materials shall be prewetted and shall be kept continually wet during demolition. The area to be cut or ground shall be free of all lead coatings, paints, primers etc. PRIOR to using mechanical equipment or open flame. The Contractor shall take care not to produce runoff or excess water waste. Waste generated during mechanical/open flame demolition shall be quickly packaged and placed into the waste containers required by the waste hauler and the landfill. The machinery shall be decontaminated prior to removing it from the lead control work area.
- C. Exterior Lead-Related Demolition: The Contractor shall utilize the following procedures in addition to those proposed during the Test Sections and in the lead-related demolition work plan when performing lead-related demolition on the exterior of the building. Airborne lead concentrations outside the lead work control area but inside of the work area shall be kept below $10 \ \mu g/m^3$. Airborne lead concentrations outside of the work area shall be kept below to the commencement of construction activities. If the airborne lead concentration outside of the lead work control area exceeds $10 \ \mu g/m^3$ or if the airborne lead concentration outside of the work area exceeds background levels, then work shall cease and new engineering controls and work procedures shall be utilized.
 - 1. Exterior lead-related demolition shall be performed in a manner that reduces the amount of airborne lead particulate generated.
 - 2. While performing manual demolition, the material shall be kept wet to reduce airborne lead concentrations. The material shall only be wetted to a point that dust control is maintained. The Contractor shall take care not to produce runoff or excess water waste. Waste generated during manual demolition shall not be allowed to dry out and shall be quickly packaged and placed into the waste containers required by the waste hauler and landfill.
 - 3. If mechanical methods (power equipment) are used such as saws or grinders, this equipment should be used in a manner that reduces airborne lead concentrations. The area to be cut or ground shall be free of all lead coatings, paints, primers etc. PRIOR to cutting or grinding. The Contractor shall take care not to produce runoff or excess water waste. Waste generated during mechanical demolition shall not be allowed to dry out and shall be quickly packaged and placed into the waste containers required by the waste hauler and the landfill. The equipment shall be decontaminated prior to removing it from the lead work control area.
 - 4. If machinery/open flame is used to perform lead-related demolition, the lead-containing materials shall be prewetted and shall be kept continually wet during demolition. The area to be cut or ground shall be free of all lead coatings, paints, primers etc. PRIOR to using mechanical equipment or open flame. The Contractor shall take care not to produce runoff or excess water waste. Waste generated during mechanical/open flame demolition shall be quickly packaged and placed into the waste containers required by the waste hauler and the landfill. The machinery shall be decontaminated prior to removing it from the lead control work area.

3.7 Lead Work Area Clean Up Procedure

A. Maintain surfaces within the lead work control area free of accumulations of lead debris and dust. Restrict the spread of dust and debris. Keep waste from being distributed over the work area. Do not dry sweep or use



compressed air to clean up the area. When the lead removal operation has been completed, clean the area of visible lead contamination by vacuuming with a HEPA filtered vacuum cleaner and/or wet mopping the area.

- B. Final Cleaning: After all lead-containing materials are removed; the Contractor shall clean any remaining items remaining inside of the building including wall support systems, roof support systems and the concrete slab to remove any "settled" lead dust/debris. The wall and deck support systems shall be wet wiped using towels, rags, and sponges. The concrete slab shall be HEPA vacuumed and then mopped with plain water. The following procedures shall be used:
 - 1. Wash all surfaces in the work area with a solution containing 5 percent tri-sodium phosphate (TSP) or equivalent. Prepare solution using hot water. Workers shall use towels, sponges, and mops to clean all surfaces including all areas that had been covered with polyethylene sheeting. Cleaning shall start at the ceiling and work down to the floors. A new solution of TSP/TSP Substitute and water shall be mixed as the water becomes dark or dirty.
 - 2. The floor will then be re-cleaned with plain water. If required by the Owner or the HPM, the floors could require 'neutralization' of any and all chemicals used. If this is to be performed, the neutralization will be carried out after the area has satisfied all clearance criteria.

3.8 Lead-Related Demolition Final Inspection

- A. The Owner/HPM will perform a visual inspection of each lead work control area at the completion of each phase of lead-related demolition. The inspection will determine that all lead-containing dust and debris has been cleaned up and that all lead-containing materials have been removed, packaged, and placed into the proper waste containers. If the final visual inspection is not acceptable, the Contractor shall perform the cleanup procedures listed in Article 3.07 of this Section.
- B. The Owner/HPM will perform an inspection of the soil surrounding the building. No visible paint chips or leadcontaining debris shall be present in the soil. If paint chips or debris are identified in the soil, the Contractor shall remove these using manual methods and HEPA vacuums.
- C. Final Inspection: Following completion of all phases of lead-related demolition, the Owner will perform a FINAL visual inspection of any items remaining in the work area including wall and deck support systems and the concrete slab.
 - 1. All paint/lead containing waste is to be removed from work area by the end of each workday. Accumulated waste will not be allowed to remain in the area overnight. Plastic barriers, at entrances to the work areas, shall remain in place at all times until the area is scraped and cleared. Items requiring removal of lead-based paints intact shall be wrapped in one layer of polyethylene sheeting, sealed with duct tape and labeled properly prior to removal from the holding area.
 - 2. Visual Clearance Criteria for Lead Only Abatement Areas: At the end of each workday the HPM and the Contractor's Supervisor shall inspect work performed that day. If the visual inspection reveals that lead-contaminated wastes and loose debris have been adequately removed from the area, the Contractor will be allowed to commence work on the next work area. If the HPM determines that unacceptable waste and residue remain, the Contractor shall vacuum and re-clean those areas that are unsatisfactory. The Contractor will not be allowed to start removal in the next work area until the existing/current work area has passed a visual inspection.
 - 3. Wipe Sample Clearance, as deemed necessary by the HPM.
 - a. When the work is completed, the HPM will visually inspect the zone for any loose dust or debris, followed by wipe sampling of settled dust to document surface lead levels below the specified clearance levels.



Samples will be collected using commercial wipes moistened with a non-alcohol wetting agent. A one-foot square area will be wiped twice in an "S" pattern, the second pass being at right angles to the first, folding the wipe inward and placing it in a labeled sample container. The wipe sample will be analyzed by flame atomic absorption using EPA method SW846. The Contractor shall re-clean the work zone if :

(i) the surface concentrations exceed the pre-existing (baseline) levels collected prior to the commencement of work or

(ii) the surface concentrations exceed the following levels, whichever of (i) or (ii) listed above is lower:

40 μg/ft².....for floors.
250 μg/ ft².....for interior windowsills and stools.
400 μg/ft².....for window troughs.
400 μg/ ft².....for exterior concrete or other rough surfaces.
350 ppmfor soil (or the pre-existing 'baseline' level, whichever is lower).

- b. The cleaning and testing will cease only after all required paints are abated and all sample results are below these specified levels. Sample analysis times will be within 1 workday, unless otherwise indicated.
- c. If the above levels are enumerated in paragraph 3 a above are exceeded, the final testing procedure shall then be repeated at Contractor's expense. This shall include, but not be limited to, the sampling and analysis costs for the samples during re-cleaning and the final clearance, HazMat Project Manager's costs and expenses, any and all contractual penalties, liquidated damages, etc., levied by the owner and/or other trades that may be impacted by the change in schedule.
- 4. Air Sampling Criteria (As Applicable): Aggressive air sampling will be conducted for lead simultaneous to the asbestos clearance air sampling. Air samples will be analyzed for total lead in accordance with Lead in Air by Flame AAS NIOSH method 7082. The clearance criterion for lead shall be an airborne concentration below OSHA's "Action Level" of 30 micrograms per cubic meter of lead (30 μg/m³), on an 8 hour Time Weighted Average (TWA), for all samples.

3.9 Lead Waste Handling Procedures

- A. All disposable personal protective equipment, respirator cartridges, and HEPA vacuum filters shall be packaged and disposed of upon completion of the work shift and when the lead removal operation has been completed.
- B. All removed lead-containing materials, lead-contaminated clothing and equipment, and lead-containing dust/debris shall be packaged and placed into waste containers approved for use by both the waste transporter and landfill.
- C. Properly label each lead waste container in accordance with the requirements of the waste hauler and the landfill. At a minimum, the labels shall identify the type of waste and the date lead-contaminated wastes were first put into the container.
- D. The Contractor shall make provisions for the safe storage of waste on site for waste characterization and eventual disposal. For health and safety reasons, waste storage areas must be treated as lead work control areas with restricted access.

3.10 Lead Waste Disposal

A. The Contractor shall perform at their expense, any and all waste characterization and analysis of lead-containing waste or lead-contaminated waste generated during this project. The waste characterization sampling performed on the waste will be in accordance with Title 22.



- B. Any and all waste including but not limited to waste generated from abatement projects, demolition debris and/or soil excavation, with total lead content greater than 350 parts per million and scheduled for disposal in California, must be disposed of at a Class I hazardous waste landfill, or at other landfills that have specific permits to accept these waste. Copies of all waste permits from the waste disposal facility shall be included as a part of the pre-job submittal.
- C. For all waste generated from the site one or more of the following characterization tests must be performed:

Total Threshold Limit Concentration (TTLC) (California State Requirement)	 (a) If greater than or equal to 1000 mg/kg the waste must be disposed as a Class I Hazardous Waste, (b) If less than 1000 mg/kg but greater than or equal to 50 mg/kg then perform the W.E.T.(STLC) test, (c) If less than 50 mg/kg can be disposed of as construction debris
Waste Extraction Test Soluble Threshold Limit Concentration (WET-STLC) (California State Requirement)	 (a) If greater than or equal to 5mg/ℓ the waste must be disposed as a Class I Hazardous Waste after performing the TCLP Test (Federal) (b) If less than 5 mg/ℓ can be disposed of as construction debris.
Toxicity Characteristic Leachate Procedure (TCLP) (Federally Regulated)	 (a) If greater than or equal to 5mg/ℓ the waste must stabilized prior to being disposed as a Class I Hazardous Waste (b) If less than 5mg/ℓ the waste stabilization is not required. However the material must be disposed as a Class I Hazardous Waste

3.11 OSHA Personnel Air Monitoring

- A. Air monitoring required by OSHA for lead exposure is work of the contractor. The contractor is responsible for providing daily OSHA compliance monitoring as per 29 CFR Part 1926.62 and 8 CCR Part 1532.1.
 - 1. At minimum, Contractor shall conduct representative (25% of crew) breathing zone personal air monitoring of its employees twice each shift and repeated daily.
 - 2. Monitoring shall be conducted by a qualified professional experienced and knowledgeable about the methods of air monitoring and in accordance with 29 CFR Part 1926.62 and 8 CCR Part 1532.1.
 - 3. Monitoring results and appropriate laboratory analysis work shall be submitted to Owner's Representative within twenty-four (24) hours of the monitoring work.

3.12 Alternate Procedures

- A. The procedures described in this Section shall be utilized at all times.
- B. If specified procedures cannot be utilized, a request shall be made in writing to the Owner providing details of the problem encountered and proposed alternatives.
- C. Alternative procedures shall provide equivalent or greater protection than the procedures that they replace.
- D. Alternative procedure shall be approved in writing by the Owner and HazMat Project Manager prior to implementation.



SECTION 02 84 00

POLYCHLORINATED BIPHENYLS (PCB) AND FLUORESCENT TUBES REMOVAL

PART 1 GENERAL

1.01 DESCRIPTION

The work of this section consists of furnishing all transportation, labor, materials, equipment and incidentals necessary to legally handle and dispose of offsite all Polychlorinated Biphenyl (PCB) containing materials (fluorescent light ballasts), fluorescent tubes containing mercury vapor, and other hazardous materials.

1.02 SCOPE OF WORK

- A. The Contractor is responsible for the removal, handling, transport, and proper disposal of PCB-containing materials including fluorescent light ballasts. The Contractor shall inspect remaining fluorescent light fixtures, remove all ballasts which are not marked "Non-PCB containing" or "No PCBs", package, and dispose of in accordance with the requirements identified in this section.
- B. The Contractor is responsible for the removal, handling, transport, and disposal of fluorescent tubes containing mercury vapor. Contractor shall remove, package and dispose of all remaining fluorescent light tubes in accordance with the requirements of this section.

1.03 RELATED WORK

- A. SECTION 02 82 13 ASBESTOS ABATEMENT WORK
- B. SECTION 02 83 00 LEAD-RELATED DEMOLITION WORK

1.04 APPLICABLE DOCUMENTS AND REGULATIONS

- A. It is the responsibility of the Contractor to know the current regulations controlling work and to perform all related work in accordance with such regulations that provide for worker and public safety against asbestos exposure.
- B. The publications listed below form a part of this specification to the extent referenced. The current issue of each document shall govern. Where conflict among requirements or with these Specifications exists, the more stringent requirements shall apply.

CODE OF FEDERAL REGULATIONS (CFR)

- 40 CFR 761 Polychlorinated Biphenyl (PCBs) Manufacturing, Processing, Distribution in Commerce and Use Prohibitions
- 29 CFR 1910.134 Respiratory Protection
- 29 CFR 1910.145 Accident Prevention Signs and Tags
- 40 CFR 178 Shipping Container Specification



AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) PUBLICATION

Z88.2-69 Practices for respiratory protection

UNDERWRITERS LABORATORIES, INC.

UL 586 1990 High-Efficiency Particulate Air Filter Units

1.05 **DEFINITIONS**

- A. "Polychlorinated Biphenyls (PCBs)" as used in this specification shall mean the same as PCB Article, PCB Article Container, PCB Container, PCB Equipment, PCB Item, PCB Transformer, PCB Contaminated Transformer, as defined in 40 CFR 716.3.
- B. "Leak or leaking" means any instance in which a PCB Article, PCB Container, or PCB Equipment has any PCBs on any portion of its external surface.
- C. "Spill" means intentional and unintentional spills, leaks, and other uncontrolled emissions resulting in any quantity of hazardous material being released to the environment.
- D. "Control Area" means a restricted area posted with the proper warning/caution signs in which only trained persons may enter.
- E. "High Efficiency Particulate Air (HEPA) Filters (for PCB dust)" means a filter capable of removing 99.97% of the particles down to 0.3 microns (Φ) in diameter and consistent with a UL 586 filter system.
- F. "Mercury Filter" means a special mercury filter cartridge carrying proper test and certification approval number for mercury vapor work.
- G. "Other Hazardous Materials and Potentially Hazardous Materials" means all hazardous materials or potentially hazardous materials not otherwise defined in this specification as Asbestos, Chlorofluorocarbons (CFCs), Polychlorinated Biphenyls (PCBs), Fluorescent Tubes, Mercury, or Lead Based Paint shall be considered as Other Hazardous Materials and Potentially Hazardous Materials.
- H. Hazmat Project Manager (HPM) means the on-site representative from HazMat Doc. The HPM is also one of the owner's representatives.



1.06 QUALITY ASSURANCE

- A. Training: Instruct employees on the dangers of mercury vapor, PCB, and other hazardous materials exposure, on respirator use, decontamination, and applicable OSHA and EPA regulations.
- B. Regulation Documents: Maintain at all times one copy each at the office and one copy each in view at the job site of the approved Contractor's Removal, Storage, and Disposal Work Plan, including addenda and revisions.
- C. Access by the Owner, Owners Representative or HPM: The Owner/Owner's Representative/HPM may enter control areas for brief periods of time provided they underwent proper training, donned disposable polyethylene gloves and disposable polyethylene foot covers, as a minimum. Additional protective equipment may be required if respiratory hazard is involved or if skin contact is involved. Contractor shall provide all required personnel protective equipment and training for the Owner/Owner's Representative/HPM as required for safe entry and visual inspection in contaminated areas.

1.07 SUBMITTALS

A. Submit, as applicable, the following to the Owner/Owner's Representative/HPM for approval within 10 days of receiving the Notice to Proceed. These submittals are in addition to those required in Section 02 82 13 or Section 02 83 00. These submittals shall be submitted in accordance with Section 02 84 16:

1. Training Certification of Employees: Submit certificates signed and dated by an officer of the Contractor and by each employee stating that the employee has received required training.

2. Removal, Storage, Packaging, Transportation, and Disposal Work Plan: Submit a Removal, Storage, Packaging, Transportation, and Disposal Work Plan. Submit a detailed job-specific plan of the work procedures to be used in the removal of: fluorescent light bulbs; PCB-containing ballasts, other oils; and mercury containing devices. Include in the plan: eating, drinking, smoking and restroom procedures; leak and spill clean-up; procedures for identifying other hazardous materials and potentially hazardous materials; interface of trades; sequencing of related work; training requirements; respiratory protection requirements; personal protective equipment to be utilized; temporary storage locations; packaging procedures; transportation procedures and disposal sites. Include personal air sampling (if required), sampling methodology, frequency, duration of sampling, and qualifications of air monitoring personnel in the air sampling portion of the plan.

B. Upon completion of all removal activities, submit to the Owner/Owner's Representative/HPM, documentation that includes the following.

1. The Contractor shall keep records of all documents generated in the course of the work. These include copies of all forms and reports of spills, accidents, personal exposure monitoring, hazardous materials removal logs, and hazardous waste manifests. Copies of all records shall be submitted to the Owner/Owner's Representative/HPM at the completion of the work.

1.08 EQUIPMENT

- A. Personal Protective Equipment: Work clothes shall consist of Personnel Protection Equipment (PPE) as required by OSHA regulations, including, but not limited to the following:
 - 1. Disposable coveralls;
 - 2. Gloves;



- 3. Chemical safety goggles;
- 4. Half mask cartridge respirator for mercury vapor, PCBs and/or other hazardous material to be used for spills;
- 5. Disposable foot covers (polyethylene).
- B. Leak/Spill Kit: Assemble a leak/spill kit to include at a <u>minimum</u>, the following items for maximum 200gallon <u>potential spills</u>. For items where a larger spill potential exists, multiply quantities provided accordingly:
 - 1. Gloves specifically rated for use in handling PCBs (six pairs);
 - 2. Disposable coverall specifically rated for use in handling PCBs (four each);
 - 3. Chemical safety goggles (two each);
 - 4. Disposable foot covers (polyethylene) (six pairs);
 - 5. PCB Caution Sign: "PCB-Spill --- Authorized Personnel Only" (two each);
 - 6. Banner guard or equivalent banner material (100 feet);
 - 7. Absorbent material (five bags);
 - 8. Rags (20 each);
 - 9. HEPA vacuum (one each);
 - 10. Poly lined DOT 17H drums (two each);
 - 11. Blue polyethylene waste bags (five each).

Note: All materials and equipment used to clean up a PCB spill become PCB waste and must be disposed of accordingly.



PART 2 PRODUCTS

Not Used



PART 3EXECUTION

3.01 **REQUIREMENTS**

- A. The Contractor shall furnish all labor, materials, and equipment necessary for the complete collection and removal of all PCBs, fluorescent light tubes, ballasts, mercury and other hazardous materials or potentially hazardous materials from the project site.
- B. All hazardous materials which are identified as in-scope requirements shall be properly packaged, delivered to, and disposed of at a properly licensed disposal facility. The PCB-containing articles shall be incinerated. The mercury-containing fluorescent tubes shall be recycled.
- C. The Contractor shall prepare hazardous waste manifest that will accompany the hazardous materials to the storage site. The Contractor shall ensure that a responsible person from the District signs the form. The Contractor is responsible to ensure that the form from point of origin to point of disposal is filled out completely and accurately for complete tracking of hazardous materials. A copy of each hazardous waste manifest shall be submitted to the following:

HazMat Doc 3080 Olcott Street, Suite 135D Santa Clara, CA 95054 Tel: 408-748-0055 Fax: 408-748-0066

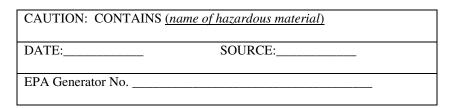
Re: (Project Name and Address)

- D. The Contractor shall verify that the storage site is capable of accepting the hazardous materials within regulatory compliance prior to delivery of the hazardous materials.
- E. Isolate a PCB control area by physical boundaries to prevent unauthorized entry of personnel.
- F. Personnel Protection: Workers shall wear and use PPE as required in Article 1.08 of this section upon entering a control area.
- G. Permissible Exposure Limits (PEL):
 - 1. The PEL for mercury is 0.05 mg/m^3 of air based on an 8-hour time weighted average (TWA).
 - 2. The PEL for PCBs is 0.5 mg/m^3 based on an 8-hour time weighted average basis.
 - 3. The Contractor shall perform Personal Sampling to ensure the PEL is not exceeded.
- H. Special Hazards
 - 1. Fluorescent light bulbs shall be handled with care during removal and packaging and any breakage shall be reported and the spill cleaned up immediately.
 - 2. Ballasts shall not be exposed to open flames or other high temperature sources since toxic decomposition by-products may be produced.
 - 3. Other hazardous materials or potentially hazardous materials shall be properly identified prior to handling or exposure.



I. Caution Label

1. Affix labels to all waste containers. Provide label with sufficient print size to be clearly legible, with bold print on a contrasting background, displaying the following:



J. Caution Signage

1. Per 29 CFR 1910.145, provide signs at approaches to PCB control areas. Locate signs at such a distance that personnel may read the sign and take the necessary precautions before entering the area.

3.02 WORK PROCEDURE

- A. Furnish all labor, materials, services, and equipment necessary for the complete removal of all PCB/Non-PCB Ballasts, fluorescent light bulbs, and other hazardous materials and potentially hazardous materials in accordance with federal, state, and local regulations.
 - 1. Package and mark fluorescent light bulbs and ballasts as required by EPA and DOT regulations and dispose of offsite.
 - 2. Provide packaging, available from the manufacturer, for the storage of fluorescent light bulbs. Provide 17C or 17H drums for packaging of PCB ballasts.
 - 3. Fluorescent light bulbs, and ballasts labeled as "Non-PCB Containing" or "No PCBs", shall be packaged in leak-proof packaging, and be transported under manifest/trip ticket and disposed of for either (a) recycling or (b) disposal in full compliance with local, state and federal regulations. A manifest/trip-ticket or equivalent endorsed by the waste disposal facility or the recycler shall be provided to the HPM within 2 working days of the waste being moved of the site.
- B. Smoking: Smoking is not permitted within 50 feet of the control area. Provide and post "No Smoking" signs.
- C. Work Operations: Ensure that work operations or processes are conducted in accordance with the applicable requirements of this section, including but not limited to:
 - 1. Obtain advance approval of storage sites.
 - 2. Report spills/leaks to the Owner/Owner's Representative/HPM and maintain a record detailing the circumstances surrounding the leak/spill include the location, material leaked/spilled, estimated quantity, cleanup procedure utilized, and disposition of waste.
 - 3. Maintain a spill/leak kit for immediate clean up of spill/leaks.
 - 4. Maintain an access log of employees working in a control area and provide a copy to the District's representative upon completion of the operation.



3.03 REMOVAL WORK

- A. Establish a control area as specified in paragraph entitled "Control Area". Only personnel briefed on the handling and safety precautions shall be allowed into the area.
- B. Work performed in confined spaces shall be performed in accordance with applicable Cal/OSHA requirements.
- C. Remove mercury containing bulbs and other devices intact and immediately package for disposal. Handle in a manner that will prevent skin contact.
- D. Remove all fluorescent light ballasts that are not marked "Non-PCB containing" or "No PCBs". Place ballasts in DOT approved 17C or 17H drums. Handle PCBs such that no skin contact occurs.
- E. Remove all other equipment containing PCBs from site and transport to an approved decontamination facility for final disposal.

3.04 SPILL/LEAK REQUIREMENTS

- A. Spills/Leaks: Report any spill/leak to the District's Representative immediately.
- B. Spill/Leak Control Area: Establish a spill/leak control area and restrict access to properly trained personnel utilizing appropriate personal protective equipment.
- C. Employee Safety: The contractor shall be responsible for ensuring that his personnel are knowledgeable and protected from the health and safety hazards of working with PCBs. The Contractor is advised to follow the guidance promulgated by EPA's Standard Operating Safety Guides (latest edition), the NIOSH, OSHA, USCG, EPA's Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (latest edition) based on 29 CFR 1910.120.
- D. Spill/Leak Cleanup Procedures
 - 1. Initiate cleanup of spill/leaks as soon as possible. Immediately transfer broken items into a DOT approved 17H, poly lined drum or other approved container. To clean up spills, personnel shall wear the PPE prescribed in paragraph entitle "Special Clothing." Mop up any liquids with rags or other conventional absorbent. The spent absorbent shall be properly contained and disposed of as solid PCB waste. HEPA vacuum the spill area. HEPA vacuumed waste shall be drummed in a poly lined DOT 17H drum and labeled with a DOT approved caution label.
 - 2. The Contractor shall be responsible for the proper cleanup of all pre-existing or inadvertent spills or leaks. Any leaks shall be immediately stopped, contained, covered, and diked as necessary to facilitate clean-up operations and to prevent the hazardous materials from entering drains, storm sewers, or other water bodies. The District shall be immediately notified by a subsequent written report describing the details of the spill or leak, and what actions have been taken to clean-up the spill or leak. The hosing down of any spillage or leaks is prohibited. In the event of a Contractor caused fire involving hazardous materials, the Contractor shall be responsible for the cleanup of any contamination caused by the hazardous, toxic products of combustion.



3.05 STORAGE FOR DISPOSAL

- A. Storage Containers
 - 1. Intact fluorescent light bulbs shall be placed in the packaging that is available from the manufacturer.
 - 2. Store non-liquid PCB mixtures, articles, or equipment in DOT Specification 17C or 17H containers.
- B. The contractor shall properly label and mark all hazardous materials and ensure that the vehicle used to transport the hazardous materials is also placarded in accordance with EPA and DOT requirements.
- C. Waste Containers: Label waste containers in accordance with the requirements of this section.
- D. Temporary Onsite Storage: Obtain written approval for temporary onsite storage from the Owner/Owner's Representative/HPM. Temporary onsite storage areas must comply with the following: (1) Provide adequate roof and walls to prevent rainwater from reaching the stored material; (2) Provide containment curbs to prevent the spread of secondary contamination in the event of a container leak. Hazardous waste shall not be stored on site for longer than regulations allow, but in no case longer than 14 days or the end of the contractor's onsite activity whichever is earlier.
- E. The contractor shall make every endeavor to recycle as much of the waste generated from this project as possible. To this end the contractor may contact the following facilities to assist them in putting together a recycling plan for this project

AERC Recycling Facility 30677 Huntwood Avenue Hayward, CA 94544 Tel: 510-429-1129 Fax: 510-429-1498 www.aercrecycling.com

Or

Lighting Resources Inc. 805 East Francis St. Ontario, CA 91761 800-572-9253 www.lightingresourcesinc.com

3.06 CONTROL AREA HOUSEKEEPING

A. Maintain surfaces of the control area free of accumulations of fluorescent light bulb debris, PCBs, and other hazardous materials. Restrict the spread of dust and debris; keep waste from being distributed over work area. Do not remove the control area and warning signs prior to the District's representative's approval. Re-clean areas showing residual dust or debris.

END OF SECTION



APPENDIX -A

SCOPE OF WORK

SHEET NOTES FOR THE ABATEMENT SCOPE OF WORK

The following notes will apply in their entirety, without exclusions or exemptions, to the entire Scope of Work for this Project unless otherwise instructed to in writing:

- 1. These Buildings are slated for renovation and/or reconfiguration. Coordinate work activities with HPM, Construction Manager and other trades as applicable. Prior to the commencement of abatement or removal activities, it is the Contractors responsibility to reconcile all the abatement/removal scope of work materials and locations listed herein with the intent of the Project Construction Manager and/or the Owners Representative.
- 2. Contractors shall bid all quantities listed herein. Any and all additions and/or deductions shall be based on the Abatement Unit Prices (Appendix B) attached hereto.
- 3. The Contractor shall be responsible for independently verifying ALL quantities enumerated.
- 4. The Contractor shall be responsible for the abatement/removal of ALL LISTED MATERIALS IN ALL LOCATIONS as indicated in these documents.
- 5. The Contractor shall be responsible for the quantification of all materials actually removed from ALL LOCATIONS.
- 6. Any and all items that are left in/on the Building(s) that may be affected by of this Scope of Work are to be <u>protected in place</u> unless otherwise directed (in writing) by the Owner or the Owners designee.
- 7. These Scopes of Work are created on the basis of the Architectural Drawings and/or the information received from the Owner/the Owners representative. It is restricted to those materials surfaces and quantities that are designated to be impacted during the modernization. This is not a complete inventory of all known or suspect hazardous materials in these areas, nor should it be construed to be a comprehensive hazardous materials report for these work areas.

Asbestos Abatement Scope of Work Notes:

- a) All items enumerated are to be removed in accordance with Section 02 82 00 of the attached Specifications and in full compliance with current Local, State and Federal regulations. In the event of a conflict between the regulations and the specifications the most stringent shall apply.
- b) Multiple Containment(s) could be required in the same locations in order to coordinate activities with other trades. The Asbestos Removal Contractor's Base Bid shall include two (2) additional mobilizations (in addition to the initial mobilization) and containment costs <u>per Building</u> for Asbestos related work.
- c) For the removal of Asbestos Containing Materials by Mechanical Means and use of Regulated Solvents –

 (i) If ANY Asbestos Containing Materials are removed by Mechanical Means
 - (1a) BAAQMD Notification and Friable Material Removal Preparations will be required, and
 (1b) The waste are duste must be dimensed of as Henerdeux Wester.
 - (1b) The waste products must be disposed of as Hazardous Waste.
 - (ii) <u>If Mastics/Adhesives are removed with Regulated Solvents</u> The waste products must be disposed of in accordance with prevailing regulations and the MSDS for that Solvent.
- d) All Asbestos Containing Material Finishes are to be removed as directed in their entirety to the framing/substrate, including any insulation materials encountered. Framing/Substrate is to be cleaned of any residues, nails, etc, and remain intact.
- e) For the removal of Asbestos Containing Roofing Materials (ACRM) or roof related materials/sealants etc., all materials are to be removed in their entirety to the roof deck/wall. Roof deck/wall is to be cleaned of any residues, nails, etc, and remain intact. For penetrations/patches/edges, an additional 1' of roofing material around each roof penetration/patch/edge is to be removed (all layers to roof deck) to ensure the complete removal of the roofing sealant(s).

APPENDIX-A – Scope of Work Sheet Notes Page 1 of 2

BUESD – Piedmont MS – New Gym Project: Existing Building Pre-Demolition - Abatement Specifications © HazMat Doc 2021



Lead Abatement/ Removal Scope of Work Notes:

- a) All items enumerated are to be removed in accordance with Section 02 83 00 of the attached Specifications and in full compliance with current Local, State and Federal regulations. In the event of a conflict between the regulations and the specifications, the most stringent shall apply.
- b) Multiple Containment(s) could be required in the same locations in order to coordinate activities with other trades. The Lead Removal Contractor's Base Bid shall include two (2) additional mobilizations (in addition to the initial mobilization) and containment costs <u>per building</u> for Lead related work.
- c) Special Removal and Disposal Instructions:

(i) In Areas for Removal

Remove all layers of Material/Component to framing/substrate, including any insulation materials and Dispose of as Lead Containing Waste; framing/substrate to be cleaned and remain intact.

NOTE 1: If Lead Coated Metal Components are to be "recycled" instead of being disposed of as Lead Containing Waste, the Contractor must - (I) appropriately stabilize component prior to transport, (i.e., remove all peeling-chipping paint from entire component and seal the leading edges of removed areas with an appropriate sealant); (II) provide the owner with documentation from the Metal Recycler, confirming acceptance of known Lead Coated materials; (III) transport these materials under proper manifest/trip ticket; and (IV) provide a copy of the trip ticket signed by the Recycler, proving appropriate disposal of the Scope of Work Item(s).

NOTE 2: If Lead Coated Components are to be salvaged and returned to "Owner", the coatings must be appropriately stabilized before released back to "Owner's" Representative.

(ii) In areas for Modification/Detachment

Remove all Layers of Paint and Dispose of as Lead Containing Waste. Stabilize ('Coat' Over) removed edge with an approved "Sealant" to enable work by Others. For anticipated welding, torching or other 'hot work' on metal, remove all layers of paint to bare metal at a minimum of 18 inches on <u>each side</u> (on all faces of the metal) of the anticipated work. For anticipated mechanical impact remove all layers to bare substrate at a minimum of 6 inches <u>each side</u> (on all faces of the component) of the anticipated work.

(iii) In Areas for Stabilization for Demolition by Others

Manually Abrade/Scrape all accessible surfaces in their entirety, being careful to remove all 'peelingchipping' paint. Stabilize ('Coat' Over) with an approved "Sealant" to enable Demolition by Others.

THE LEAD SCOPE(S) OF WORK INCLUDE(S) ONLY THE ITEMS WITH COATINGS/CONTENT THAT ARE AT OR ABOVE THE THRESHOLD REQUIRING LEAD ABATEMENT CERTIFIED PERSONNEL; PLEASE SEE THE ATTACHED SAMPLING REPORTS FOR ALL OTHER COATINGS/COMPONENTS THAT WERE BELOW THAT THRESHOLD.

Poly Chlorinated Biphenyl Remediation Notes:

- a) All items enumerated are to be removed in accordance with Section 02 84 00 of the attached Specifications and in full compliance with current Local, State and Federal regulations. In the event of a conflict between the regulations and the specifications the most stringent shall apply.
- b) Light bulbs/tubes are to be removed and disposed of as Mercury containing waste.
- c) Light fixture ballasts are to be removed and disposed of as Poly-Chlorinated Bi-Phenyl (PCB) containing waste unless expressly labeled as "Non-PCB" or "No PCB's". If ballasts are labeled as "Non-PCB" or "No PCB's", they must be appropriately disposed of and/or recycled.



ASBESTOS, MERCURY AND PCB SCOPE OF WORK

PIEDMONT MIDDLE SCHOOL

BUILDING L – CLASSROOMS 26-31

Page 1 of 2

All items enumerated below are to be removed and disposed of as ACM or ACRM unless otherwise noted.

ITEM #	LOCATION / MATERIAL	APPROXIMATE QUANTITY*
1.	(Interior) Classrooms 26-31) / Sinks with Black Undercoating.	6 EA
2.	(Interior) Classrooms 26-31, in Concealed Locations (inside Wall/Ceiling Cavities and Attic/Plenum) / Pipe Fitting and Pipe Insulation Materials.	≈ 5 LF
	NOTE 1: The quantity listed for this item is an estimate only, provided for bidding purposes. Additions or deductions to this estimate will be done, on site, after work areas are opened up during the course of the Project. Additions or deductions will be pro-rated on the basis of the Unit Prices sheets (attached).	
	NOTE 2: The Wall Cavities behind and Ceiling Cavities above the Sink Fixtures will have to be opened and explored for possible Insulation Materials on the concealed pipe runs.	
3.	(Exterior) Classrooms 26-31 / Suspect Insulated Doors.	6 EA Door Leaves
	NOTE 1: Either Remove Intact or Check for Asbestos Cores in-situ. If Abatement Contractor determines by coring that Doors have Suspect ACM Core Insulation, Dispose of as Asbestos Containing Material. If Door(s) are determined to have no Core Insulation, dispose of properly as construction waste.	
	NOTE 2: These Materials are also listed in the Lead Scope of Work. Disposal will depend on the Asbestos AND Lead Waste Profiles, BOTH of which are required.	
4.	(Interior) Classroom 27 / Black Cementitious Countertop.	≈ 18 SF
5.	(Interior and Exterior) Classrooms 26-31, HVAC Systems / Refrigerant Gas from HVAC Units. (Total of 6 EA. units)	≈ 60 pounds Refrigerant Gas
	NOTE: Recover, Manifest and Dispose of Refrigerant Gas.	
6.	(Interior) Classrooms 26-31, HVAC System Thermostats / Mercury Switches.	≈ 12 EA Switches
NOTE(S) [.]	NOTE: Recover, Manifest and Dispose of Mercury Materials.	

NOTE(S):

A. REFER TO APPENDIX -A SCOPE OF WORK SHEET NOTES FOR ALL RELEVANT DIRECTIONS/INSTRUCTIONS FOR THIS SCOPE OF WORK.

Key: ACM = Asbestos Containing Material; ACRM = Asbestos Containing Roofing Material; SF = Square Feet; LF = Linear Feet; EA. = Each



ASBESTOS, MERCURY AND PCB SCOPE OF WORK

PIEDMONT MIDDLE SCHOOL

BUILDING L – CLASSROOMS 26-31

Page 2 of 2

All items enumerated below are to be removed and disposed of as ACM or ACRM unless otherwise noted.

ITEM #	LOCATION / MATERIAL	APPROXIMATE QUANTITY*
7.	(Interior) Classrooms 26-31 / Fluorescent Light Fixture Assemblies (Including Fixtures, Light Bulbs/Tubes and Ballasts).	≈ 72 EA Light Fixture Assemblies
	NOTE 1: Light bulbs/tubes are to be removed and disposed of as Mercury containing waste. NOTE 2: Light fixture ballasts are to be removed and disposed of as Poly- Chlorinated Bi-Phenyl (PCB) containing waste unless expressly labeled as "Non-PCB" or "No PCB's". If ballasts are labeled as "Non-PCB" or "No PCB's", they must be appropriately disposed of and/or recycled.	

NOTE(S):

A. REFER TO APPENDIX -A SCOPE OF WORK SHEET NOTES FOR ALL RELEVANT DIRECTIONS/INSTRUCTIONS FOR THIS SCOPE OF WORK.

Key: ACM = Asbestos Containing Material; ACRM = Asbestos Containing Roofing Material; SF = Square Feet; LF = Linear Feet; EA. = Each



LEAD SCOPE OF WORK

PIEDMONT MIDDLE SCHOOL

BUILDING L – CLASSROOMS 26-31

Page 1 of 2

All items enumerated below are to be removed and disposed of as Lead Containing Waste unless otherwise noted.

ITEM #	LOCATION / MATERIAL	APPROXIMATE <u>QUANTITY*</u>
1.	(Exterior) Classrooms 26-31 / Suspect Insulated Doors.	≈ 6 EA Door Leaves
	*** See Special Removal and Disposal Instructions: i-Component Removal, or iii- Paint Stabilization for Demolition in Place by Others. ***	
	NOTE 1: These Materials are also listed in the Lead Scope of Work. Disposal will depend on the Asbestos AND Lead Waste Profiles, BOTH of which are required.	
	NOTE 2: Coatings must be stabilized for either Component Removal or Stabilization for Demo in Place by Others. If no Asbestos Cores are found, the Components may be Profiled with the remainder of the Building.	
2.	(Exterior) Classrooms 26-31 / Blue Painted Wood Window Panels and Beige Painted Wood Window Panels. (1.5'x3' EA)	≈ 12 EA
	*** See Special Removal and Disposal Instructions: i-Component Removal, or iii- Paint Stabilization for Demolition in Place by Others. ***	
	NOTE: Coatings must be stabilized for either Component Removal or Stabilization for Demo in Place by Others. Components may be Profiled with the remainder of the Building.	
3.	(Exterior) Classroom 28 / Orange Painted Tackboard. (4'x8')	≈ 1 EA
	*** See Special Removal and Disposal Instructions: i-Component Removal, or iii- Paint Stabilization for Demolition in Place by Others. ***	
	NOTE: Coatings must be stabilized for either Component Removal or Stabilization for Demo in Place by Others. Components may be Profiled with the remainder of the Building.	
4.	(Exterior) Classrooms 26-31 / Roof Jacks/Pipe Sleeves.	≈ 6 EA
	*** See Special Removal and Disposal Instructions: i-Component Removal. ***	

NOTES

A. REFER TO APPENDIX -A SCOPE OF WORK SHEET NOTES FOR ALL RELEVANT DIRECTIONS/INSTRUCTIONS FOR THIS SCOPE OF WORK.

B. THIS SCOPE INCLUDES ONLY THE ITEMS WITH COATINGS/CONTENT THAT ARE AT OR ABOVE THE THRESHOLD REQUIRING LEAD ABATEMENT CERTIFIED PERSONNEL; PLEASE SEE THE ATTACHED SAMPLING REPORTS FOR ALL OTHER COATINGS/COMPONENTS THAT WERE BELOW THAT THRESHOLD.

Key: SF = Square Feet; LF = Linear Feet; EA = Each



LEAD SCOPE OF WORK

PIEDMONT MIDDLE SCHOOL

BUILDING L – CLASSROOMS 26-31

Page 2 of 2

All items enumerated below are to be removed and disposed of as Lead Containing Waste unless otherwise noted.

ITEM #	LOCATION / MATERIAL	APPROXIMATE QUANTITY*
5.	(Exterior) Entire Building / Blue Painted Metal Walls, Beige Painted Metal Walls, Blue Painted Metal Fascia, Beige Painted Metal Fascia, Beige Painted Wood Overhangs, Blue Painted Metal HVAC Component, and Beige Painted Metal HVAC Components.	FOR INFORMATION ONLY PURPOSES
	NOTE 1: These Materials are coated with Lead Containing Paint below the threshold requiring removal by Lead Abatement Personnel. Any impact/removal of these surfaces must be done by appropriately informed, trained and protected personnel.	
	NOTE 2: Engineering Controls MUST be employed for the Demolition and Off- Hauling of these Components, (whether these Components are a) removed before the Buildings' Demolition; and/or b) left in-situ for the Buildings' Demolition and removed with the resulting debris piles), to ensure there is no contamination of the School Site.	
	NOTE 3: The resulting waste streams from either a) and/or b) above must be appropriately Lead Waste Profiled to determine acceptance at the appropriate Landfill/Recycler.	

NOTES

A. REFER TO APPENDIX -A SCOPE OF WORK SHEET NOTES FOR ALL RELEVANT DIRECTIONS/INSTRUCTIONS FOR THIS SCOPE OF WORK.

B. THIS SCOPE INCLUDES ONLY THE ITEMS WITH COATINGS/CONTENT THAT ARE AT OR ABOVE THE THRESHOLD REQUIRING LEAD ABATEMENT CERTIFIED PERSONNEL; PLEASE SEE THE ATTACHED SAMPLING REPORTS FOR ALL OTHER COATINGS/COMPONENTS THAT WERE BELOW THAT THRESHOLD.

Key: SF = Square Feet; LF = Linear Feet; EA = Each

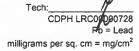
BUSD - Piedmont MS Building 'L'

Reading No	Results	BUILDING	ROOM	LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Pb mg/cm
1			SHUTTER		CALIBRATE					3.66
2	Positive		INSTRUMENT		CALIBRATE					1.00
3	Positive		INSTRUMENT		CALIBRATE					1.00
4	Positive		INSTRUMENT		CALIBRATE					1.00
5	Negative	BLDG. L	CLASSROOM 30	EXTERIOR	WEST	WALLBASE	CONCRETE	BLUE	FAIR	0.00
6		BLDG. L	CLASSROOM 30			WALLBASE	WOOD	BLUE	FAIR	0.01
7			CLASSROOM 30	EXTERIOR	WEST	WALLBASE	METAL	BLUE	FAIR	0.01
8		BLDG. L	CLASSROOM 30	EXTERIOR	WEST	WALL FRAME	METAL	BLUE	FAIR	0.02
9		BLDG. L	CLASSROOM 30	and the second sec		WALL	METAL	BLUE	FAIR	0.02
10	Negative		CLASSROOM 30	EXTERIOR	WEST	WALL	METAL	BEIGE	FAIR	0.03
11		BLDG. L	CLASSROOM 30			WALL FRAME	METAL	BEIGE	FAIR	0.10
12		BLDG. L	CLASSROOM 30	EXTERIOR	WEST	PIPE	METAL	BEIGE	FAIR	0.09
13		BLDG. L	CLASSROOM 30			PIPE	METAL	BLUE	FAIR	0.03
14		BLDG. L	CLASSROOM 30			CONDUIT PIPE	METAL	BEIGE	FAIR	0.01
15			CLASSROOM 30			CONDUIT BOX	METAL	BLUE	FAIR	0.10
16			CLASSROOM 30			OVERHANG	WOOD PANEL	BEIGE	FAIR	0.30
17		BLDG. L	CLASSROOM 30			OVERHANG FRAME	METAL	BEIGE	FAIR	0.00
18		BLDG. L	CLASSROOM 30			OVERHANG FRAME	METAL	BEIGE	FAIR	0.02
19		BLDG. L	CLASSROOM 30	-		OVERHANG FRAME	METAL	BEIGE	FAIR	0.00
20	and the second s	BLDG. L	CLASSROOM 30			UPPER WALL	METAL	YELLOWISH	FAIR	0.00
21		BLDG. L	CLASSROOM 30			DUCTWORK	METAL	YELLOWISH	FAIR	0.00
22		BLDG. L	CLASSROOM 30			HVAC UNIT	METAL	BEIGE	FAIR	0.07
23		BLDG. L	CLASSROOM 30			HVAC UNIT	METAL	BLUE	FAIR	0.01
24	Negative		CLASSROOM 30			HVAC UNIT FRAME	METAL	BLUE	FAIR	0.01
25		BLDG. L	CLASSROOM 30			HVAC UNIT FRAME	METAL	BEIGE	FAIR	0.00
26		BLDG. L	CLASSROOM 30			WALL BASE VENT	METAL	BLUE	FAIR	0.01
27		BLDG. L	CLASSROOM 26			FASCIA	METAL	BLUE	FAIR	0.01
28		BLDG. L	CLASSROOM 26			FASCIA	METAL	BEIGE	FAIR	0.00
29		BLDG. L	CLASSROOM 26			CONDUIT BOX	METAL	BEIGE	FAIR	0.00
30	-		CLASSROOM 26			CONDUIT PIPE	METAL	BEIGE	FAIR	0.00
31		BLDG. L	CLASSROOM 26	and the second se	Company of the International Technology of the International T	CONDUIT PIPE	METAL	BEIGE	FAIR	0.08
32			CLASSROOM 26			CONDUIT PIPE	METAL	BEIGE	FAIR	0.13
33			CLASSROOM 26			CONDUIT PIPE	METAL	BLUE	FAIR	0.00
34		BLDG. L	CLASSROOM 26			CONDUIT PIPE	METAL	BLUE	FAIR	0.18
35			CLASSROOM 26			CONDUIT PIPE	METAL	BLUE	FAIR	0.21
36		BLDG. L	CLASSROOM 26			WALL	WOOD	BEIGE	FAIR	0.00
37		BLDG. L	CLASSROOM 26			WALL	WOOD	BLUE	FAIR	0.00
38		BLDG. L	CLASSROOM 26			WALL	WOOD	PEACH	FAIR	0.00
39		BLDG. L	CLASSROOM 26		and the second se	WALL BASE FLASHING	METAL	BLUE	CHIPPING	0.00
40		BLDG. L	CLASSROOM 27			FASCIA	METAL	BLUE	CHIPPING	0.12
40		BLDG. L	CLASSROOM 27			OVERHANG	WOOD PANEL	BEIGE	CHIPPING	0.40
41			CLASSROOM 27			OVERHANG FRAME	METAL	BEIGE	FAIR	0.08
42		BLDG. L	CLASSROOM 27 CLASSROOM 27			OVERHANG FRAME	METAL	BEIGE	FAIR	0.00

Inst: Niton XLp300 Sr # 110707

BUSD - Piedmont MS Building 'L'

Reading No	Results	BUILDING	ROOM	LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Pb mg/cm
44	Negative	BLDG. L	CLASSROOM 27	EXTERIOR	EAST	CONDUIT BOX	METAL	BEIGE	FAIR	0.00
45	Negative		CLASSROOM 27		+	CONDUIT PIPE	METAL	BEIGE	FAIR	0.19
46	Negative		CLASSROOM 27	EXTERIOR	EAST	CONDUIT PIPE	METAL	BEIGE	FAIR	0.30
47	Negative		CLASSROOM 27	Contraction of the second	-	CONDUIT PIPE	METAL	BEIGE	FAIR	0.00
48	Negative		CLASSROOM 27			WALL FRAME	METAL	BEIGE	FAIR	0.00
49	Negative		CLASSROOM 27			WALL FRAME	METAL	BEIGE	FAIR	0.02
50	Negative		CLASSROOM 27			WALL FRAME	METAL	BEIGE	FAIR	0.01
51	Negative		CLASSROOM 27			WALL FRAME	METAL	BEIGE	FAIR	0.02
52	Negative		CLASSROOM 27	the second se	-	WALL FRAME	METAL	BLUE	FAIR	0.04
53	Negative		CLASSROOM 27	EXTERIOR	EAST	WALL	METAL	BLUE	FAIR	0.00
54	Negative		CLASSROOM 27			WALL	METAL	BLUE	FAIR	0.01
55	Negative		CLASSROOM 27			WALL	METAL	BEIGE	FAIR	0.02
56	Negative		CLASSROOM 27			WALL	METAL	BEIGE	FAIR	0.05
57	Positive		CLASSROOM 27			DOOR	METAL	BLUE	FAIR	2.80
58	Negative		CLASSROOM 27			DOORFRAME	METAL	BLUE	FAIR	0.10
59	Negative		CLASSROOM 28			DOORFRAME	METAL	BLUE	FAIR	0.01
60		BLDG. L	CLASSROOM 28			DOOR	METAL	BLUE	FAIR	4.90
61		BLDG. L	CLASSROOM 29			DOOR	METAL	BLUE	FAIR	4.40
62	Negative		CLASSROOM 29			DOORFRAME	METAL	BLUE	FAIR	0.13
63		BLDG. L	CLASSROOM 29			WINDOW	WOOD PANEL	BEIGE	FAIR	2.30
64	-	BLDG. L	CLASSROOM 30			WINDOW	WOOD PANEL	BEIGE	FAIR	2.00
65		BLDG. L	CLASSROOM 30			WINDOW	WOOD PANEL	BLUE	FAIR	3.50
66	Negative		CLASSROOM 30	-		DOORFRAME	METAL	BLUE	FAIR	0.07
67	and the second se	BLDG. L	CLASSROOM 30			DOOR	METAL	BLUE	FAIR	6.80
68		BLDG. L	CLASSROOM 31			DOOR	METAL	BLUE	FAIR	5.50
69	Negative		CLASSROOM 31			DOORFRAME	METAL	BLUE	FAIR	0.12
70		BLDG. L	CLASSROOM 31			WINDOW	WOOD PANEL	BLUE	FAIR	4.10
71		BLDG. L	CLASSROOM 31			WINDOW	WOOD PANEL	BEIGE	FAIR	3.40
72	Negative		CLASSROOM 31			WINDOW TRIM	METAL	BEIGE	FAIR	0.00
73	Negative		CLASSROOM 31		-	WINDOW TRIM	METAL	BLUE	FAIR	0.00
74	Negative		CLASSROOM 31			DOOR TRIM	METAL	BLUE	FAIR	0.01
75	Negative		CLASSROOM 31			DOOR TRIM	METAL	BEIGE	FAIR	0.00
76	Negative		CLASSROOM 27			DOOR TRIM	METAL	BEIGE	FAIR	0.08
77	Negative		CLASSROOM 27			DOOR TRIM	METAL	BLUE	FAIR	0.01
78	Negative			EXTERIOR		WINDOW TRIM	METAL	BLUE	FAIR	0.00
79	Negative		CLASSROOM 27			WINDOW TRIM	METAL	BEIGE	FAIR	0.00
80		BLDG. L	CLASSROOM 27			WINDOW	WOOD PANEL	BEIGE	FAIR	2.70
81		BLDG. L	CLASSROOM 27			WINDOW	WOOD PANEL	BLUE	FAIR	3.50
82	-	BLDG. L	CLASSROOM 28	and the second se	2 CONTRACTOR 104112	WINDOW	WOOD PANEL	BLUE	FAIR	2.20
83	Negative		CLASSROOM 28			WINDOW TRIM	METAL	BLUE	FAIR	0.00
84	Negative	and the second se	CLASSROOM 28			WINDOW TRIM	METAL	BEIGE	FAIR	0.00
85	Negative		CLASSROOM 28			DOOR TRIM	METAL	BEIGE	FAIR	0.01
86	Negative		CLASSROOM 28			DOOR TRIM	METAL	BLUE	FAIR	0.00 .



BUSD - Piedmont MS Building 'L'

Reading No	Results	BUILDING	ROOM	LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Pb mg/cm
87	Negative		INSTRUMENT		CALIBRATE					0.90
88	Positive		INSTRUMENT		CALIBRATE					1.10
89	Positive		INSTRUMENT		CALIBRATE					1.00
90	Negative	BLDG. L	CLASSROOM 27	INTERIOR	EAST	CEILING BEAM	METAL	OFF-WHITE	FAIR	0.02
91	Negative		CLASSROOM 27		EAST	CEILING BEAM	METAL	OFF-WHITE	FAIR	0.01
92	Negative		CLASSROOM 27	INTERIOR	EAST	CEILING TRUSSES	METAL	OFF-WHITE	FAIR	0.00
93	Negative		CLASSROOM 27	INTERIOR	EAST	CEILING LIGHT UNIT	METAL	WHITE	FAIR	0.00
94	Negative		CLASSROOM 27	INTERIOR	EAST	2' x 4' CEILING TILE	FIBER BOARD	WHITE	FAIR	0.00
95	Negative		CLASSROOM 27		EAST	2' x 4' CEILING TILE GRID	METAL	WHITE	FAIR	0.00
96	Negative		CLASSROOM 27	INTERIOR	EAST	WINDOW	METAL	WHITE	FAIR	0.01
97	Negative		CLASSROOM 27	INTERIOR	EAST	WINDOW SILL	METAL	WHITE	FAIR	0.03
98	Negative		CLASSROOM 27		EAST	WINDOW	WOOD PANEL	WHITE	FAIR	0.02
99	Negative		CLASSROOM 27		EAST	WINDOW	WOOD PANEL	WHITE	FAIR	0.14
100	Negative		CLASSROOM 27		EAST	WINDOW FRAME	METAL	WHITE	FAIR	0.02
101	Negative		CLASSROOM 27		EAST	DOORFRAME	METAL	WHITE	FAIR	0.00
102	Negative		CLASSROOM 27		EAST	DOOR	METAL	BLUE	FAIR	0.60
103	Negative		CLASSROOM 27		EAST	WALL	VINYL	WHITE	FAIR	0.01
104	Negative		CLASSROOM 27		EAST	WALL TRIM	METAL	WHITE	FAIR	0.00
105	Negative		CLASSROOM 27		EAST	WALLBASE	VINYL	BLACK	FAIR	0.00
106	Negative		CLASSROOM 27		SOUTH	WALLBASE	VINYL	BLACK	FAIR	0.00
107	Negative		CLASSROOM 27		SOUTH	WALL	VINYL	WHITE	FAIR	0.00
108	Negative		CLASSROOM 27		SOUTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
109	Negative		CLASSROOM 27		SOUTH	CEILING BEAM	METAL	OFF-WHITE	FAIR	0.01
110	Negative		CLASSROOM 27		SOUTH	CEILING TRUSSES	METAL	OFF-WHITE	FAIR	0.01
111	Negative		CLASSROOM 27		WEST	WINDOW	METAL	WHITE	FAIR	0.00
112	Negative		CLASSROOM 27		WEST	WINDOW SILL	METAL	WHITE	FAIR	0.02
113	Negative		CLASSROOM 27		WEST	WALL	VINYL	WHITE	FAIR	0.07
114	Negative		CLASSROOM 27		WEST	WALL TRIM	METAL	WHITE	FAIR	0.00
115	Negative		CLASSROOM 27	and the second sec	WEST	WALL VENT	METAL	WHITE	FAIR	0.00
116	Negative		CLASSROOM 27	Company of the local day of the local da	WEST	CABINET	LAMINATE	WHITE	FAIR	0.40
117	Negative		CLASSROOM 27	and the second se	WEST	CABINET DOOR	LAMINATE	WHITE	FAIR	0.40
118	Negative		CLASSROOM 27		WEST	CABINET DOOR	LAMINATE	BLUE	FAIR	0.00
119	Negative		CLASSROOM 27		WEST	CABINET DOOR	LAMINATE	BLACK	FAIR	0.00
120	Negative		CLASSROOM 27		WEST	CABINET DRAWER	LAMINATE	BLACK	FAIR	0.00
121	Negative		CLASSROOM 27		WEST	CABINET DRAWER	LAMINATE	BLUE	FAIR	0.00
122	Negative		CLASSROOM 27		WEST	CABINET DRAWER	LAMINATE	LT. GREEN	FAIR	0.40
123	Negative		CLASSROOM 27		WEST	COUNTERTOP	LAMINATE	BROWN	FAIR	0.28
123	Negative		CLASSROOM 28		WEST	COUNTERTOP	CEMENTITIOUS	and the second sec	FAIR	0.00
124	Negative		CLASSROOM 28		WEST	CABINET	METAL	GRAY	FAIR	0.00
125	Negative		CLASSROOM 28		WEST	CABINET DOOR	METAL	GRAY	FAIR	0.00
120	Negative		CLASSROOM 28		WEST	CABINET DOOR	METAL	LT. BLUE	CHIPPING	0.00
	Negative			INTERIOR	WEST	CABINET	METAL	LT. BLUE	CHIPPING	0.00
120	Negative		CLASSROOM 28		WEST	CABINET DRAWER	METAL	LT. BLUE	CHIPPING	0.00

Tech: CDPH LRC00000728 Pb Lead milligrams per sq. cm = mg/cm²

BUSD - Piedmont MS Building 'L'

Reading No	Results	BUILDING	ROOM	LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Pb mg/cm ²
130	Negative		CLASSROOM 28	INTERIOR	NORTH	WALL	VINYL	WHITE	FAIR	0.00
131	Negative		CLASSROOM 28	INTERIOR	NORTH	WALL TRIM	METAL	WHITE	FAIR	0.00
132	Negative		CLASSROOM 28		NORTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
133	Negative		CLASSROOM 28		NORTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
134	Negative		CLASSROOM 28		EAST	MARKER BOARD	METAL	WHITE	FAIR	0.00
135	Negative		CLASSROOM 28		NORTH	CONDUIT BOX	METAL	GRAY	FAIR	0.00
136	Negative		CLASSROOM 28		NORTH	CONDUIT BOX	METAL	BLACK	FAIR	0.00
137	Negative		CLASSROOM 28		EAST	DOOR	METAL	BLUE	FAIR	0.30
138	Negative		CLASSROOM 28		EAST	DOORFRAME	METAL	WHITE	FAIR	0.00
139	Negative		CLASSROOM 28		EAST	WINDOW	METAL	WHITE	FAIR	0.01
140	Negative		CLASSROOM 28		EAST	WINDOW	WOOD PANEL	WHITE	FAIR	0.03
141	Negative		CLASSROOM 28		EAST	WINDOW	WOOD PANEL	WHITE	FAIR	0.10
142	Negative		CLASSROOM 28	-	EAST	WINDOW SILL	WOOD PANEL	WHITE	FAIR	0.00
143	Negative		CLASSROOM 28		EAST	WALL	VINYL	WHITE	FAIR	0.01
144	Negative		CLASSROOM 28		EAST	WALL TRIM	METAL	WHITE	FAIR	0.00
145	Negative		CLASSROOM 28		EAST	CONDUIT PIPE	METAL	WHITE	FAIR	0.00
146	Negative		CLASSROOM 28		SOUTH	WALL	VINYL	WHITE	FAIR	0.12
147	Negative		CLASSROOM 28		SOUTH	WALL TRIM	METAL	WHITE	FAIR	0.00
148	Negative		CLASSROOM 28		SOUTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
149	Negative		CLASSROOM 28		SOUTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
150	Negative		CLASSROOM 28		WEST	CABINET	LAMINATE	WHITE	FAIR	0.00
151	Negative		CLASSROOM 28		WEST	CABINET DOOR	LAMINATE	WHITE	FAIR	0.30
152	Negative		CLASSROOM 28		WEST	CABINET DOOR	LAMINATE	BLACK	FAIR	0.00
153	Negative		CLASSROOM 28		WEST	CABINET DOOR	LAMINATE	LT. BLUE	FAIR	0.00
154	Negative		CLASSROOM 28		WEST	CABINET DRAWER	LAMINATE	LT. BLUE	FAIR	0.00
155	Negative		CLASSROOM 28		WEST	CABINET DRAWER	LAMINATE	LT. GREEN	FAIR	0.30
156	Negative		CLASSROOM 28		WEST	CABINET DRAWER	LAMINATE	BLACK	FAIR	0.00
157	Negative		CLASSROOM 28		WEST	12" FLOOR TILE	VINYL	GRAY	FAIR	0.00
158		BLDG. L	CLASSROOM 28		WEST	TACKBOARD	VINYL	ORANGE	FAIR	1.20
159	Negative		CLASSROOM 28		WEST	WALL	VINYL	WHITE	FAIR	0.01
160	Negative		CLASSROOM 28		WEST	WALL TRIM	METAL	WHITE	FAIR	0.00
161	Negative		CLASSROOM 28		WEST	WALL VENT	METAL	WHITE	FAIR	0.00
162	Negative		CLASSROOM 28		WEST	WIRE MOLD	VINYL	BEIGE	FAIR	0.00
163	Negative		CLASSROOM 28		WEST	WINDOW SILL	METAL	BEIGE	FAIR	0.01
164	Negative		CLASSROOM 28		WEST	CEILING BEAM	METAL	BEIGE	FAIR	0.00
165	Negative		CLASSROOM 28		WEST	CEILING BEAM	METAL	OFF-WHITE	FAIR	0.01
166	Negative		CLASSROOM 28		WEST	CEILING TRUSSES	METAL	OFF-WHITE	FAIR	0.01
167	Negative	and the second sec	CLASSROOM 28		WEST	2' x 4' CEILING TILE	FIBER BOARD	WHITE	FAIR	0.00
168	Negative		CLASSROOM 28	+	WEST	2' x 4' CEILING TILE GRID	METAL	WHITE	FAIR	0.00
169	Negative		CLASSROOM 28		NORTH	CEILING BEAM	METAL	OFF-WHITE	FAIR	0.01
170	Negative		CLASSROOM 28		NORTH	CEILING TRUSSES	METAL	OFF-WHITE	FAIR	0.01
170	Negative		CLASSROOM 28		NORTH	WALL	VINYL	BEIGE-BROWN		0.11
172	Negative		CLASSROOM 28		NORTH	WALL TRIM	METAL	BEIGE-BROWN		.0.00
1/2	ivegative	DLDG. L	02-0010000120		HOIGHT	**/ \ !! \!!!!				

Tech: CDPH LRC00000728 Pb = Lead milligrams per sq. cm = mg/cm²

BUSD - Piedmont MS Building 'L'

Reading No	Results	BUILDING	ROOM	LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Pb mg/cm ²
173	Negative	BLDG. L	CLASSROOM 29	INTERIOR	EAST	MARKER BOARD	METAL	WHITE	FAIR	0.00
174	Negative		CLASSROOM 29	INTERIOR	SOUTH	CONDUIT PIPE	METAL	BEIGE-BROWN	FAIR	0.00
175	Negative		CLASSROOM 29	INTERIOR	SOUTH	WALL	VINYL	BEIGE-BROWN	FAIR	0.01
176	Negative		CLASSROOM 29	INTERIOR	SOUTH	WALL TRIM	METAL	BEIGE-BROWN	FAIR	0.00
177	Negative		CLASSROOM 29	INTERIOR	NORTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
178	Negative		CLASSROOM 29		NORTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
179	Negative		CLASSROOM 30	INTERIOR	EAST	CEILING BEAM	METAL	WHITE	FAIR	0.01
180	Negative		CLASSROOM 30		EAST	CEILING BEAM	METAL	OFF-WHITE	FAIR	0.01
181	Negative		CLASSROOM 30	INTERIOR	EAST	CEILING TRUSSES	METAL	OFF-WHITE	FAIR	0.01
182	Negative	BLDG. L	CLASSROOM 30	INTERIOR	EAST	2' x 4' CEILING TILE	FIBER BOARD	WHITE	FAIR	0.00
183	Negative	BLDG. L	CLASSROOM 30	INTERIOR	EAST	2' x 4' CEILING TILE GRID	METAL	WHITE	FAIR	0.00
184	Negative	BLDG. L	CLASSROOM 30	INTERIOR	EAST	CEILING LIGHT UNIT	METAL	WHITE	FAIR	0.00
185	Negative		CLASSROOM 30	INTERIOR	EAST	WINDOW SILL	METAL	WHITE	FAIR	0.01
186	Negative		CLASSROOM 30	and we want to be a first size of the same way of the location of the same of the same	EAST	WINDOW	METAL	WHITE	FAIR	0.00
187	Negative		CLASSROOM 30	INTERIOR	EAST	WINDOW	WOOD PANEL	WHITE	FAIR	0.03
188	Negative		CLASSROOM 30	INTERIOR	EAST	WINDOW	WOOD PANEL	WHITE	FAIR	0.04
189	Negative		CLASSROOM 30		EAST	DOORFRAME	METAL	WHITE	FAIR	0.00
190	Negative		CLASSROOM 30	INTERIOR	EAST	DOOR	METAL	BLUE	FAIR	0.60
191	Negative		CLASSROOM 30		EAST	WALL	DRYWALL	WHITE	FAIR	0.00
192	Negative		CLASSROOM 30	INTERIOR	SOUTH	WALL	VINYL	WHITE	FAIR	0.01
193	Negative		CLASSROOM 30	INTERIOR	SOUTH	WALL TRIM	METAL	WHITE	FAIR	0.00
194	Negative	BLDG. L	CLASSROOM 30	INTERIOR	SOUTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
195	Negative		CLASSROOM 30	INTERIOR	SOUTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
196	Negative	BLDG. L	CLASSROOM 30	INTERIOR	SOUTH	CEILING BEAM	METAL	BEIGE-BROWN	FAIR	0.01
197	Negative	BLDG. L	CLASSROOM 30	INTERIOR	SOUTH	CEILING TRUSSES	METAL	OFF-WHITE	FAIR	0.01
198	Negative		CLASSROOM 30	INTERIOR	SOUTH	CEILING TRUSSES	METAL	OFF-WHITE	FAIR	0.00
199	Negative		CLASSROOM 30	INTERIOR	WEST	CABINET	LAMINATE	WHITE	FAIR	0.00
200	Negative	BLDG. L	CLASSROOM 30	INTERIOR	WEST	CABINET DOOR	LAMINATE	WHITE	FAIR	0.18
201	Negative	BLDG. L	CLASSROOM 30	INTERIOR	WEST	COUNTERTOP	LAMINATE	BROWN	FAIR	0.30
202	Negative	BLDG. L	CLASSROOM 30	INTERIOR	WEST	WALL	VINYL	WHITE	FAIR	0.01
203	Negative	BLDG. L	CLASSROOM 30	INTERIOR	WEST	WALL TRIM	METAL	WHITE	FAIR	0.00
204	Negative		CLASSROOM 30	INTERIOR	WEST	WALL VENT	METAL.	WHITE	FAIR	0.00
205	Negative		CLASSROOM 30	INTERIOR	WEST	WINDOW SILL	METAL	WHITE	FAIR	0.00
206	Negative		CLASSROOM 30	INTERIOR	WEST	CONDUIT PIPE	METAL	WHITE	FAIR	0.08
207	Negative	BLDG. L	CLASSROOM 30	INTERIOR	NORTH	WALL	DRYWALL	BEIGE-BROWN	FAIR	0.00
208	Negative	BLDG. L	CLASSROOM 31	INTERIOR	SOUTH	WALL	DRYWALL	BEIGE-BROWN	FAIR	0.00
209	Negative	BLDG. L	CLASSROOM 31		SOUTH	WALL	DRYWALL	BEIGE-BROWN	FAIR	0.00
210	Negative		CLASSROOM 31		SOUTH	WALL	DRYWALL	BEIGE-BROWN		0.00
211	Negative		CLASSROOM 31		NORTH	WALL	VINYL	WHITE	FAIR	0.00
212	Negative		CLASSROOM 31		NORTH	WALL TRIM	METAL	WHITE	FAIR	0.00
213	Negative		CLASSROOM 31		NORTH	MARKER BOARD	METAL	WHITE	FAIR	0.00
214	Negative		CLASSROOM 31		NORTH	MARKER BOARD	METAL	WHITE	FAIR	0.00

Inst: Niton XLp300 Sr # 110707 Results at or over 1.00 mg/cm² are deemed lead based paint by HUD/EPA (24 CFR Part 35) Page 5 of 6

Tech:_____ CDPH LRC00000728 Pb = Lead milligrams per sq. cm = mg/cm²

BUSD - Piedmont MS Building 'L'

Reading No	Results	BUILDING	ROOM	LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR	CONDITION	Pb mg/cm ²
215	Positive		INSTRUMENT		CALIBRATE					1.00
216	Positive		INSTRUMENT		CALIBRATE					1.10
217	Positive		INSTRUMENT		CALIBRATE					1.10

Tech CDP ead milligrams per sq. cm = mg/cm²

		EMSL Analytical, Inc. 464 McCormick Street, San Leand Phone/Fax: (510) 895-3675 / (510) http://www.EMSL.com	ro, CA 94577			EMSL Order: CustomerID: CustomerPO: ProjectID:	092217098 HAZM63 22-090		
Attn:	Zen Doctor			Phone:	(408) 748-0055				
	HazMat Do	с		Fax:					
	3080 Olcot			Received:	8/3/2022 09:15 A	AM			
	Suite D135		Collected: 8/2/2022						
	Santa Clara	a, CA 95054							
Projec	t: BERRYERR	A UNION ELEMENTARY SCHO	OL DISTRICT - PIREDM	ONT MS. NEW	GYM - EPISTING	BLDG DEMO.			

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Des	cription Lab ID	Collected	Analyzed	Weight	Lead Concentration
L0-48	092217098-00	001 8/2/2022	8/4/2022	0.2528 g	1200 ppm
	Site: BLDG L	EAST SIDE,	METAL FASCIA, BLUE		
L0-49	092217098-00	002 8/2/2022	8/4/2022	0.2524 g	1500 ppm
	Site: BLDG L	EAST SIDE,	WOOD OVERHANG, BEIGE		
L0-50	092217098-00	003 8/2/2022	8/4/2022	0.2527 g	130 ppm
	Site: BLDG L	WEST SIDE,	METAL OVERHANG FRAME, BEIGE		
L0-51	092217098-00	004 8/2/2022	8/4/2022	0.2503 g	1300 ppm
	Site: BLDG L	WEST SIDE,	METAL FASCIA, BEIGE		
L0-52	092217098-00	005 8/2/2022	8/4/2022	0.2509 g	630 ppm
	Site: BLDG L	WEST SIDE,	EXTERIOR METAL WALL, BEIGE		
L0-53	092217098-00	006 8/2/2022	8/4/2022	0.2525 g	560 ppm
	Site: BLDG L	WEST SIDE,	EXTERIOR METAL WALL, BLUE		
L0-54	092217098-00	007 8/2/2022	8/4/2022	0.2531 g	400 ppm
	Site: BLDG L	WEST SIDE,	EXTERIOR METAL HVAC UNIT, BEIG	BE	
L0-55	092217098-00	008 8/2/2022	8/4/2022	0.2529 g	470 ppm
	Site: BLDG L	WEST SIDE,	EXTERIOR METAL HVAC UNIT, BLUI	E	

Juh/m

Julian Neagu, Lead Laboratory Manager or other approved signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. * Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result

* Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request. Samples analyzed by EMSL Analytical, Inc San Leandro, CA AIHA-LAP, LLC-ELLAP Accredited #101748

Initial report from 08/04/2022 14:57:35

HazMar Doc		O CHAIN-OF-CUST	92217098 FODY		JOB # <u>22</u>	-090
CLIENT NAME: PROJECT LOCATION: SAMPLED BY:	BERRYESSA W.S. P FIEDMONT MS. P ZBM		TIZ BLOG 2		STANDA	OUND TIME RD LS iff2,
Sample #	Location/Type	Time On FLC Time Off Start	WRATES Stop Average	Total Time PCM	'LM TEM	EAD (Air, Paint, Soil, Water, Wipe)
20-49		WOOD DLERHANG	, BEAE.		e 1 Of 1	2 1
20-51 20-52		MEAL FASCIA	BERGE		р Б С С С С С С С С С С С С С С С С С С	
20-53 20-54 20-55	u , 6e	VERIE MOTAL	AC CADT, B	57 G &		1
	u , &	TERISR METHL HU	42 (20)7, [
Relinquished By: CZ	Date &	: Time: 08-02-22 Rece	ived By: Mr Er	737	Date & Tim	3 2 9 2 2 - 0 9 1 5 e:
Relinquished By: CZ	Date &	Time: Rece	vived By:	~	Date & Tim	le:
	3080 Olcott Street • .	Suite 135D • Santa Clara, CA 95	054• Tel 408.748.0055	• Fax 408.748.0	0066	

APPENDIX – B

ABATEMENT UNIT PRICES



UNIT PRICES

	ASBESTOS					
Item	Task	Qty	Unit Price	\$ Total (Qty x Unit Price)		
1.	Mobilization	2 EA				
2.	Small Containment < 200 SF	2 EA				
3.	Large Containment > 200 SF	2 EA				
4.	Spot Removal (2' x 2')	3 EA				
5.	Abate Sinks with Undercoating	1 EA				
6.	Abate Cementitious Countertops	1 SF				
7.	Abate Doors	1 EA				
8.	Abate Asbestos Cement Panels (Walls and/or Ceilings)	1 SF				
9.	Abate Thermal System Insulation – Pipe Run Insulation	1 LF				
10.	Abate Thermal System Insulation – Pipe Fitting Insulation	1 LF				
11.	Abate Asbestos Cement Pipe (Pipe is 4" O.D.)	1 LF				
	Total Asbestos					

ASBESTOS





UNIT PRICES

IFAD	
LEAD	

_	LEAD					
Item	Task	Qty	Unit Price	\$ Total (Qty x Unit Price)		
1.	Mobilization	2 EA				
2.	Small Containment < 200 SF	2 EA				
3.	Large Containment > 200 SF	2 EA				
4.	Remove all layers Paint to Bare Wood Substrate	10 SF				
5.	Remove all layers Paint to Bare Metal Substrate	10 SF				
6.	Remove Peeling and Chipping Paint on Wood and stabilize substrate for demolition	100 SF				
7.	Remove Peeling and Chipping Paint on Metal and stabilize substrate for demolition	100 SF				
8.	Remove Peeling and Chipping Paint on Plaster, Stucco, or Concrete and stabilize substrate for demolition	100 SF				
9.	Remove Peeling and Chipping Paint on Wood and stabilize substrate for demolition	100 LF				
10.	Remove Peeling and Chipping Paint on Metal and stabilize substrate for demolition	100 LF				
11.	Exterior Doors	1 EA				
12.	Remove Wood Components	10 SF				
13.	Remove Metal Components	10 SF				
14.	Remove Wood Components	10 LF				
15.	Remove Metal Components	10 LF				
16.	Remove Metal Roof Components (Jacks, Pipe Sleeves, Drain Pans, etc)	1 EA				
	Total Lead					



UNIT PRICES

MISCELLANEOUS

Item	Task	Qty	Unit Price	\$ Total (Oty x Unit Price)
1.	Remove and Dispose of PCB Containing	1 EA	The	
2.	Fluorescent Light Fixture Ballast's Remove and Recycle NonPCB Containing Fluorescent Light Fixture Ballast's	5 EA		
3.	Remove and Recycle Mercury Containing Fluorescent Light Bulbs/Tubes (Standard 48" tubes)	10 EA		
4.	Remove and Recycle of Mercury Containing Thermostat Switch Bulbs/Tubes	1 EA		
5.	Remove, Recover, and Recycle HVAC Refrigerant	10 Pounds		
	Total Miscellaneous			

UNIT PRICE TOTALS

Task	\$ Total
Total Asbestos	
Total Lead	
Total Miscellaneous	
GRAND TOTAL UNIT PRICE	

