State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
DIVISION OF STATE PARKS
Honolulu, Hawaii

BOARD OF LAND AND NATURAL RESOURCES

Dawn N. S. Chang
Chairperson

CONTRACT SPECIFICATIONS AND PLANS

Job No. F11C763J
‘IOLANI PALACE STATE MONUMENT
WINDOWS AND DOORS
RESTORATION
HONOLULU, OAHU, HAWAII

Architect: Mason Architects, Inc.

April 2026

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
Honolulu, Hawaii

CONTRACT SPECIFICATIONS AND PLANS

Job No. F11C763J
‘IOLANI PALACE STATE MONUMENT
WINDOWS AND DOORS
RESTORATION
HONOLULU, OAHU, HAWAII

Approved: _____
ALAN B. CARPENTER
Acting Administrator
Division of State Parks

Approved: _____
Dina U. Lau
Acting Chief Engineer
Engineering Division

April 2026

NOTICE TO BIDDERS iii

INFORMATION AND INSTRUCTIONS TO BIDDERS I-1

PROPOSAL..... P-1

SPECIAL PROVISIONS..... SP-1

DETAILED SPECIFICATIONS..... S-1

PLANS (Bound Separately)

DEPARTMENT OF LAND AND NATURAL RESOURCES
INTERIM GENERAL CONDITIONS,
DATED OCTOBER 1994 (Bound Separately)

NOTICE TO BIDDERS
(Chapter 103D, HRS)

COMPETITIVE BIDS for Job No. F11C763J, ‘Iolani Palace State Monument Windows and Doors Restoration, Honolulu, Oahu, Hawaii shall be submitted to the Department of Land and Natural Resources, Engineering Division on the specified date and time through the Hawaii State e-Procurement (HIePRO). HIePRO is accessible through the State Procurement Office website at www.spo.hawaii.gov.

The Department of Land and Natural Resources Interim General Condition, dated October 1994, as amended, and the General Conditions –AG008, latest revision shall be made part of the specifications.

The project is located at the ‘Iolani Palace State Monument, 364 South King Street, Honolulu, Hawaii 96813.

The work shall generally consist of refinishing the specified doors and windows within the “Iolani Palace State Monument.

To be eligible to submit a bid, the Bidder must possess a valid State of Hawaii Contractor’s license classification “B”.

A voluntary pre-bid conference will be held at the ‘Iolani Palace State Monument, 364 South King Street, Honolulu Hawaii 96813, on May 18, 2026, at 10:00 AM. Meeting location will be at the palace entrance facing King Street.

All interested parties are invited to attend a State-conducted site visit. The site visit will be held at the project site after the pre-bid conference.

The estimated cost of construction is $500,000.00.

The award of the contract will be subject to the availability of funds.

Since the estimated cost of construction is $250,000 or more, the apprenticeship agreement preference pursuant to Hawaii Revised Statutes §103-55.6 (ACT 17, SLH 2009) shall apply.

Should there be any questions, please refer to the HIePRO solicitation.

INFORMATION AND INSTRUCTIONS TO BIDDERS

CONTENTS

		Page
A	Project Location and Scope of Work	I-2
B	Proposals	I-2
C	General Conditions	I-2
D	Proposal Form	I-2
E	Omissions or Erasures	I-2
F	Notice of Intent to Bid and Questionnaire	I-2
G	Bid Security	I-2
H	Contractor's License Required	I-2
I	Irregular Bids	I-3
J	Withdrawal of Bids	I-3
K	Successful Bidder to File Performance and Payment Bonds	I-3
L	Number of Executed Original Counterparts of Contract Documents	I-3
M	Change Orders	I-3
N	Wages and Hours	I-3
O	Permits	I-3
P	Property Damage	I-4
Q	Time	I-4
R	Bidder's Responsibility to Provide Proper Superintendence	I-4
S	Liquidated Damages	I-4
T	Hiring of Hawaii Residents	I-4
U	Water and Electricity	I-5
V	Public Convenience and Safety	I-5
W	Work to be Done Without Direct Payment	I-5
X	As-Built Drawings	I-5
Y	Asbestos Containing Materials	I-5
Z	Worker Safety	I-5
AA	Toilet Facilities	I-6
BB	Signs	I-6
CC	Field Office for Department	I-6
DD	Quantities	I-6
EE	Other Health Measures	I-6
FF	Hawaii Business Requirement	I-6
GG	Compliance With §3-122-112 HAR	I-7

INFORMATION AND INSTRUCTIONS TO BIDDERS

A. PROJECT LOCATION AND SCOPE OF WORK: The project location and scope of work shall be as generally described in the Notice to Bidders.

B. PROPOSALS**:** Bidders shall submit their bid, including the completed proposal form, bid bond, and any other documents required by the solicitation as part of their bid through the State of Hawaii e-Procurement System (HIePRO). See Item D, PROPOSAL FORM.

C. GENERAL CONDITIONS: The Department of Land and Natural Resources Interim General Conditions dated October 1994, as amended, shall be made a part of these contract specifications and are referred to hereafter as the General Conditions.

D. PROPOSAL FORM: **The Bidders shall fill out and upload the electronic copy of the proposal form to the HIePRO website when submitting the bid. Bid Proposals shall not be mailed, faxed or delivered to the State, unless requested to do so after the designated closing date. The successful Bidder shall fill out and print a hard copy of the proposal form, sign and submit the form with the contract award package.**

E. OMISSIONS OR ERASURES: Any proposal which contains any omission or erasure or alteration not properly initialed, or conditional bid, or other irregularity may be rejected by the Board of Land and Natural Resources (Board).

F. NOTICE OF INTENT TO BID AND QUESTIONNAIRE:
A Notice of Intent to Bid is not required for this project. In compliance with HRS Section 103D-310, the lowest responsive and responsible bidder may be required to complete a questionnaire. When requested by the State, the completed questionnaire shall be submitted to the Chief Engineer for evaluation. Failure to furnish the requested information within the time allowed may be grounds for a determination of non-responsibility, in accordance with HRS Section 103D-310 and HAR Section 3-122-108.

G. BID SECURITY: A bid security will be furnished by each bidder as provided in sub-section 2.7 of the General Conditions. The successful bidder's bid security will be retained until Contract execution and furnished a performance and payment bond in an amount equal to one hundred percent (100%) of the total Contract price, including an amount estimated to be required for extra work, is furnished.

The Board reserves the right to hold the bid securities of the four lowest bidders until the successful bidder has entered into a contract and has furnished the required performance bond. All bid securities will be returned in accordance with sub-section 3.5 of the General Conditions.

Should the successful bidder fail to enter into a contract and furnish a satisfactory performance bond within the time stated in the proposal, the bid security shall be forfeited as required by law.

H. CONTRACTOR'S LICENSE REQUIRED: The Board will reject all bids received from contractors who have not been licensed by the State Contractors License Board in accordance

with Chapter 444, HRS; Title 16, Chapter 77, Hawaii Administrative Rules; and statutes amendatory thereto.

I. IRREGULAR BIDS: No irregular bids or propositions for doing the work will be considered by the Board.

J. WITHDRAWAL OF BIDS: No bidder may withdraw his bid between the time of the opening thereof and the award of contract.

K. SUCCESSFUL BIDDER TO FILE PERFORMANCE AND PAYMENT BONDS: The successful bidder will be required to file performance and payment bonds each; in the amount equal to the total contract price, including amounts estimated to be required for extra work, as provided in sub-section 3.6 of the General Conditions.

L. NUMBER OF EXECUTED ORIGINAL COUNTERPARTS OF CONTRACT DOCUMENTS: If requested by the Board, six copies of the Contract, performance and payment bonds shall be executed.

M. CHANGE ORDERS: No work of any kind in connection with the work covered by the plans and specifications shall be considered as change order work, or entitle the Contractor to extra compensation, except when the work has been ordered in writing by the Chief Engineer (Engineer) and in accordance with sub-section 4.2 of the General Conditions.

The Contractor shall clearly identify and inform the Engineer in writing of any deviations from the contract documents at the time of submission and shall obtain the Engineer's written approval to the specified deviation prior to proceeding with any work.

N. WAGES AND HOURS: In accordance with sub-sections 7.3 to 7.9 of the General Conditions relative to hours of labor, minimum wages and overtime pay, the current minimum wage rates promulgated by the Department of Labor and Industrial Relations (DLIR) shall be paid to the various classes of laborers and mechanics engaged in the performance of this contract on the job site. The minimum wages shall be increased during the performance of the contract in an amount equal to the increase in the prevailing wages for those kinds of work as periodically determined by the DLIR.

The Department of Land and Natural Resources will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the said minimum wage rates. The possibility of wage increase is one of the elements to be considered by the Contractor in determining his bid, and will not, under any circumstances, be considered as the basis of a claim against the Department under this Contract.

No work shall be done on Saturdays, Sundays, legal State holidays, and/or in excess of eight (8) hours each day without the written consent of the Engineer. Should permission be granted to work at such times, the Contractor shall pay for all inspection administrative costs thereof. No work shall be done at night unless authorized by the Engineer.

O. PERMITS: The State will process permit applications whenever possible, and the Contractor shall procure the pre-processed permits and pay the required fees. If permit applications are not processed by the State, the Contractor shall process the permit applications, permits and

licenses, and pay all charges and fees. In all cases, the Contractor shall give all notices necessary and incident to the due and lawful prosecution of the work.

P. PROPERTY DAMAGE: It shall be the responsibility of the contractor to respect State property and to prevent damage to existing improvements. The Contractor will be responsible for damages resulting from construction operations. Immediately upon discovery, the Contractor shall repair such damage to the satisfaction of the Engineer.

All trees and shrubbery outside the excavation, embankment or construction limits shall be fully protected from injury.

Q. TIME: The time of completion is specified in the Proposal. It is the Board's intention to insist the Contractor diligently prosecute the work to completion within the specified time.

Prospective bidders are reminded that the State has the option to proceed with or abandon a project depending on whether the project can be completed for occupancy in the specified time.

It is the bidder's responsibility to check the availability of all materials before bidding. The bidder shall select sub-contractors and suppliers who can warrant availability and delivery of all specified or qualified materials to assure project completion within the specified time.

The successful bidder must assume all risks for completing the project by the specified date. There shall be no extension of time for any reason except for delays caused by acts of God, labor disputes involving unions, or actions of the State. If for any reason the project falls behind schedule, the Contractor shall at its own cost, take necessary remedial measures to get the project back on schedule, i.e., working overtime, air freighting all materials, etc. In addition, if the Contractor fails to fully complete the project by the completion date, Contractor will be required to make the facility usable at its own cost.

R. BIDDER'S RESPONSIBILITY TO PROVIDE PROPER SUPERINTENDENCE: The successful low bidder shall designate in writing to the Engineer the name of its authorized superintendent (Superintendent), who will be present at the job site whenever any work is in progress. The Superintendent shall be responsible for all work, receiving and implementing instructions from the Engineer in a timely manner. The cost for superintendence shall be considered incidental to the project.

If the Superintendent is not present at the site of work, the Engineer shall have the right to suspend the work as described under sub-section 5.5 c. and 7.20 - Suspension of Work of the General Conditions.

S. LIQUIDATED DAMAGES: Liquidated damages in the amount specified in the Proposal will be assessed for each and every calendar day from and after the expiration of the time period stated in the Contract for the completion of the project.

T. HIRING OF HAWAII RESIDENTS: The Contractor shall comply with Act 68, SLH 2010, in the performance and for the duration of this contract. The Contractor shall ensure that Hawaii residents compose not less than eighty percent of the workforce employed to perform the contract work on the project. The eighty percent requirement shall be determined by

dividing the total number of hours worked on the contract by Hawaii residents, by the total number of hours worked on the contract by all employees of the Contractor in the performance of the contract. The hours worked by any Subcontractor of the Contractor shall count towards the calculation for this section. The hours worked by employees with shortage trades, as determined by the Department of Labor and Industrial Relations (DLIR), shall not be included in the calculation for this section.

The requirements shall apply to any subcontract of $50,000 or more in connection with the Contractor, that is, such Subcontractors must also ensure that Hawaii residents compose not less than eighty percent of the Subcontractor's workforce used to perform the subcontract.

U. WATER AND ELECTRICITY: The Contractor shall make all necessary arrangements and pay all expenses for water and electricity used in the construction of this project.

V. PUBLIC CONVENIENCE AND SAFETY: The Contractor shall conduct construction operations with due regard to the convenience and safety of the public at all times. No materials or equipment shall be stored where it will interfere with the safe passage of public traffic. The Contractor shall provide, install, and maintain in satisfactory condition, all necessary signs, flares and other protective facilities and shall take all necessary precautions for the protection of the work and the convenience and safety of the public. The Engineer shall have the right to suspend the performance of the work in accordance with sub-section 7.20 - Suspension of Work of the General Conditions.

W. WORK TO BE DONE WITHOUT DIRECT PAYMENT: Whenever the contract that the Contractor is to perform work or furnish materials of any kind for which no price is fixed in the contract, it shall be understood that the Contractor shall perform such work or furnish said materials without extra charge or allowance or direct payment of any sort. The cost of performing such work or furnishing said material is to be included by the Contractor in a unit price for the appropriate item unless it is expressly specified that such work or material is to be paid for as extra work.

X. AS-BUILT DRAWINGS: As-built drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be required. All authorizations given by the Engineer to deviate from the plans shall be drawn on the job site plans. All deviations from alignments, elevations and dimensions which are stipulated on the plans shall be recorded on the as-built drawings. Final as-built drawings shall be submitted to the Engineer for review and approval. After the Engineer approves the as-built drawings, the contractor shall submit an electronic copy in Adobe PDF format on CD ROM.

Y. ASBESTOS CONTAINING MATERIALS: The use of asbestos containing materials or equipment is prohibited. The Contractor shall insure that all materials and equipment incorporated in the project are asbestos-free

Z WORKER SAFETY: The Contractor shall provide, install and maintain in satisfactory condition all necessary protective facilities and shall take all necessary precautions for the protection and safety of its workers in accordance with the Occupational Safety and Health Standards for the State of Hawaii. The Engineer shall have the right to suspend the performance of the work in accordance with sub-section 7.20 - Suspension of Work of the

General Conditions.

AA. TOILET FACILITIES: All toilet facilities constructed at the project site shall be in accordance with the Public Health Regulations of the State Department of Health (DOH). All necessary precautions shall be observed at the project site. The use of sanitary facilities shall be strictly enforced and workers violating these provisions shall be promptly discharged.

BB. SIGNS: Whenever the project involves closing or obstructing any public thoroughfare, the Contractor shall provide traffic signs conforming to the applicable provisions of the current edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", published by the Federal Highway Administration as directed by the Engineer for the purpose of diverting or warning traffic prior to the construction area. All traffic signs shall bear proper wording stating thereon the necessary information as to diverting or warning traffic.

When indicated in the Proposal, the Contractor shall provide a project sign, size 4'-0" x 7'-0" to be placed as directed by the Engineer. The sign shall be constructed in accordance with Section 01581 - Project Sign of these specifications and approved by the Engineer. All wording, type and size of lettering and color selection shall be as specified in these specifications or as approved by the Engineer.

All signs shall be kept neat and clean, and properly erected at all times.

CC. FIELD OFFICE AREA FOR DEPARTMENT: When indicated in the Proposal, the Contractor shall provide a housed working area of at least 100 square feet adjacent to the Contractor's office for the Department's use. This area will be used by the Engineer to perform tests and to store equipment. As a minimum, the field office shall include the following: standard sized office desk and chair, lighting, ventilation, window-type air conditioning rated at 5,000 BTU, door and window with locking hardware, electrical outlets, and working communications facilities (a cellular telephone is acceptable). The Department will pay for all long distance toll charges made by the Engineer.

DD. QUANTITIES: All bids will be compared on the basis of quantities of work to be done as shown in the Proposal; the quantities shown in the Unit Price items are estimated, being given as a basis for comparison of bids. The Board reserves the right to increase or decrease the quantities given under the items or delete items entirely as may be required during the progress of the work.

EE. OTHER HEALTH MEASURES: Forms of work site exposure or conditions which may be detrimental to the health or welfare of workers or of the general public shall be eliminated or reduced to safe levels as required by the DOH codes, standards, and regulations. Suitable first aid kits and a person qualified to render first aid, as specified in the DOH regulations, shall be provided at all times when work is scheduled.

FF. HAWAII BUSINESS OR COMPLIANT NON-HAWAII BUSINESS REQUIREMENT: Bidders (Contractors) shall be incorporated or organized under the laws of the State or be registered to do business in the State as a separate branch or division that is capable of fully performing under the contract, as stipulated in §3-122-112 HAR.

GG. COMPLIANCE WITH §3-122-112 HAR:

As a condition for award of the contract and as proof of compliance with the requirements of 103D-310(c) HRS, the apparent low bidder shall furnish the required documents to the Department. If the valid required certificates are not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. Bidder is responsible to apply for and submit the following documents to the Department.

A. TAX CLEARANCE REQUIREMENTS (HRS Chapter 237): Bidder shall obtain a tax clearance certificate from the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS). The certificate is valid for six months from the most recently approved stamp date on the certificate; the certificate must be valid on the date received by the Department.

B. Department of Labor (DLIR) "**Certificate of Compliance**". (HRS Chapter 383 - Unemployment Insurance, Chapter 386 - Workers' Compensation, Chapter 392 - Temporary Disability Insurance, and 393 – Prepaid Health Care): Bidder shall obtain a certificate of compliance from the Hawaii State Department of Labor and Industrial relations (DLIR). The certificate is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

C. Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) "**Certificate of Good Standing**". Bidder shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG). The certificate of good standing is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

Alternately, instead of separately applying for these certificates at the various state agencies, bidder may choose to use the Hawaii Compliance Express (HCE), which allows businesses to register online through a simple wizard interface at http://vendors.ehawaii.gov to acquire a "Certificate of Vendor Compliance" indicating the bidder's status is compliant with the requirements of §103D-310(c), HRS, and shall be accepted for contracting and final payment purposes. Bidders that elect to use the new HCE services will be required to pay an annual fee of $12.00 to the Hawaii Information Consortium, LLC (HIC). Bidders choosing not to participate in the HCE program will be required to provide the paper certificates as instructed in the previous paragraphs.

P R O P O S A L

FOR

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION
State of Hawaii

JOB NO. F11C763J
'IOLANI PALACE STATE MONUMENT
WINDOWS AND DOORS
Honolulu, Oahu, Hawaii

_____, 2026

Chief Engineer
Engineering Division
Department of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Dear Sir:

The undersigned, having carefully examined the local conditions and all available records and information covering conditions which may affect the cost of the work to be performed, and having carefully examined the Plans and Specifications, and other contract documents, hereby proposes to furnish and pay for all materials, tools, equipment, labor and other incidental work necessary to refinish doors and windows in the 'Iolani Palace State Monument, as required or called for in this Proposal, all according to the true intent and meaning of the Notice to Bidders, Information and Instructions to Bidders, Proposal, Detailed Specifications, Interim General Conditions, Plans, and any and all addenda for:

JOB NO. F11C763J
'IOLANI PALACE STATE MONUMENT
WINDOWS AND DOORS
Honolulu, Oahu, Hawaii

on file in the office of the Engineering Division for the TOTAL BASE BID (Items 1 to 5) of:

_____

_____Dollars ($_____)
and will fully complete all work under this contract within 365 consecutive calendar days from the date of written notice to proceed, including date of said order, said total sum being itemized on the following pages.

PROPOSAL

Item No.	Quantity	Unit	Description	Unit Price	Total
			BASE BID		
1.		LS	Demolition Work; to include existing finish removal and any hazardous materials abatement.		$_____
2.		LS	Painting work on all doors and windows marked "RF".		$_____
3.		LS	Painting work on all doors and windows marked "SRF".		$_____
4.		LS	Project Sign, in place complete.		$_____
	Allowance		Field Office		$ 10,000.00
				Subtotal Base Bid (Items 1-4)	$_____
5.		LS	Mobilization and Demobilization (not to exceed 10% of the Subtotal Base Bid)		$_____
				Total Base Bid (Items 1-5)	$_____

RECYCLED PRODUCTS PREFERENCE

This project allows a 10% price preference for recycled products in accordance with HRS 103D-1005. Please indicate your selection of recycled or non-recycled product by indicating its cost FOB jobsite unloaded in the schedule below, including applicable General Excise & Use Taxes.

DESCRIPTION	RECYCLED PRODUCT COST	NONRECYCLED PRODUCT COST
_____	$_____	$_____
_____	$_____	$_____
_____	$_____	$_____
_____	$_____	$_____

The bidder requesting a recycled product preference shall also complete and submit the form "CERTIFICATION OF RECYCLED CONTENT" as shown in the Interim General Conditions and provide all supporting information with this proposal. Additional information may be requested to qualify a product.

The following definitions are applicable to the CERTIFICATION OF RECYCLED CONTENT form:

"Post-consumer recovered material" means any product used by a consumer, including a business that purchases the material, that has served its intended end use, and that has been separated or diverted from the solid waste stream for the purpose of use, reuse, or recycling.

"Product" includes materials, manufactures, supplies, merchandise, goods, wares, and foodstuffs.

"Recovered material" means waste material and by-products that have been separated, diverted, or removed from the solid waste stream after a manufacturing process for the purpose of use, reuse, or recycling. Recovered material does not include those materials and by-products that are generated and normally reused on-site or within original manufacturing processes (such as mill broke, in the case of paper products).

"Recycled content" means the percentage of a product composed of recovered material, or post-consumer recovered material, or both.

"Recycled product" means a product containing recovered material, or post-consumer recovered material, or both.

The bidder agrees that preference for recycled products shall be taken into consideration to determine the low bidder in accordance with said Section and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive any preference.

APPRENTICESHIP AGREEMENT PREFERENCE

1. If applicable to this project, any bidder seeking the preference must be a party to an apprenticeship agreement registered with the State Department of Labor and Industrial Relations (DLIR) at the time the bid is submitted for each apprenticeable trade the bidder will employ to construct the project. "Employ" means the employment of a person in an employer-employee relationship.

   a. The apprenticeship agreement shall be registered with the DLIR and conform to the requirements of Hawaii Revised Statutes Chapter 372.

   b. Subcontractors do not have to be a party to an apprenticeship agreement for the bidder to obtain preference.

   c. The bidder is not required to have apprentices in its employ at the time the bid is submitted to qualify for the preference.

2. A bidder seeking the preference must state the apprenticeable trade the bidder will employ for each trade to be employed to perform the work by submitting a completed signed original *Certification Form 1* verifying participation in an apprenticeship program registered with DLIR. "Apprenticeable trade" shall have the same meaning as "apprenticeable occupation" pursuant to Hawaii Administrative Rules (HAR) §12-30-5.

   a. The *Certification Form 1* shall be authorized by an apprenticeship sponsor listed on the DLIR list of registered apprenticeship programs. "Sponsor" means an operator of an apprenticeship program and in whose name the program is approved and registered with the DLIR pursuant to HAR §12-30-1.

   b. The authorization shall be an original signature by an authorized official of the apprenticeship sponsor.

   c. The completed signed original *Certification Form 1* for each trade must be submitted with the bid. Previous certifications shall not apply.

   d. When filling out the *Certification Form 1*, the name of Apprenticeable Trade and Apprenticeship Sponsor must be the same as recorded in the List of Construction Trades in Registered Apprenticeship Programs that is posted on the DLIR website. "Registered apprenticeship program" means a construction trade program approved by the DLIR pursuant to HAR §12-301 and §12-30-4.

   e. The *Certificate Form 1* and the List of Construction Trades in Registered Apprenticeship Programs is available on the DLIR website at: http://hawaii.gov/labor/wdd.

3. Upon receiving the *Certification Form 1*, the Procurement Officer will verify that the apprenticeship program is on the List of Construction Trades in Registered Apprenticeship Programs and that the form is signed by an authorized official of the Apprenticeship Program Sponsor. If the programs and signature are not confirmed by the DLIR, the bidder will not qualify for the preference.

4. If the bidder is certified to participate in an apprenticeship program for each trade which will be employed by the bidder for the project, a preference will be applied to decrease the bidder's bid

amount by five percent (5%) for evaluation purposes.

5. Should the bidder qualify for other preferences, all applicable preferences shall be applied to the bid price.

CONTRIBUTIONS BY STATE AND COUNTY CONTRACTORS PROHIBITED

Contractors are hereby notified of the applicability of Section 11-355, HRS, which states that campaign contributions are prohibited from specified State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body.

CONDITION OF AWARD

It is understood that the award of the contract will be made on the basis of the lowest responsible Total Base Bid (Items 1 to 5) selected by the Board of Land and Natural Resources. Write the total of bid items 1 to 5 on page P-1.

It is understood and agreed that the Board of Land and Natural Resources reserves the right to reject any and/or all bids and waive any defects when, in the Board's opinion, such rejection or waiver will be for the best interest of the State of Hawaii.

In the event all bids exceed available funds certified by the appropriate fiscal officer, the head of the purchasing agency responsible for the procurement in question is authorized in situations where time or economic considerations preclude resolicitation of work of a reduced scope to negotiate an adjustment of the bid price, including changes in the bid requirements, with the low responsible and responsive bidder, in order to bring the bid within the amount of available funds. It is understood and agreed upon that the head of the purchasing agency may delete a portion or all of any item(s) in the proposal at the stated unit or lump sum price as necessary to stay within the available funding. The bidder is responsible to make an earnest effort to represent the actual cost of each item, including all materials, labor, equipment, overhead and profit in their bid proposal to preclude claims of anticipated profit or loss of profit because of an unbalanced bid proposal.

It is also understood that if a mutually agreeable cost for the reduced scope of work necessitated by a lack of available funds cannot be agreed upon between the bidder and the head of the purchasing agency within 14 calendar days after the bid opening, then the bid may be rejected in the best interest of the purchasing agency, and the head of the purchasing agency may negotiate in progressive order (lowest to highest) with the next lowest responsible and responsive bidder.

It is also understood and agreed that the award of the contract shall be conditioned upon funds being made available for this project and further upon the right of the Board of Land and Natural Resources to hold all bids received for a period of one hundred eighty (180) days from the date of the opening thereof, unless otherwise required by law, during which time no bid may be withdrawn.

It is also understood that Notice to Proceed may be delayed up to one (1) year after the bid opening date, and that no additional compensation will be provided for any claim for escalation or delay for issuance of Notice to Proceed on or before that date.

It is also understood and agreed that the quantities given herewith are approximate only and are subject to increase or decrease, and that the undersigned will perform all quantities of work as either increased or decreased, in accordance with the provisions of the Contract Specifications.

It is also understood and agreed that the estimated quantities shown for the items for which a UNIT PRICE is asked in this Proposal are only for the purpose of comparing on a uniform basis, bids offered for the work under this contract, and the undersigned agrees that he is satisfied with and will at no time, dispute said estimated quantities as a means of claims for anticipated profit or loss of profit, because of a difference between the quantities of the various classes of work done or the materials and equipment installed, and the said estimated quantities. On UNIT PRICE bids, payment will be made only for the actual number of units incorporated into the finished project at the contract UNIT PRICE.

After the HIePRO bid due date and time, the figures will be extended and/or totaled in accordance with the bid prices of the acceptable proposals and the totals will be compared. In the comparison of bids, words written in the proposal shall govern over figures and unit prices will govern over totals. Until the award of the contract, however, the right will be reserved to reject any and all proposals and to

waive any defects or technicalities as may be deemed best for the interest of the State.

It is also understood and agreed that liquidated damages in the amount of One Hundred Fifty and Zero Cents ($150.00) for each and every calendar day in excess thereof prior to completion of the contract shall be withheld from payments due to the Contractor.

It is also understoodf and agreed that if this bid is accepted, the successful bidder must enter into and execute a contract with the Board of Land and Natural Resources and furnish a Performance and Payment Bond, as required by law. These bonds shall conform to provisions of Section 103D-324 and 325, Hawaii Revised Statutes and any law applicable hereto.

It is also understood and agreed that the successful bidder will provide all necessary labor, materials, tools, equipment, and other incidentals necessary to do all the work and furnish all the materials specified in the contract in the manner and time herein prescribed, and according to the requirements of the Engineer as therein set forth.

It is understood that by submitting this proposal, the undersigned is declaring that his firm has not been assisted or represented on this matter by an individual who has, in a State capacity, been involved in the subject matter of this contract in the past two years.

It is understood that by submitting this proposal in accordance with HAR 3-122-192, the undersigned is declaring that the price submitted is independently arrived without collusion.

It is also understood that by submitting this proposal, a Certification for Safety and Health Programs for bids in excess of $100,000 (in accordance with HRS 396-18), the undersigned certifies that his organization will have a written safety and health plan for this project that will be available and implemented by the Notice to Proceed date of this project. Details of the requirements of this plan may be obtained from the Department of Labor and Industrial Relations, Occupational, Safety and Health Division (HIOSH).

It is further understood and agreed that the successful bidder shall comply with paragraph 3.1.a "SUBCONTRACTING" of the General Provisions which requires that the contractor shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than twenty percent (20%) of the value of all work embraced in the Contract, except that certain contract items of work, if specifically referred to in the special provisions, will be exempted from said twenty percent requirement.

Compliance with §103-310 HRS. As a condition of award all bidders shall comply with all laws governing entities doing business in the State, including Chapter 237 HRS (general excise tax); Chapter 383 HRS (employment security – unemployment insurance); Chapter 386 HRS (workers compensation); Chapter 392 HRS (temporary disability insurance); and Chapter 393 HRS (pre-paid health care), and shall produce all documents to the State (DLNR, Engineering Division) required to demonstrate compliance with these subsections. Any bidder making a false affirmation or certification under this subsection shall be suspended and may be debarred from further offerings or awards pursuant to §103D-702 HRS.

RECEIPT OF ADDENDA

The bidder also acknowledges receipt of any and all addenda issued by the Engineering Division, by recording the date of receipt of the respective addenda in the space provided below:

Addendum	Date Received	Addendum	Date Received
No. 1	_____	No. 5	_____
No. 2	_____	No. 6	_____
No. 3	_____	No. 7	_____
No. 4	_____	No. 8	_____

It is understood that failure to receive any such addendum shall not relieve the Contractor from any obligation under this Proposal as submitted.

It is also understood and agreed that if this Proposal is accepted and the undersigned should fail or neglect to contract as aforesaid, the Board may determine that the bidder has abandoned the Contract, and thereupon, forfeiture of the security accompanying his proposal shall operate and the same shall become the property of the Board.

JOINT CONTRACTORS OR SUBCONTRACTORS TO BE ENGAGED ON THIS PROJECT

The Bidder agrees that the following is a complete listing of all joint contractors or subcontractors covered under Chapter 444, Hawaii Revised Statutes (HRS), who will be engaged by the Bidder on this project to perform the required work indicated pursuant to Section 103D-302, HRS. It is the sole responsibility of the contractor to review the requirements of this Project and determine the appropriate licenses that are required to complete the Project. The Bidder certifies that the completed listing of joint contractors or subcontractors fulfills the requirements for the project and the Bidder, together with the listed subcontractors or joint contractors have all the specialty contractor's licenses to complete the work, except as provided for in HRS §103D-302(b). Failure of the Bidder to comply with this requirement may be just cause for rejection of the bid.

"A" General Engineering Contractors and "B" General Building Contractors are reminded that due to the Hawaii Supreme Court's January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area in which the general contractor has no license. Although the "A" and "B" contractor may still bid on and act as the "prime" contractor on an "A" or "B" project (See, *HRS §*444-7 *for the definitions of an "A" and "B" project.*), respectively, the "A" and "B" contractor may only perform work in the areas in which they have the appropriate contractor's license (*An "A" or "B" contractor obtains "C" specialty contractor's licenses either on its own, or automatically under HAR § 16-77-32*). The remaining work must be performed by appropriately licensed entities.

General Engineering "A" Contractors automatically have these "C" specialty contractor's licenses: C-3, C-9, C-10, C-17, C-24, C-31a, C-32, C-35, C-37a, C-37b, C-38, C-43, C-49, C-56, C-57a, C-57b and C-61.

General Building "B" Contractors automatically have these "C" specialty contractor's licenses: C-5, C-6, C-10, C-12, C-24, C-25, C-31a, C-32a, C-42a and C-42b.

In completing the Joint Contractors or Subcontractors List, describe the specialty contractor's nature and scope of work to be performed for this project and provide the complete firm name of the joint contractor or subcontractor in the respective columns. If the Bidder is a general contractor and providing the work of the required specialty contractor, fill in the Bidder's (general contractor's) name and nature and scope of work to be performed on this project.

List only one joint contractor or subcontractor per required specialty contractor's classification, unless within the same specialty, the work of each joint contractor or subcontractor can be described so that there is no overlap in work descriptions.

If a contractor's license is required by law for the performance of the work which is called for in this bid, the bidder and all subcontractors must have the required license before the submission of the bidder's proposal in the case of a non-federal aid project, and for federal-aid projects, the bidder must have the required license prior to the award of the project and all subcontractors prior to the start of the subcontracted work.

COMPLETE FIRM NAME OF JOINT CONTRACTOR OR SUBCONTRACTOR	NATURE AND SCOPE OF WORK TO BE PERFORMED

Enclosed herewith is a:

1. Surety Bond (*1))
2. Legal Tender (*2))
3. Cashier's Check (*3))
4. Certificate of Deposit (*3)) in the
5. Certified Check (*3)) amount
6. Official Check (*3)) of
7. Share Certificate (*3))
8. Teller's Check (*3))
9. Treasurer's Check (*3))

(Cross Out Those Not Applicable)

_____

_____Dollars ($_____)

as required by law.

Exact Legal Name of Company, Joint Venture or Partnership

Company is:
☐ Sole Proprietor ☐ Partnership ☐ Corporation ☐ Joint Venture ☐ Other _____

Contractor's License No.: _____

Federal I.D. No.: _____

Hawaii General Excise Tax License I.D. No.: _____

Payment address (other than street address below): _____

City, State, Zip Code: _____

Business Address (street address): _____

City, State, Zip Code: _____

Respectfully submitted,

By _____
Authorized (Original) Signature (*4)

Title: _____

Print Name: _____

Date: _____

Telephone No.:_____

E-Mail Address:_____

NOTES:

1. Surety bond underwritten by a company licensed to issue bonds in this State;

2. Legal tender; or

3. A certificate of deposit; share certificate; or cashier's, treasurer's, teller's, or official check drawn by, or a certified check accepted by, and payable on demand to the State by a bank, a savings institution, or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration.

   A. These instruments may be utilized only to a maximum of $100,000.

   B. If the required security or bond amount totals over $100,000, more than one instrument not exceeding $100,000 each and issued by different financial institutions shall be accepted.

4. Please attach to this page evidence of the authority of this officer to submit bids on behalf of the Company and also the names and residence addresses of all officers of the Company.

5. Fill in all blank spaces with information asked for or bid may be invalidated. PROPOSAL MUST BE INTACT, MISSING PAGES MAY INVALIDATE YOUR BID.

End of Proposal

SPECIAL PROVISIONS

Amend INTERIM GENERAL CONDITIONS, dated October 1994, as follows:

Section 2 – Proposal Requirements and Conditions

1. **AMEND** Section 2.1 Qualification of Bidder with the following:

Written Notice of Intent to Bid or Offer: A written Notice of Intent to Bid is not required for the Solicitation.

Standard Qualification Questionnaire: Bidders may be required to complete a standard qualifications questionnaire. When requested, the information shall be furnished within two working days or longer at the discretion of the Engineer. Failure to furnish the requested information within the time allowed may be grounds for a determination of non-responsibility, in accordance with HRS Section 103D-310 and HAR Section 3-122-108.

Hawaii Business or Compliant Non-Hawaii Business Requirement: Bidders shall be incorporated or organized under the laws of the State or be registered to do business in the State as a separate branch or division that is capable of fully performing under the contract, as stipulated in §3-122-112 HAR. A certified letter is not required prior to bid opening.

Compliance with §3-122-112 HAR: As a condition for award of the contract and as proof of compliance with the requirements of 103D-310(c) HRS, the apparent low bidder shall furnish the required documents to the Department. If the valid required certificates are not submitted on a timely basis for award of a contract, a bidder otherwise responsive and responsible may not receive the award. Bidder is responsible to apply for and submit the following documents to the Department.

A. Tax Clearance (HRS Chapter 237): Bidder shall obtain a tax clearance certificate from the Hawaii State Department of Taxation (DOTAX) and the Internal Revenue Service (IRS). The certificate is valid for six months from the most recently approved stamp date on the certificate; the certificate must be valid on the date received by the Department.

B. Department of Labor (DLIR) "Certificate of Compliance". (HRS Chapter 383 - Unemployment Insurance, Chapter 386 - Workers' Compensation, Chapter 392 - Temporary Disability Insurance, and 393 – Prepaid Health Care): Bidder shall obtain a certificate of compliance from the Hawaii State Department of Labor and Industrial relations (DLIR). The certificate is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

C. Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG) "Certificate of Good Standing". Bidder shall obtain a certificate of good standing issued by the Department of Commerce and Consumer Affairs (DCCA), Business Registration Division (BREG). The certificate of good standing is valid for six months from the date of issue; certificates must be valid on the date received by the Department.

Hawaii Compliance Express. Alternately, instead of separately applying for these certificates at the various state agencies, bidder may choose to use the Hawaii Compliance Express (HCE), which allows businesses to register online through a simple wizard interface at http://vendors.ehawaii.gov to acquire a "Certificate of Vendor compliance" indicating that bidder's status is compliant with requirements of §103D-310(c), HRS, shall be accepted for contracting and final payment purposes.
Bidders that elect to use the new HCE services will be required to pay an annual fee of $15.00 to the Hawaii

Information Consortium, LLC (HIC). Bidders choosing not to participate in the HCE program will be required to provide the paper certificates as instructed in the previous paragraphs.

2. **ADD** Section 2.4a, Pre-Bid Conferences

Required Pre-bid Conferences: For construction and design-build projects with an estimated value of $500,000 or more and solicited under the competitive sealed bid method (103D-302 HRS); and for construction and design-build projects with an estimated value of $100,000 or more and solicited under the competitive sealed proposal method (103D-303 HRS); a pre-bid conference is required.

Other Pre-Bid Conferences: The Department may require a pre-bid conference for construction or design-build projects that are below the dollar threshold listed in above or when projects have special or unusual requirements.

Other Conditions: The Department may require the prospective Bidders to make a physical inspection of the project site and make attendance at the pre-bid conference a condition for submitting an offer.

Nothing stated at the pre-bid conference shall change the solicitation unless a change is made by written addendum.

3. **DELETE** Section 2.5, Addenda and Interpretations, in its entirety and replace with the following:

"Discrepancies, omissions, or doubts as to the meaning of drawings and specifications should be communicated using the question and answer section on the HIePRO solicitation for interpretation and must be received in the time frame set in the HIePRO solicitation. Any interpretation, if made and any supplemental instructions will be in the form of written addenda to the plans and specifications and made available prior to the offer due date. It shall be the prospective bidder's sole responsibility to verify and obtain any said addenda. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents."

Section 3 – Award and Execution of Contract

1. **AMEND** Section 3.3, Award of Contract, by deleting "sixty (60)" and replacing with "one hundred eighty (180)" in the first paragraph.

2. **AMEND** Section 3.3, Award of Contract, by adding the following after the first paragraph:

"If the contract is not awarded within the one hundred eighty (180) days, the Department may request the successful Bidder to extend the time for the acceptance of its bid. The Bidder may reject such a request without penalty; and in such case, the Department may at its sole discretion make a similar offer to the next lowest responsive and responsible bidder and so on until a bid is duly accepted or until the Department elects to stop making such requests."

3. **AMEND** Section 3.9, Notice to Proceed, by replacing the last paragraph with the following:

In the event the Notice to Proceed is not issued within three hundred and sixty-five (365) calendar days after the date of bid opening, the Contractor may submit a claim for increased labor and materials costs (but not overhead costs). The claim shall be for labor and material

costs incurred after 365 days and the full duration of the contract time allowed for the performance of the work (as specified on Page P-1 of the [Bid] PROPOSAL) have elapsed. Such claims shall be accompanied with the necessary documentation to justify the claim. No payments will be made for escalation costs that are not fully justified as determined by the State.

4. **ADD** Section 3.10, Protests:

"**3.10 PROTESTS**—Pursuant to Section 103D-701, Hawaii Revised Statutes, an actual or prospective offeror who is aggrieved in connection with the solicitation or award may submit a protest. Any protest shall be submitting in writing to the Chairperson, Department of Land and Natural Resources, 1151 Punchbowl Street, Honolulu, Hawaii 96813, or designee as specified in the solicitation.

A protest shall be submitted in writing within five (5) working days after the aggrieved person knows or should have known the facts giving rise thereto; provided that a protest based upon the content of the solicitation shall be submitted in writing prior to the date set for receipt of offers. Further provided that a protest of an award or proposed award shall be submitted within five (5) working days after the posting of the award of the contract.

The notice of award, if any, resulting from this solicitation shall be posted on the HIePRO website.

Section 5 – Control of Work

AMEND Section 5.8 Value Engineering Incentive by deleting "$100,000" and replacing with "$250,000" in the first paragraph.

Section 6 – Substitution of Materials and Equipment

ADD the following to Section 6.3 Sub-paragraph b:

4. If the substitution meets all the requirements of the specifications and plans.

Section 7 – Prosecution and Progress

1. **DELETE** Section 7.2d in its entirety and replace with the following:

"d. Proof of Insurance Coverage

A Certificate of Insurance or other documentary evidence, to the satisfaction of the Engineer, that the Contractor has in place all insurance coverage required by the contract. The Certificate of Insurance shall contain wording which identifies the Project number and Project title for which the certificate of insurance is issued. Refer to the following for insurance requirements:

1. Insurance Requirements

(a) Obligation of Contractor - Contractor shall not commence any work until it obtains, at its own expense, all required herein insurance. Such insurance must have the approval of the Department as to limit, form and amount and must be maintained with a company authorized by laws of the State to issue such insurance in the State of Hawaii. Coverage by a "Non-Admitted" carrier is permissible provided the carrier has a AM Best's Rating of "A-VII" or better.

(b) All insurance described herein will be maintained by the Contractor for the full period of the contract and in no event will be terminated or otherwise allowed to lapse prior to written certification of final acceptance of the work by the Department.

(c) Certificate(s) of Insurance acceptable to the Department shall be filed with the Engineer prior to commencement of the work. Certificates shall identify if the insurance company is a "captive" insurance company or a "Non-Admitted" carrier to the State of Hawaii. The Best's Rating must be stated for the "Non-Admitted" carrier. Certificates shall contain a provision that coverages afforded under the policies will not be canceled or changed until at least thirty (30) days written notice has been given to the Engineer by registered mail. The insurance policies shall name the State of Hawaii, its officers and employees as an additional insured and such coverage shall be noted on the certificate. Should any policy be canceled before final acceptance of the work by the Department, and the Contractor fails to immediately procure replacement insurance as specified, the Department, in addition to all other remedies it may have for such breach, reserves the right to procure such insurance and deduct the cost thereof from any money due to the Contractor.

(d) Nothing contained in these insurance requirements is to be construed as limiting the extent of Contractor's responsibility for payment of damages resulting from its operations under this contract, including the Contractor's obligation to pay liquidated damages, nor shall it affect the Contractor's separate and independent duty to defend, indemnify and hold the Department harmless pursuant to other provisions of this contract. In no instance will the Department's exercise of an option to occupy and use completed portions of the work relieve the Contractor of its obligation to maintain the required insurance until the date of final acceptance of the work.

(e) All insurance described herein shall be primary and cover the insured for all work to be performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including traffic detour work or other work performed outside the work area, and all change order work.

(f) The Contractor shall, from time to time, furnish the Engineer, when requested, satisfactory proof of coverage of each type of insurance required or a copy of the actual policies covering the work. Failure to comply with the Engineer's request may result in suspension of the work, and shall be sufficient grounds to withhold future payments due the Contractor and to terminate the contract for Contractor's default.

(g) If the Contractor is self-insured, it shall furnish, upon the request and the satisfaction of the Engineer, any documentation to demonstrate the ability to self-insure itself. The Engineer, from time to time, can conduct an audit to determine the ability of the Contractor to be self-insured. Failure to comply with the Engineer's request will be considered a material breach of the contract, and at the discretion of the Engineer, may be sufficient grounds to terminate the contract, suspend any work or withhold future payments.

(h) It is the responsibility of the Contractor to notify the Department of any changes to its insurance policies or if the Contractor receives a notice of cancellation of any of its insurance policies. The Contractor will immediately provide written notice to the Department should the insurance policies evidenced on its Certificate of Insurance form be cancelled, limited in scope, or not renewed upon expiration.

2. Types of Insurance - The Contractor shall purchase and maintain insurance described below which shall provide coverage against claims arising out of the Contractor's operations under the contract, whether such operations be by the Contractor itself or by the subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

(a) Worker's Compensation. The Contractor and all subcontractors shall obtain worker's compensation insurance for all persons whom they employ or may employ in carrying out the work under this contact. This insurance shall be in strict conformity with the requirements of the most current and applicable State of Hawaii Worker's Compensation Insurance laws in effect on the date of the execution of this contract and as modified during the duration of the contract.

(b) Commercial General Liability. The Contractor shall obtain General Liability insurance with a limit of not less than $1,000,000 per occurrence and $2,000,000 aggregate. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess polices."

(c) Comprehensive Automobile Liability. The Contractor shall obtain Auto Liability insurance covering all owned, non-owned and hired autos with a combined single Limit of not less than $1,000,000 per accident for bodily injury and property damage. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess polices.

Furthermore, the Contractor's commercial general liability insurance and automobile liability insurance shall include coverage for bodily injury, sickness, disease or death of any person, arising directly or indirectly out of, or in connection with, the performance of work under this contract.

The Contractor's property damage liability insurance shall provide for all damages arising out of injury to or destruction of property of others including the Department's, arising directly or indirectly out of or in connection with the performance of the work under this contract including explosion or collapse.

The Contractor shall either:

i. Require each of its subcontractors to procure and to maintain during the life of its subcontract, subcontractors' comprehensive general liability, automobile liability and property damage liability insurance of the type and in the same amounts specified herein; or

ii. Insure the activities of its subcontractors in its own policy.

The Contractor will be permitted, in cooperation with insurers, to maintain a self-insured

retention for up to 25% of the per occurrence combined single limits of the commercial general liability and the automobile liability policies. The existence of the self-insured retention must be noted on the certificate of insurance coverage submitted to the Department or else it will be understood that the insurer is providing first dollar coverage for all claims. For all claims within the self-insured retention amount, the rights, duties and obligations between the Contractor and the Department shall be identical to that between a liability insurer and the Department, as an additional insured, as if there was no self-insured retention.

(d) Builder's Risk Insurance. Unless included in the Specifications of this project, the Contractor shall not be required to provide builder's risk insurance. If required as noted in the Specifications, builder's risk insurance shall be provided during the progress of work and until final acceptance by the Department upon completion of the contract. It shall be "All Risk" (including but not limited to earthquake, windstorm and flood damage) completed value insurance coverage on all completed work and work in progress to the full replacement value thereof. Such insurance shall include the Department as additional name insured. The insurance policy shall contain the following clauses: 1) "The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii."; and 2) "It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contributed with, insurance provided by this policy." The required limit of insurance may be provided by a single policy or with a combination of primary and excess polices.

The Contractor shall submit to the Engineer for its approval all items deemed to be uninsurable. The policy may provide for a deductible in an amount of up to 25% of the amount insured by the policy. With respect to all losses up to any deductible amount, the relationship between the Contractor and the Department shall be that of insurer and additional insured as if no deductible existed".

2. **DELETE** Section 7.16 in its entirety and replace with the following:

"RESPONSIBILITY FOR DAMAGE CLAIMS; INDEMNITY – The Contractor shall indemnify the State and the Department against all loss of or damage to the State's or the Department's existing property and facilities arising out of any act or omission committed in the performance of the work by the Contractor, any subcontractor or their employees and agents. Contractor shall defend, hold harmless and indemnify the Department and the State, their employees, officers and agents against all losses, claims, suits, liability and expense, including but not limited to attorneys' fees, arising out of injury to or death of persons (including employees of the State and the Department, the Contractor or any subcontractor) or damage to property resulting from or in connection with performance of the work and not caused solely by the negligence of the State or the Department, their agents, officers and employees. The State or the Department may participate in the defense of any claim or suit without relieving the Contractor of any obligation hereunder. The purchase of liability insurance shall not relieve the Contractor of the obligations described herein.

The Contractor agrees that it will not attempt to hold the State and its Departments and Agencies and their officers, representatives, employees or agents, liable or responsible for any losses or damages to third parties from the action of the elements, the nature of the work to be done under these specifications or from any unforeseen obstructions, acts of God, vandalism, fires or encumbrances which may be encountered in the prosecution of the work.

The Contractor shall pay all just claims for materials, supplies, tools, labor and other just claims against the Contractor or any subcontractor in connection with this contract and the surety bond will not be released by final acceptance and payment by the Department unless all such claims are paid or released. The Department may, but is not obligated to, withhold or retain as much of the monies due or to become due the Contractor under this contract considered necessary by the Engineer to cover such just claims until satisfactory proof of payment or the establishment of a payment plan is presented.

The Contractor shall defend, indemnify and hold harmless the State and its Departments and Agencies and their officers, representatives, employees or agents from all suits, actions or claims of any character brought on account of any claims or amounts arising or recovered under the Worker's Compensation Laws or any other law, by-law, ordinance, order or decree.

Section 8 – Measurement and Payment

1. **DELETE** Section 8.7a in its entirety and replace with the following:

a. Tax Clearances from the State of Hawaii Department of Taxation and Internal Revenue Service, subject to section 103D-328, HRS, current within two months of issuance date indicating that all delinquent taxes levied or accrued under State Statutes against the contractor have been paid.

2. **ADD** Section 8.7d, Certificate of Compliance:

d. A Certification from the Contractor affirming that the Contractor has, as applicable, remained in compliance with all laws as required by Section 103D-310, HRS, and Section 3-122-112, HAR. A contractor making a false affirmation shall be suspended and may be debarred pursuant to section 103D-702, HRS.

1. Certification of Compliance for Final Payment, State Procurement Office Form-22. Must be Signed Original.

3. **ADD** Section 8.7e, Hawaii Compliance Express:

e. In lieu of submitting the tax clearances from Taxation and IRS, and SPO Form -22, the Contractor may choose to use the Hawaii Compliance Express as described on page SP-1 of this Special Provisions.

TABLE OF CONTENTS

TECHNICAL SPECIFICATIONS	PAGES
DIVISION 1 - GENERAL REQUIREMENTS	
01019 - General Specification	4
01090 - Standard References	2
01100 - Project Requirements	5
01310 - Project Management and Coordination	11
01330 - Submittal Procedures	4
01505 - Mobilization Demobilization	1
01581 - Project Sign	3
01700 - Execution Requirements	7
01770 - Closeout Procedures	6
DIVISION 2 - SITEWORK	
02411 – Selective Demolition	4
DIVISION 7 – THERMAL AND MOISTURE PROTECTION	
07920 - Joint Sealants	6
DIVISION 9 – FINISHES	
09900 - Painting	5
DIVISION 13 –SPECIAL CONSTRUCTION	
13283 - Disturbance of Lead-Containing Material	25
Project Specific Asbestos and Lead Paint Report, 27 August 2025	
13288 - Testing/Air Monitoring	3

SECTION 01019

GENERAL SPECIFICATIONS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

Work shall consist of furnishing all labor, tools, materials and equipment necessary and required to construct in place complete all work as indicated on the drawings and as specified herein.

1.2 GENERAL

A. Examination of Premises: The Contractor shall contact the Engineer and obtain permission before visiting the site.

B. Notices: The Contractor shall notify the Engineer and give at least three (3) working days notice before starting any work.

C. Disruption of Utility Services: All work related to the temporary disconnection of electrical system shall be pre-arranged with the Engineer so that any disruption of such services will be kept to a minimum. In the event temporary power hook-up is required, the Contractor shall provide the necessary services.

D. Contractor's Operations

1. The Contractor must employ, insofar as possible, such methods and means of carrying out the work so as not to cause any interruption or interference to the facility's operations. Where the Contractor's operations would result in interruptions which would hamper the operations of the facilities, the Contractor shall rearrange the schedule of work accordingly.

2. The Contractor shall maintain safe passageway to and from the facility for the user agency personnel and the public at all times.

F. Lead Paint

1. When the project includes paint to be disturbed that was applied prior to 1980, it shall be assumed to contain lead. The Contractor shall inform its employees, subcontractors, and all other persons engaged in the project that lead containing paints are present in the existing buildings at the job site and to follow the requirements of the Department of Labor

and Industrial Relations, Division of Occupational Safety and Health, Title 12, Subtitle 8,Chapter 148, Lead Exposure in Construction, Hawaii Administrative Rules (Chapter 12-148, HAR).

G. Parking Policy for Contractor

1. The Contractor and its employees shall park as directed by the Friends of ‘Iolani Palace.

H. Toilet Accommodations: The Contractor shall supply toilet facilities and will not be allowed to use facilities on site.

I. Protection of Property: The Contractor shall continually maintain adequate protection of all its work from damage and shall protect all property, including but not limited to buildings, equipment, furniture, grounds, vegetation, material, utility systems located at and adjoining the job site. The Contractor shall repair, replace or pay the expense of repair of damages resulting from its operations.

J. Use of Power Driven Equipment: The Contractor is cautioned to take all necessary safety precautions to protect the facility personnel, and the public whenever power driven equipment is used.

K. Safety: The Contractor shall carefully read and strictly comply with the requirements of the Hawaii Occupational Safety and Health Law, Chapter 396, Hawaii Revised Statutes, as amended, is applicable and made a part of the Contract.

L. Clean Up Premises: The Contractor shall clean up and remove from premises all debris accumulated from operations as necessary or as directed. See also Section 7.25 of the General Conditions.

M. Responsibility

1. The State will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the prime Contractor in matters pertaining to other trades employed on the job. The Contractor shall be responsible for coordinating the work of all trades on the job.

N. Should the Contractor discover any discrepancy in the plans or specifications, the Contractor shall immediately notify the Engineer before proceeding any further with the work, otherwise, the Contractor will be held responsible for any cost involved in correction of work placed due to such discrepancy. Cooperation

With Other Contractors: The State reserves the right at any time to contract for or otherwise perform other or additional work within the contract zone limits of this Contract. The Contractor of this project shall, to the extent ordered by the State, conduct its work so as not to interfere with or hinder the progress or completion of the work performed by other contractors.

O. Division of the Work: The Divisions and Sections into which these Specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to all work specified within each Section.

P. Drawings and Specifications

1. The Contractor shall not make alterations in the drawings and specifications. In the event the contractor discovers any errors or discrepancies, the Contractor shall immediately notify the Engineer in accordance with the General Conditions.

2. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the work.

3. Specifications and drawings are prepared in abbreviated form and include incomplete sentences. Omission of words or phrases such as "the Contractor shall", "as shown on the drawings", "a", "an", and "the" are intentional. Omitted words and phrases shall be provided by inference to form complete sentences.

Q. Required Submittals

1. Required submittals as specified in the Technical Sections of these specifications include one or more of the following: Shop drawings; color samples; material samples; technical data; schedules of materials; schedules of operations; guarantees; operating and maintenance manuals; and as-built drawings.

2. The Contractor shall make a comprehensive list of the required submittals, by Specification Section, and submit this list to the Engineer within 15 days after notice to proceed.

3. As-Built Drawings: When as-built drawings are required for submittal, the following shall apply:

a. As-built drawings, the intent of which is to record the actual in-place construction so that any future renovations or tie-ins can be anticipated accurately, shall be required. All deviations from

alignments, elevations and dimensions which are stipulated on the plans shall be recorded in red on the as-built drawings.

b. The following procedure shall be followed:

1) Immediately after these changes are constructed in place, the Contractor shall record them on the field office plans.

2) Within two weeks after final inspection of the project, the Contractor shall transfer the changes marked on the field office plans onto a clean copy of plans using a red pencil. Any deletions shall be so noted and redrawn as necessary. The Contractor shall stamp or mark the tracings "AS-BUILT" and also sign and date each drawing so marked.

3) The Contractor shall submit the as-built drawings to the Engineer for review and approval. After the Engineer approves the as-built drawings, the Contractor shall submit an electronic copy in Adobe PDF format on CD ROM.

4) Any as-built drawing which the Engineer determines does not accurately record the deviation shall be corrected by the State, and the Contractor shall be charged for the services.

END OF SECTION

SECTION 01090

STANDARD REFERENCES

PART 1 - GENERAL

Wherever used in the project, the following abbreviations will have the meanings listed:

Abbreviation	Company
AITC	American Institute of Timber Construction 333 West Hampden Avenue Englewood, CO 80110
APA	American Plywood Association 1119 A Street Tacoma, WA 98401
ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWPA	American Wood Preservers Association 1625 Eye Street Washington, DC 20006
AWS	American Welding Society 2501 N.W. 7th Street Miami, FL 33125
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
CBM	Certified Ballast Manufacturers 2120 Keith Building Cleveland, OH 44115
CMAA	Crane Manufacturers Association of America, Inc..(Formerly called: Overhead Electrical Crane Institute - OECI) 1326 Freeport Road

Pittsburgh, PA 15238

FEDSPEC	Federal Specifications General Services Administration Specification and Consumer Information Distribution Branch Washington Navy Yard, Bldg. 197 Washington, DC 20407
FEDSTDS	Federal Standards (see FEDSPECS)
FM	Factory Mutual Research 1151 Boston-Providence Turnpike Norwood, MA 02062
ICBO	International Conference of Building Officials 5360 South Workman Mill Road Whittier, CA 90601
NFPA	National Forest Products Association (Formerly called: National Lumber Manufacturer's Association) 1619 Massachusetts Avenue, N.W. Washington, DC 20036
OSHA	Occupational Safety and Health Act U.S. Department of Labor San Francisco Regional Office 450 Golden Gate Avenue, Box 36017 San Francisco, CA 94102
SSPWC	Standard Specifications for Public Works Construction Building News, Inc. 3055 Overland Avenue Los Angeles, CA 90034
UL	Underwriters Laboratories Inc. 207 East Ohio Street Chicago, IL 60611

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

- END OF SECTION

SECTION 01100 - PROJECT REQUIREMENTS

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Identification: Project consists of refinishing exterior windows and doors in ‘Iolani Palace.
   1. Project Location: 364 S. King Street, Honolulu, Oahu, Hawaii

B. Perform operations and furnish equipment, fixtures, appliances, tools, materials, related items and labor necessary to execute, complete and deliver the Work as required by the Contract Documents.

C. The Division and Sections into which these specifications are divided shall not be considered an accurate or complete segregation of work by trades. This also applies to work specified within each section.

D. Contractor shall not alter the Drawings and Specification. If an error or discrepancy is found, notify the Contracting Officer.

E. Specifying of interface and coordination in the various specification sections is provided for information and convenience only. These requirements in the various sections shall complement the requirements of this Section.

1.02 SPECIFICATION FORMATS AND CONVENTIONS

A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
   1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated and include incomplete sentences. Omission of words or phrases such as “the Contractor shall”, “as shown on the drawings”, “a”, “an”, and “the” are intentional. Omitted words and phrases shall be provided by inference to form complete sentences. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred, as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates. Where devices, or items, or parts thereof are referred to in the singular, it is intended that such reference shall apply to as many such devices, items or parts as are required to properly complete the Work.

2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
   a. The words “shall”, “shall be”, or “shall comply with”, depending on the context, are implied where a colon (:) is used within a sentence or phrase.

3. Abbreviations and Acronyms for Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale Research’s “Encyclopedia of Associations” or in Columbia Books’ “National Trade & Professional Associations of the U.S.”.

B. Terms
   1. Directed: Terms such as “directed”, “requested”, “authorized”, “selected”, “approved”, “required”, and “permitted” mean directed by Contracting Officer, requested by Contracting Officer, and similar phrases.

   2. Indicated: The term “indicated” refers to graphic representations, notes, or schedules on drawings or to other paragraphs or schedules in specifications and similar requirements in the Contract Documents. Terms such as “shown”, “noted”, “scheduled”, and “specified” are used to help the user locate the reference.

   3. Furnish: The term “furnish” means to supply and deliver to project site, ready for unloading, unpacking, assembly, and similar operations.

   4. Install: The term “install” describes operations at project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

   5. Provide: The terms “provide” or “provides” means to furnish and install, complete and ready for the intended use.

   6. Submit: Terms such as “submit”, “furnish”, “provide”, and “prepare” and similar phrases in the context of a submittal, means to submit to the Contracting Officer.

C. Industry Standards
   1. Applicability of Standards: Unless the Contract Documents include

more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directlyinto the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

2. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.

3. Conflicting Requirements: If compliance with 2 or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Contracting Officer for a decision before proceeding.

1.03 CONTRACT

A. Refer to SECTION 00800 - SPECIAL CONDITIONS for other contract conditions.

B. Construction Window:
   1. Project Start Date: January 1, 2027
   2. Jobsite Start Date February 1, 2027
   3. Jobsite Completion Date February 1, 2028

1.04 WORK SEQUENCE

A. The Work will be conducted in two phases. The first phase shall consist of exterior work, installing fire suppression pipes in the attic and making any modifications to the existing installation in the basement of the Palace. The second construction phase shall be all work in the first and second floors of the Palace.

1.05 USE OF PREMISES AND WORK RESTRICTIONS

A. General: Contractor shall coordinate with the Friends of ‘Iolani Palace and the Division of State Parks for construction operations during construction period. The Palace is closed to the public on Mondays.

B. Contractor’s use of premises is restricted as follows:

   1. Construction Times and Schedule:
      a. Night, weekend and overtime work is allowed unless restricted elsewhere.

      b. Work shall occur between 6:30 AM and 4:30 PM unless otherwise agreed by the Friends of Iolani Palace.

   2. Site Access and Parking:
      a. Parking: Parking for the Contractor’s employees (or Subcontractors) will be coordinated with the Friends of ‘Iolani

Palace and the Engineer. Do not use parking stalls in regularly designated parking zones within the Palace grounds. Unauthorized vehicles parked in marked stalls and in any area outside of the designated project construction site will be subject to towing at the Contractor's expense.

3. Sanitation:
   a. Use of existing toilet facilities on the Palace grounds will be as directed by the Engineer. Facilities shall be kept clean. Abuse of this condition may result in the Contractor providing their own toilet facilities at no additional cost to the State.

4. Noise and Dust Control:
   a. Exercise precaution when using equipment and machinery to keep the noise and dust levels to a minimum.

   b. To reduce loud disruptive noise levels, ensure mufflers and other devices are provided on equipment, internal combustion engines and compressors.

   c. Schedule construction activities that create excessive noise and dust problems, such as concrete coring, drilling, hammering, trenching, and demolition, for the weekends or holidays hours. Overtime costs for the Contractor's employees and work force are the Contractor's responsibility.

5. Other Conditions:
   a. Arrange for construction debris and trash to be removed from project site weekly.

   b. Operate machinery and equipment with discretion and with minimum interference to driveways and walkways. Do not leave machinery and equipment unattended on roads and driveways.

   c. Store materials in the areas as designated by the Engineer Locate construction equipment, machinery, equipment and supplies within the Project Contract Limits.

   d. All smoking and vaping activities on the 'Iolani Palace grounds or within the facilities on those grounds, are prohibited. Violations will be considered a contractual noncompliance by the general contractor.

6. WORK UNDER OTHER CONTRACTS

   a. Separate Contract: The State may execute a separate contract for other construction at the project site.

b. Cooperate fully with separate Contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract.

7. FUTURE WORK

a. It is not anticipated the State will award a future contract that depends on the Work under this contract.

1.09 MISCELLANEOUS PROVISIONS

‘Iolani Palace is a National Historic Landmark that deserves nearly sacred treatment. The Contractor shall make all employees aware of the care and consideration this resource deserves.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION [Not Used]

END OF SECTION

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. General project coordination procedures.

2. Project meetings.

1.02 PERFORMANCE AND COORDINATION

A. Contractor is in charge of the Work within the Project Contract Limits and shall direct and schedule the Work. Include general supervision, management and control of the Work of this project, in addition to other areas more specifically noted throughout the Specifications. Final responsibility for performance, interface, and completion of the Work and the Project is the Contractor's.

B. The Contractor is responsible for jobsite Administration. Provide a competent superintendent on the job and provide an adequate staff to execute the Work. In addition, all workers shall dress appropriately and conduct themselves properly at all times. Loud abusive behavior, sexual harassment and misconduct will not be tolerated. Workers found in violation of the above shall be removed from the job site as directed by the Engineer.

C. The State will hold the Contractor liable for all the acts of Subcontractors and shall deal only with the Prime Contractor in matters pertaining to other trades employed on the job.

D. Coordination: Provide project interface and coordination to properly and accurately bring together the several parts, components, systems, and assemblies as required to complete the Work pursuant to the GENERAL CONDITIONS and SPECIAL CONDITIONS.

1. Provide interface and coordination of all trades, crafts and subcontracts. Ensure and make correct and accurate connections of abutting, adjoining, overlapping, and related work. Provide anchors, fasteners, accessories, appurtenances, and incidental items needed to complete the Work, fully, and correctly in accordance with the Contract Documents.

2. Provide additional structural components, bracing, blocking, miscellaneous metal, backing, anchors, fasteners, and

installation accessories required to properly anchor, fasten, or attach material, equipment, hardware, systems and assemblies to the structure. Provide excavation, backfilling, trenching and drilling for trades to install their work.

3. Provide equipment, appliances, fixtures, hardware, and systems requiring electrical services with such electrical services, including outlets, switches, overload protection, interlocks, panelboard space, disconnects, circuit breakers, and connections.

4. Materials, equipment, component parts, accessories, incidental items, connections, and services required to complete the Work which are not provided by Subcontractors shall be provided by the Contractor.

5. Coordination: Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.

1.03 COOPERATION WITH OTHER CONTRACTORS

A. The State reserves the right at any time to contract for or otherwise perform other or additional work within the Project Contract Limits. The Contractor of this project shall to the extent ordered by the Engineer, conduct its work so as not to interfere with or hinder the progress or completion of the work performed by the State or other Contractors.

1.04 COORDINATION WITH OTHER PRIME CONTRACTORS

A. Multiple prime Contractors performing work under separate agreements with the State may be present near the project location, adjacent to and abutting the Project Contract Limits. This Contractor shall coordinate activities, sequence of work, protective barriers and any and all areas of work interfacing with other Prime Contractor's work. Contractor shall provide a continuity of finishes, etc. at abutting Contract Limits so no additional work will be required. Any damage to other Prime Contractor's Work committed by this Contractor (or its Subcontractor) shall be repaired promptly at no additional cost to the State.

B. Coordinate Subcontractors and keep them informed of any work from the other Projects that may affect the site or the Subcontractor's work. If the Contractor has any questions regarding its coordination responsibilities or needs clarification as to the impact in scheduling of its work and the work of other projects, this Contractor shall notify the Engineer in writing.

C. Subject to approval by the Engineer, this Contractor shall amend and schedule its work and operations to minimize disruptions to the work and operations of other projects.

1. Relocate or remove and replace temporary barriers, fencing supports

or bracing to allow work by others to proceed unimpeded. Do not remove required barriers supporting work until specified time or asapproved by the Engineer. This does not relieve the Contractor of the responsibility of proper coordination of the work. If directed by the Engineer, leave in place any temporary barriers.

2. Coordinate work that abuts or overlaps work of the other projects with the Engineer and other Prime Contractors to mutual agreement so that work is 100 percent complete with continuity of all materials, systems and finishes.

3. When directed by the Engineer, provide access into the construction zone to allow the other project's Contractor(s) to perform their Work and work that must be interfaced.

4. Contractor shall adjust and coordinate its Work and operations as required by the other projects as part of the Work of this contract without additional cost or delay to the State.

5. When directed by the Engineer provide a combined Contractor's construction schedule.

D. Other Contracts: If known, they are listed in SECTION 01100 - PROJECT REQUIREMENTS.

1.05 SUBMITTALS

A. Photo Documentation: Prior to the start of jobsite work, the Contractor shall photo document the existing conditions at the site and file with the Engineer one complete set of documents.

1.06 PROJECT MEETINGS

A. General: Schedule and conduct meetings and conferences as directed by the Engineer.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Engineer of scheduled meeting dates and times.

2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.

3. Minutes: Contractor record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Engineer, within 7 days of the meeting.

Preconstruction Conference: Engineer shall schedule a preconstruction conference before the start of construction, at a time convenient to the

Engineer, but no later than 7 days before the Project start date or jobsite start date whichever is later. Conference will be held at the Old Archives(Kanaina Building) on the Palace grounds. The Engineer shall conduct the meeting to review responsibilities and personnel assignments.

1. Attendees: Engineer, design consultants; Facility Users; Contractor and its superintendent; and major Subcontractors shall attend the conference. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.

2. Agenda: Discuss items of significance that could affect progress, including the following:

   a. Tentative construction schedule.

   b. Critical work sequencing and coordination.

   c. Designation of responsible personnel.

   d. Use of the premises.

   e. Responsibility for temporary facilities and controls.

   f. Parking availability.

   g. Office, work, and storage areas.

   h. Equipment deliveries and priorities.

   i. First aid.

   j. Security.

   k. Progress cleaning.

   l. Working hours.

B. Progress Meetings: Progress meetings at monthly or other intervals as determined by the Engineer. Coordinate dates of meetings with preparation of payment requests.

1. Attendees: In addition to Engineer, each Contractor, Subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Review and correct or approve minutes of previous progress

meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

b. Review present and future needs of each entity present, including the following:
   1) Outstanding Requests for information (clarification).
   2) Interface requirements.
   3) Sequence of operations.
   4) Status of outstanding submittals.
   5) Deliveries.
   6) Off-site fabrication.
   7) Access.
   8) Site utilization.
   9) Temporary facilities and controls.
   10) Work hours.
   11) Hazards and risks.
   12) Progress cleaning.
   13) Quality and work standards.
   14) Force Account work, if any.
   15) Change Orders and Change Proposals.
   16) Documentation of information for payment requests.

c. Corrective Action Plan: Contractor shall provide a plan of corrective action for any item which is delayed or expected to be delayed, then that item impacts the contractual dates.

d. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01330 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. Comply with the GENERAL CONDITIONS “Shop Drawings and Other Submittals” section and “Material Samples” section.

B. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.

C. Related Sections include the following:

1. SECTION 01770 - CLOSEOUT PROCEDURES for submitting warranties, project record documents and operation and maintenance manuals.

1.02 SUBMITTAL PROCEDURES

A. Coordinate Work and Submittals: Contractor shall certify the submittals were reviewed and coordinated.

B. Submittal Certification: Provide in MS Word when submitting electronically. Engineer will provide an electronic copy of the Submittal Certification. Provide a reproduction (or stamp) of the “Submittal Certification” and furnish the required information with all submittals. Include the certification on the cover sheet of submittals in 8-1/2 inch x 11 inch format

C. Variances: The Contractor shall request approval for any variance. Clearly note any proposed deviations or variances from the Specifications, Drawings, and other Contract Documents on the submittal and also in a separately written letter accompanying the submittal.

D. Submittal Certification Form (stamp or digital)

CONTRACTOR’S NAME: _____

PROJECT: _____

DLNR JOB NO: _____

As the General Contractor, we checked this submittal and we certify it is correct, complete, and in compliance with Contract Drawings and Specifications. All affected Contractors and suppliers are aware of, and will integrate this submittal into their own work.

SUBMITTAL NUMBER	_____	DATE RECEIVED	_____
REVISION NUMBER	_____	DATE RECEIVED	_____
SPECIFICATION SECTION NUMBER /PARAGRAPH NUMBER			_____
DRAWING NUMBER	_____		
SUBCONTRACTOR'S NAME	_____		
SUPPLIER'S NAME	_____		
MANUFACTURER'S NAME	_____		

NOTE: DEVIATIONS FROM THE CONTRACT DOCUMENTS ARE PROPOSED AS FOLLOWS (Indicate "NONE" if there are no deviations)

_____

_____

_____

CERTIFIED BY	

Note: Form can be combined with Design Consultant's Review stamp. This is available from the Engineer.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 SUBMITTAL REGISTER AND TRANSMITTAL FORM

A. Contractor shall use submittal register and transmittal forms as directed by the Engineer. The listing of required submittals within this Section is provided for the Contractor's convenience. Review the specification technical sections and prepare a comprehensive listing of required submittals. Furnish submittals to the Engineer for review.

B. Contractor shall separate each submittal item by listing all submittals in the following groups with the items in each group sequentially listed by the specification section they come from:
   1. Administrative
   2. Data

3. Tests
4. Closing

C. Contractor shall separate all different types of data as separate line items all with the column requirements.

D. Contractor shall send monthly updates and reconciled copies electronically to the Engineer and the Design Consultant in MS Word or MS Excel or other format as accepted by the Engineer.

Section No. – Title	Shop Drawings & Diagrams	Samples	Certificates (Material, Treatment, Applicator, etc.)	Product Data, Manufacturer's Technical Literature	MSDS Sheets	Calculations	Reports (Testing, Maintenance, Inspection, etc.)	Test Plan	O & M Manual	Equipment or Fixture Listing	Schedules (Project Installation)	Maintenance Service Contract	Field Posted As-Built Drawings	Others	Guaranty or Warranty	Manufacturer's Guaranty or Warranty (Greater than one
01310 – Project Management and Coordination											■			■		
01330 – Submittal Procedures			■											■		
01500 – Temporary Facilities and Controls							■							■		
01575 – Temporary Controls – Air Quality Requirements			■		■											
01700 – Execution Requirements														■		

01770 – Closeout Procedures													■	■	■	
09900 - Painting			■	■	■											

END OF SECTION

SECTION 01505 - MOBILIZATION AND DEMOBILIZATION

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

A. Description: This section covers the requirements for mobilization and demobilization.

1.02 MOBILIZATION: Mobilization shall consist of the transporting, assembling, constructing, installing, and making ready for use at the job site, all the equipment, machinery, structures, utilities, materials, labor, and incidentals necessary to do the work covered by this contract.

1.03 DEMOBILIZATION: Demobilization shall consist of the dismantling and removal of the above-mentioned equipment, machinery, structures, utilities, materials, and incidentals, and the cleaning up of the site.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 GUIDELINES: If the Contractor utilizes private lands other than the sites provided by the Department for mobilization purposes, the provisions of this section shall apply, and the mobilization and demobilization work on said private lands shall be in accordance with the agreement between the Contractor and the landowner.

Any and all additional mobilization or demobilization costs in excess of the maximum amounts specified in the Proposal shall be included in the appropriate unit prices bid in the Proposal. The Contractor shall not receive any compensation for mobilization and demobilization in addition to those specified in the Proposal.

All equipment, machinery, buildings, utilities and incidentals mobilized and demobilized under this section shall remain the property of the Contractor.

END OF SECTION

SECTION 01581

PROJECT SIGN

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

Furnish all labor, materials and equipment necessary to construct and install all project sign as specified hereinafter.

1.2 SUBMITTAL

The contractor shall provide the Engineer with six (6) shop drawings of the project sign for review and approval by the Engineer prior to ordering the sign.

1.3 LETTER STYLE

Copy is centered and set in Adobe Type Futura Heavy. If this specific type is not available, Futura Demi Bold may be substituted. Copy should be set and spaced by a professional typesetter and enlarged photographically for photo stencil screen process.

1.4 ART WORK

Constant elements of the sign layout - frame, outline, stripe, and official state information - may be duplicated following drawing measurements or be reproduced and enlarged photographically using a layout template if provided. The "STATE OF HAWAII" masthead should be reproduced and enlarged as specified, using the artwork provided.

1.5 TITLES

The specific major work of the project under construction is emphasized by using 3-3/4" type, all capitals. Secondary information such as location or buildings uses 2-1/4" type, all capitals. Other related information of lesser importance uses letter heights as indicated on 01581-3, upper / lower case letters.

Design should follow the example on page 01581-3. The first line of the Sample Text should read “’Iolani Palace State Monument”. The second line should read “Windows and Doors”

PART 2 - PRODUCTS

2.1 MATERIALS

A. LUMBER

1. Panel is 3/4" exterior grade high density overlaid plywood, with resin-bonded surfaces on both sides.
2. 4"x4" sign posts shall be Douglas Fir No. 1 or better.

B. PAINTS & INKS

Screen print inks are matte finish. Paints are satin finish, exterior grade. References to Ameritone Color Key Paint are for color match only.

COLOR:	1.	1BL10A	Bohemian Blue
	2.	2H16P	Softly (White)
	3.	2VR2A	Hot Tango (Red)
	4.	1M52E	Tokay (Gray)

C. CONCRETE

Concrete shall be class B with a 2,500 psi 28-day compressive strength.

PART 3 - EXECUTION

3.1 GENERAL

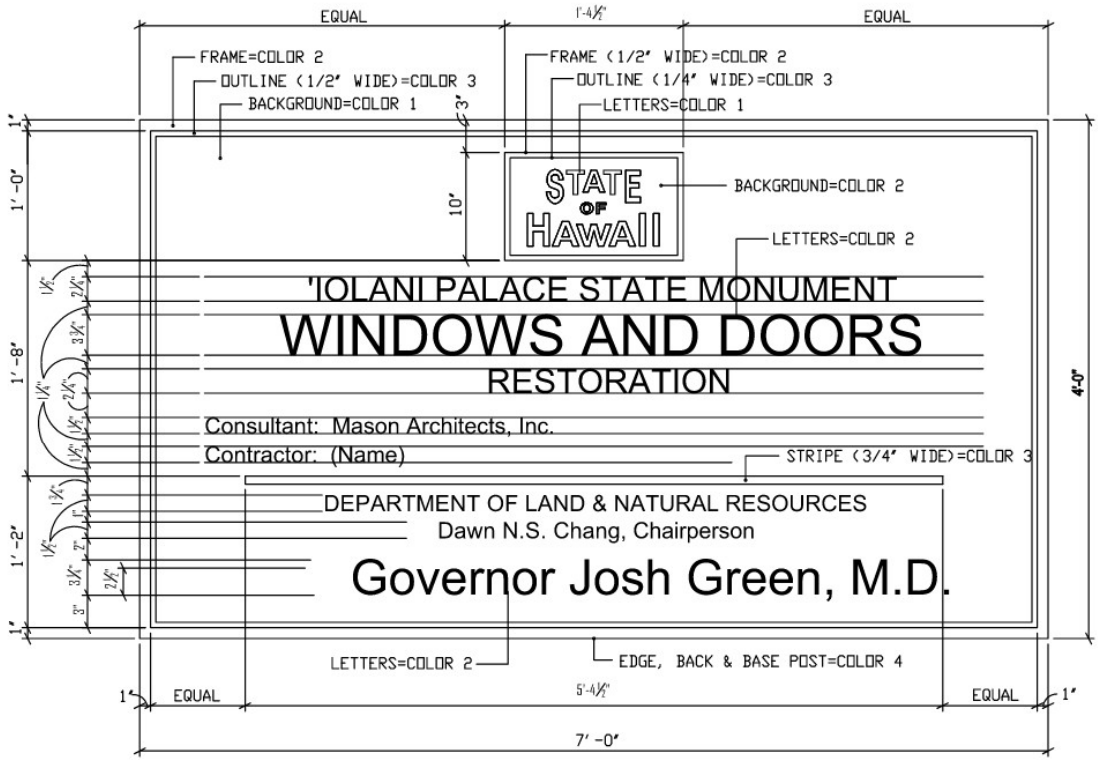
A. The Project Sign shall be constructed with new materials as specified above.

B. The Project sign shall be installed at the location indicated on the drawings or as designated by the Engineer. The project sign shall be erected upon commencement of work.

3.2 MEASUREMENTS AND PAYMENT

The construction of the project sign, including all equipment, labor and material necessary to furnish and install the project sign will be paid for under the "Project Sign" proposal item.

END OF SECTION



NOTE: Number of signs required 1

LETTERS=COLOR

Project Sign
01581-3

Job No.

Project Sign
01581-3

Job No.

SECTION 01700 - EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes general procedural requirements governing execution of the Work including the following:

1. Construction layout. Field engineering and surveying.

2. General installation of products.

3. Coordination with the Friends of ‘Iolani Palace

4. Progress cleaning.

5. Starting and adjusting.

6. Protection of installed construction.

7. Correction of the Work.

B. Related Sections
1. SECTION 01770 - CLOSEOUT PROCEDURES.

1.02 SUBMITTALS

A. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

1.03 NOTIFICATION

A. Contact the Engineer and the Project Contact Person at least 3 working days prior to starting any onsite work.

1.04 PROJECT AND SITE CONDITIONS

A. Project Contract Limits (Contract Zone Limits) indicate only in general the limits of the work involved. Perform necessary and incidental work, which may fall outside of these demarcation lines. Confine construction activities within the Project Contract Limits and do not spread equipment and materials indiscriminately about the area.

C. Disruption of Air Conditioning Services: Coordinate and arrange work related to the temporary disconnection of the air conditioning system with the Engineer. Keep disruptions to a minimum. Schedule any major outage to the air conditioning system that affects the entire building and lasts 2 hours or more, on Sundays or Mondays. Pay for overtime costs as part of the contract.

D. Contractor's Operations - Provide means and methods to execute the Work and minimize interruption or interference to the facility's operations. Rearrange the construction schedule when construction activities result in interruptions that hamper the operations of the facilities.

E. Maintain safe passageway to and from the facility's occupied buildings, rooms and other occupied spaces for the using agency personnel and the public at all times.

F. Contractor, Subcontractor(s) and their employees will not be allowed to park in zones assigned to visitors or facility personnel. Subject to availability, the Engineer may designate areas outside of the Contract Zone Limits to be used by the Contractor. Restore any lawn area damaged by construction activities.

   1. Subject to availability, the Engineer will designate areas to be used by the Contractor other than assigned stalls. Restore any lawn area damaged by construction activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 EXAMINING THE SITE

A. Contractor and Subcontractors are expected to visit the site and make allowances for difficulties and contingencies to be encountered. Compare contract documents with work in place. Become familiar with existing conditions, the conditions to be encountered in performing the Work, and the requirements of the drawings and specifications.

B. Verify construction lines, grades, dimensions and elevations indicated on the drawings before any construction begins. Bring any discrepancy to the attention of the Engineer and make any change in accordance with the Engineer's instructions.

C. Obtain all field measurements required for the accurate fabrication and installation of the Work included in this Contract. Verify governing dimensions and examine adjoining work on which the Contractor or Subcontractor's work is in any way dependent. Submit differences discovered during the verification work to the Engineer for interpretations before proceeding with the associated work. Exact measurements are the Contractor's responsibility.

D. Furnish or obtain templates, patterns, and setting instructions as required for the installation of all Work. Verify dimensions in the field.

E. Contractor shall accept the site and the existing building(s) in the condition that exists at the time access is granted to begin the Work. Verify existing conditions and dimensions shown and other dimensions not indicated but necessary to accomplish the Work.

F. Locate all general reference points and take action to prevent their destruction. Lay out work and be responsible for lines, elevations and measurements and the work executed. Exercise precautions to verify figures and conditions shown on drawings before layout of work.

3.02 SITE UTILITIES AND TONING

A. Cooperate, coordinate and schedule work to maintain construction progress, and accommodate the operations and work of the owners of underground or overhead utility lines or other property in removing or altering the lines or providing new services.

B. Contact all the various utility companies before the start of the work to ascertain any existing utilities and to develop a full understanding of the utility requirements with respect to this Project. Furnish the Engineer with evidence that the utility companies were contacted.

C. Should the Contractor discover the existence and location of utilities in the contract drawings are not correct, do not disturb the utilities and immediately notify the Engineer.

D. Do not disturb or modify any utilities encountered, whether shown or not on the Contract Drawings, unless otherwise instructed in the drawings and specifications or as directed by the Engineer. Repair and restore to pre-damaged condition any utilities or any other property damaged by construction activities.

E. Transfer to “Field Posted As-Built” drawings the location(s) and depth(s) of new and existing utilities that differ from the Contract Drawings. Locate by azimuth and distance and depth(s) from fixed referenced points.

F. Toning: Prior to the start of trenching work verify and confirm the presence, location and depth of existing underground utility lines in the area affected by the project, by “toning” or by other appropriate means acceptable to the Engineer. The intent of this advanced toning is to afford the Engineer an opportunity to identify utility lines that may or may not be shown on the drawings and issue a directive to address the existing conditions.
   1. Perform toning using instruments specifically developed and designed for the detection of underground pipes and cable utilities.

G. Notify the Engineer 48 hours in advance before toning operations. Provide information on the proposed toning method and other pertinent

information.Recording Toning Information: Upon completion of the toning operation, submit drawings that show the location and approximate depth of the existing and newly discovered utility lines. Identify the type of utility lines. Also, identify where utility lines indicated on the drawings are not shown in their approximate location or where new utility lines are found or pointed out in the field.

H. After ascertaining the exact location and depth of utilities within the project area, mark and protect the locations.
   1. Acquaint personnel working near utilities with the type, size, location, depth of the utilities, and the consequences that might result from disturbances.

   2. Do not start trenching or start similar operations until reasonable and appropriate precautions to protect the utilities are taken.

I. For newly identified utility lines, if directed by the Engineer, manually excavate when within 2-feet of the utility line to avoid damage. Under this directive, manual excavation is considered additional work.

J. Existing Irrigation Systems: Where work is located in areas with existing irrigation systems, Contractor shall test the existing systems and document all deficiencies prior to any work that may damage the existing systems.

3.03 FIELD MEASUREMENTS

A. Take field measurements to fit and install the Work properly. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress.

B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

C. Review of Contract Documents and Field Conditions: Submit a Request For Information (RFI) immediately upon discovery of the need for clarification of the Contract Documents. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.04 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to existing conditions. If discrepancies are discovered, notify the Engineer promptly.

B. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and

timesof surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by the Engineer.

3.05 INSTALLATION

A. Install materials, items, fixtures required by the various Divisions and Sections of the Specifications in accordance with Contract Documents, by workers specially trained and skilled in performance of the particular type of work, to meet guarantee and regulatory agency requirements. Should the drawings or specifications be void of installation requirements, install the materials, items, and fixtures in accordance with the manufacturer's current specifications, recommendations, instructions and directions.

3.06 CUTTING AND PATCHING

A. Oversee cutting and patching of asphaltic concrete, concrete, masonry, structural members and other materials where indicated on drawings and as required by job conditions. Unless noted elsewhere in the contract documents, do not cut or patch existing or new structural members without previously notifying the Engineer.

B. Provide patch materials and workmanship of equal quality to that indicated on the drawings or specified for new work.

3.07 CLEANING

A. General: Clean the Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
   1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.

   2. Do not hold waste more than 7 days unless approved otherwise by the Engineer.

   3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

B. Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
   1. Remove liquid spills promptly.

   2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use only cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

F. Cutting and Patching: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.10 STARTING AND ADJUSTING

A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.

C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.11 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Comply with manufacturer's written instructions to provide proper temperature and relative humidity conditions.

3.12 CORRECTION OF THE WORK

A. Repair or replace defective construction. Restore damaged substrates and finishes. Repairing includes replacing defective parts, refinishing damaged surfaces and touching up with matching materials.

B. Restore permanent facilities used during construction to their specified condition.

C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

END OF SECTION

SECTION 01770 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including the following:
   1. Project Record Documents.

1.02 SUBSTANTIAL COMPLETION

A. Preliminary Procedures:
   Before requesting a Final Inspection to determine Substantial Completion, complete the following items in addition to requirements of Article 7 of the GENERAL CONDITIONS.
   1. Advise the Engineer of pending insurance changeover requirements.

   2. Submit specific warranties, final certifications, and similar documents.

   3 Complete final cleaning requirements, including touch up painting.

   4. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

1.03 FINAL COMPLETION

A. Preliminary Procedures: Within 10 days from the Project Acceptance Date, complete the following items in addition to requirements of GENERAL CONDITIONS Article 7 PROSECUTION AND PROGRESS:

   1. Instruct the State's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training media materials.

1.04 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: Submit 2 copies of any updated and action taken list
   1. Include the following information at the top of each page:
      a. Project Name and Title.

b. Job No.
c. Date and page number.
d. Name of Contractor.

1.05 PROJECT RECORD DOCUMENTS AND REQUIREMENTS

A. General:

1. Definition: “Project Record Documents”, including Record Drawings, shall fulfill the requirements of “Field-Posted As-Built Drawings” listed in the GENERAL CONDITIONS. Do not use Project Record Documents for daily construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Engineer’s reference during normal working hours. Maintain these documents as specified in paragraph entitled “Record Drawings” hereinafter.

2. The Designer, under contract with the State, will update the drawings to show all addenda, PCD, and sketch changes. The Engineer will transmit these drawings (mylar or vellum) to the Contractor who will make all “red-line” corrections to these drawings to record the changes depicted on the Contractor’s Field Posted Record (“As-Builts”) by accepted drafting practices as approved by the Engineer.

3. The Contractor shall bring to the attention of the Engineer any discrepancy between the changes made by the Designer and those depicted on addendum, PCD, and sketch changes. The Engineer will resolve any conflicts.

4. Submit final Record Documents (Field Posted Record Drawings) before the Final Inspection Date and no later than the Contract Completion Date, unless the GENERAL CONDITIONS require otherwise.

5. The Contractor shall guarantee the accuracy of its final Record Documents. The State will hold the Contractor liable for costs the State incurs as a result of inaccuracies in the Contractor’s Record Documents.

6. Prepare and submit [construction photographs and electronic files], damage or settlement surveys, property surveys, and similar final record information as required by the Engineer.

B. Record Drawings:
   1. Maintain a duplicate full-size set as the Field Posted Record ("As- Builts") Drawings at the job site. Clearly and accurately record all deviations from alignments, elevations and dimensions, which are stipulated on the drawings and for changes directed by the Engineer that deviate from the drawings.

   2. Record changes immediately after they are constructed in place and where applicable, refer to the authorizing document (Field Order, Change Order, or Contract Modification). Use red pencil to record changes. Make Field Posted Record Drawings available to the Engineer at any time so that its clarity and accuracy can be monitored and can be countersigned for validity.
      a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later. Accurately record information in an understandable drawing technique.
      b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
      c. Mark the contract drawings or the shop drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on contract drawings.
      d. Mark important additional information that was either shown schematically or omitted from original Drawings.
      e. Note field order numbers, Change Order numbers, Contract Modification numbers, Alternate numbers, post-construction drawing numbers (PCD) and similar identification (RFI numbers) where

applicable.

f. The Contractor shall initial each deviation and each revision marking.

3. Use the final updated Contract Drawing set (including all addenda, PCD, and sketches) plus applicable shop drawings for making the final Field Posted Record Drawings submittal.

4. Certify drawing accuracy and completeness. Label and sign the record drawings or use digital electronic signature as approved by the Engineer.

5. Label the title sheet and on all sheets in the margin space to the right of the sheet number, written from the bottom upward, with the title "FIELD POSTED RECORD DRAWINGS" and certification information as shown below. Provide a signature line and company name line for each subcontractor that will also certify the respective drawing. Adjust size to fit margin space.

FIELD POSTED Certified By: _____ Date: _____

RECORD DRAWINGS [Contractor's Company Name]

6. Revise the Drawing Index and label the set "FIELD POSTED RECORD DRAWINGS". Include the label "A COMPLETE SET CONTAINS [_____] SHEETS" in the margin at the bottom right corner of each sheet. Quantify the total number of sheets comprising the set.

7. If the Engineer determines a drawing does not accurately record a deviation or omits relevant information, the State will correct any FIELD POSTED RECORD DRAWINGS sheet. Contractor will be charged for the State's cost to correct the error or omission.

8. Use the final Field Posted Record Drawings sheets and create one electronic version of the set. The set shall be recorded in Adobe Acrobat PDF (Portable Document Format). Create a

single indexed, bookmarked PDF file of the entire set of drawings and upload electronically.

1.06 WARRANTIES

A. Submittal Time: Submit written manufacturer's warranties at request of the Engineer for designated portions of the Work where commencement of warranties other than Project Acceptance date is indicated.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.01 FINAL CLEANING

A. General: Provide final cleaning. In addition to requirements of Article 7 of the GENERAL CONDITIONS conduct cleaning and waste-removal operations to comply with local laws and ordinances and federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Comply with manufacturers written instructions unless noted otherwise. Complete the following cleaning operations before requesting final inspection for entire Project or for a portion of Project.

1. Clean Project site, yard, and grounds, in areas disturbed by construction activities of rubbish, waste material, litter, and other foreign substances.

2. Remove petrochemical spills, stains, and other foreign deposits resulting from construction activities.

3. Remove tools, construction equipment, machinery, and surplus material from Project site.

4. Clean exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.

5. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.

D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the State's property. Do not discharge volatile, harmful, or dangerous materials into drainage and sewer systems or onto State property. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION

SECTION 02411 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 SUMMARY

A. The Work of this Section Includes:

1. Demolition and removal of selected portions of exterior or interior of building or structure and site elements.

B. Related Requirements:

1. Section 011000 "Summary" for restrictions on use of the premises, Owner-occupancy requirements, and phasing requirements.
2. Section 01730 "Execution" for cutting and patching procedures.

1.02 MATERIALS OWNERSHIP

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

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

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

1.03 PREINSTALLATION MEETINGS

A. Predemolition Conference: Conduct conference at Project site.

1.04 INFORMATIONAL SUBMITTALS

A. Survey of Existing Conditions: Submit survey.

B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for dust control. Indicate proposed locations and construction of barriers.

C. Schedule of selective demolition activities with starting and ending dates for each activity.

1.05 FIELD CONDITIONS

A. Owner will occupy portions of the Palace immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

1. Before selective demolition, Owner will remove the following items:

a. All furniture, paintings etc. except items indicated to remain
b. Any items indicated to remain shall be completely encased by the Contractor to eliminate the possibility of any damage.

C. Notify the Contracting Officer of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

D. Hazardous Materials:

a. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

2. Hazardous materials are present in buildings and structures to be selectively demolished. A report on the presence of hazardous materials is included at the end of this section for review and use. Examine report to become aware of locations where hazardous materials are present.

a. Hazardous material remediation is specified in Section 13283 – Disturbance of Lead-Containing Material.

E. On-site sale of removed items or materials is not permitted.

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or video, measured drawings templates.

1. Inventory and record the condition of items to be removed for salvage or reinstallation. Photograph or video conditions that might be misconstrued as damage caused by removal.
2. Photograph or video existing conditions of adjoining construction including finish surfaces, that might be misconstrued as damage caused by selective demolition operations or removal of items for salvage or reinstallation.

3.02 PREPARATION

A. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

B. Existing Items to Remain: Protect objects and existing construction indicated to remain against damage and soiling during selective demolition. When permitted by the Contracting Officer, items may be removed to a suitable, protected storage location and reinstalled in their original locations after selective demolition operations are complete.

3.03 UTILITY SERVICES AND BUILDING SYSTEMS

A. Existing Services/Systems to Remain: Maintain utilities and building systems and equipment to remain and protect against damage during selective demolition operations.

1. Owner will arrange to shut off indicated utilities when requested by Contractor.

3.04 SALVAGE/REINSTALL

A. Removed and Salvaged Items:

1. Clean salvaged items.
2. Pack or crate items after cleaning. Identify contents of containers with label indicating elements, date of removal, quantity, and location where removed.
3. Store items in a secure area until delivery to Owner.

4. Transport items to Owner's storage area on-site.
5. Protect items from damage during transport and storage.

3.05 SELECTIVE DEMOLITION, GENERAL

A. General: Demolish and remove existing construction only to extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods that are least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.

B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

3.06 DISPOSAL OF DEMOLISHED MATERIALS

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

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

B. Burning: Do not burn demolished materials.

3.07 CLEANING

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

B. When ceiling removal is being done in one room, maintain separations from the other rooms that keep dust out of those rooms

END OF SECTION

SECTION 07920 - JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Joint sealants.

1.03 REFERENCE STANDARDS

A. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018.

B. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2016.

1.04 SUBMITTALS

A. See Section 0133 0 - Submittal Procedures.

B. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.

1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.

2. Substrates that product is known to satisfactorily adhere to and with which it is compatible.

3. Substrates the product should not be used on.

4. Substrates for which use of primer is required.

5. Substrates for which laboratory adhesion and/or compatibility testing is required.

6. Sample product warranty.

C. Product Data for Accessory Products: Submit manufacturer's technical data sheet for each product to be used, including physical characteristics, installation instructions, and recommended tools. Include VOC content and emissions documentation.

D. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.

E. Field Quality Control Plan: Submit at least two weeks prior to start of installation.

F. Field Quality Control Log: Submit filled out log for each length or instance of sealant installed, within 10 days after completion of inspections/tests; include bagged test samples and photographic records, if any.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of documented experience.

C. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.

D. Field Quality Control Plan:

1. Visual inspection of entire length of sealant joints.

2. Non-destructive field adhesion testing of sealant joints, except interior acrylic latex sealants.

a. For each different sealant and substrate combination, allow for one test every 12 inches (305 mm) in the first 10 linear feet (3 linear m) of

joint and one test every 24 inches (610 mm) thereafter.

b. If any failures occur in the first 10 linear feet (3 linear m), continue testing at 12 inches (305 mm) intervals at no extra cost to Owner.

3. Field Quality Control Log Form: Show same data fields as on Preinstallation Field Adhesion Test Log, with known information filled out and lines for multiple tests per sealant/substrate combinations; include visual inspection and specified field testing; allow for possibility that more tests than minimum specified may be necessary.

E. Field Adhesion Test Procedures:

1. Allow sealants to fully cure as recommended by manufacturer before testing.

2. Have a copy of the test method document available during tests.

3. Record the type of failure that occurred, other information required by test method, and the information required on the Field Quality Control Log.

4. If any combination of sealant type and substrate does not show evidence of minimum adhesion or shows cohesion failure before minimum adhesion, report results to Architect.

F. Non-Destructive Field Adhesion Test: Test for adhesion in accordance with ASTM C1521, using Nondestructive Spot Method.

1. Record results on Field Quality Control Log.

2. Repair failed portions of joints.

1.06 WARRANTY

A. Correct defective work within a five year period after Date of Substantial Completion.

B. Warranty: Include coverage for installed sealants and accessories that fail to achieve watertight seal, exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

Acceptable Manufacturers:

1. Dow Chemical Company: consumer.dow.com/en-us/industry/ind- building-construction.html/#sle.

2. Master Builders Solutions by BASF: www.master-builders- solutions.basf.us/en-us/#sle.

3. Momentive Performance Materials, Inc (formerly GE Silicones): www.momentive.com/#sle.

4. Sherwin-Williams Company: www.sherwin-williams.com/#sle.

5. Sika Corporation: www.usa-sika.com/#sle.

6. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.

2.02 JOINT SEALANT APPLICATIONS

A. Scope:

1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items.

   a. Joints between door, window, and other frames and adjacent construction.

2.03 NONSAG JOINT SEALANTS

A. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; not expected to withstand continuous water immersion or traffic.

1. Movement Capability: Plus and minus 50 percent, minimum.

2. Color: To be selected by Architect from manufacturer's standard range.

2.05 ACCESSORIES

A. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.

B. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.

C. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that joints are ready to receive work.

3.02 PREPARATION

A. Remove loose materials and foreign matter that could impair adhesion of sealant.

B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.

C. Perform preparation in accordance with manufacturer's

instructions and ASTM C1193.

D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Perform installation in accordance with ASTM C1193.Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.

C. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed

D. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface

3.04 FIELD QUALITY CONTROL

A. Non-Destructive Adhesion Testing: If there are any failures in first 100 linear feet (30 linear m), notify Engineer immediately.

B. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

END OF SECTION

SECTION 09900 - PAINTING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. Section includes surface preparation and the application of paint systems on the following exterior substrates:

Graining finish on window frames and sash.
Graining finish on doors
Solid color paint finish on wood window sills

B. Section includes surface preparation and the application of paint systems on the following interior substrates:

Interior surfaces of doors.

1.03 DEFINITIONS

A MPI Gloss Level 1: Not more than five units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.

B. MPI Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523

C. MPI Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.

D. MPI Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.

E. MPI Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.

F. MPI Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.04 ACTION SUBMITTALS

G. Product Data: For each type of product. Include preparation requirements and application instructions.
   1. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.

1.2 QUALITY ASSURANCE

A. Applicator shall provide written testimony that he or she has done similar finishes in the past five (5) years.

B. Mockups: For exterior painting, prepare mockup on one of the doors on the Waikiki side of the basement.
   1. Do not proceed with painting of any of the windows or doors until the mockup has been approved by the Contracting Officer.
   2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Engineer specifically approves such deviations in writing.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Store materials not in use in tightly covered containers in well-ventilated areas not in direct sunlight with ambient temperatures continuously maintained at not less than 50 deg F.
   1. Maintain containers in clean condition, free of foreign materials and residue.
   2. Remove rags and waste from storage areas daily.

1.4 FIELD CONDITIONS

A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

B. Do not apply paints in rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 PAINT, GENERAL

A. MPI Standards: Products shall comply with MPI standards indicated and shall be listed in its "MPI Approved Products Lists."

B. Material Compatibility:
   1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
   2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.

C. Colors: For faux finishes, as required to match existing. For window sills, as required to match ICI #471 “Chinchilla White”.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

B. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers. For windows marked “RF”, if the existing finish is intact, the contractor may choose to leave that coating and install new coatings over it. For windows and window/doors marked SRF the existing finish on the exterior of those windows shall be removed to bare wood prior to installing any new finishes.

C. Proceed with coating application only after unsatisfactory conditions have been corrected.

D. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. The existing surfaces to be painted have lead-containing or lead-based paint on them. See the attached report from EMET. Surfaces shall be abated as required prior to any work on those surfaces.

B. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and paint systems indicated.

C. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or

impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.

D. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

E. Wood Substrates:

1. Scrape existing surfaces to remove all loose or flaking paint. Take great care to avoid scratching or marring wood and preserving existing wood profiles.
2. Sand surfaces that will be exposed to view where required to promote adhesion of new finishes, and dust off.
3. Prime edges, ends, faces, and undersides of windows and doors. Prime interior faces of doors.
4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

3.3 APPLICATION

A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."

Use applicators and techniques suited for paint and substrate indicated.

1. Paint entire exposed surface of window frames and sashes. Finished appearance shall match approved mockup.
2. Apply base coat of paint over the primer.

B. Apply semi-transparent stain over base coat, with variation in opacity to produce a faux finish to match existing finishes elsewhere in basement of the Palace.

C. Apply top coat of clear UV-resistant polyurethane to seal and protect faux finish.

3.4 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Engineer, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 PAINTING SCHEDULE

A. Exterior doors and windows:

Latex over Latex Primer System MPI EXT 6.3L:

a. Prime Coat: Primer, latex for exterior wood, MPI #6.

b. Intermediate Coat: Latex, exterior, (MPI Gloss Level 5), MPI #11.

c. Stain coat: To match existing.

d. Top coats: Two coats of aliphatic polyurethane, two component, MPI 78

END OF SECTION

DIVISION 13 - SPECIAL CONSTRUCTION

SECTION 13283 - DISTURBANCE OF LEAD-CONTAINING MATERIAL

PART 1 - GENERAL

1.01 SUMMARY

A. Disturbance of materials containing lead during renovation activities.

B. All paint shall be considered to contain lead until proven otherwise. A Project Specific Asbestos and Lead Paint Report prepared by EMET, dated 27 August 2025, is included at the end of this section.

1.02 DESCRIPTION OF WORK

A. Whenever lead paint (lead-containing or lead-based) or lead material is being disturbed, this Section shall take precedence over others.

B. The preparation and treatment of existing paint with lead (lead-containing or lead-based) material on various surfaces. Lead paint (lead-containing or lead- based) removal work shall be selective and only where existing paint (lead- containing or lead-based) is peeling, blistering, flaking, delaminating, chalky, in poor condition, not adhering to the existing substrate and/or fails adhesion testing.

C. Contractor shall coordinate work in this Section with contract drawings and documents to determine where painted surfaces, regardless of condition, are going to be disturbed to complete work required.

D. Contractor shall coordinate work in this Section with contract drawings and documents to determine where painted surfaces (lead-containing or lead-based), regardless of condition, are going to be disturbed and are required to be completely removed (deleading) to structural substrate to complete work required.

E. Demolition of surfaces and/or components containing lead and/or lead paint (lead-containing or lead-based).

F. All preparation of lead paint (lead-containing or lead-based)

shall be identified in advance so that the preparation/treatment of surfaces will be one continuous operation.

G. Contractor is responsible for coordinating all work within this Section with contract drawings, contract specifications, and contract documents.

H. This section is being implemented so that the planned work can be accomplished in a safe manner.

1.03 WORK SPECIFIED IN THIS SECTION

A. Furnish all labor, materials and equipment necessary to carry out the safe preparation and treatment of lead-containing paint in compliance with all applicable laws and regulations from all surfaces, including all incidental and pertinent operations to safely complete this project.

1.04 COORDINATION WITH OTHER SECTIONS

A. It will be the Contractor's responsibility to repair and/or replace, to the State's satisfaction, all items identified as damaged and/or missing in connection with this work that cannot be proven to have been in this condition prior to the commencement of this project. It is the Contractor's responsibility to bring to the attention of the Engineer, any discrepancies in the plans and specifications prior to starting any work.

1.05 CONTRACTOR USE OF PREMISES

A. General: The Contractor shall cooperate fully with the State, during the project execution to minimize conflicts.

B. Pollution Control: The Contractor shall not contaminate the air, water, soil or other items with hazardous materials such as cleaning solutions, lead-containing paint debris and waste, etc. The Contractor shall immediately clean the contaminated area and dispose of the waste at his own expense if determined by the Engineer to be contaminated. The Engineer shall have the authority to immediately stop the work and order the Contractor to clean the contaminated site.

C. Use of the Site:

1. Confine operations at the site to the areas permitted under the Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the work while at the project site.

2. Do not unreasonably encumber the site with materials or equipment. Confine stock-piling of materials and location of storage to the areas authorized by the Engineer.

1.06 COMMENCEMENT OF WORK

A. The Contractor shall not commence work unless the following requirements have been met. These requirements must be met each time work that calls for the disturbance of lead-containing paint is to begin in a new work area.

B. Submittals: All pre-treatment submittals, notifications, posting and permits have been provided and are satisfactory to the Engineer.

C. Equipment: All equipment for preparation, clean-up and disposal are on hand.

1.07 SUBMITTALS

A. Submit in accordance with SECTION 01330 - SUBMITTAL PROCEDURES.Submittals shall be submitted in the order listed herein. Failure to do so will result in automatic rejection of submittals.

B. General: All submittals shall be made to the Engineer no later than 10 consecutive calendar days from award date unless specified otherwise.

C. Detailed Lead-Based and/or Lead-Containing Paint Disturbance Schedule: The Contractor shall submit a project schedule indicating the actual start and completion dates for each phase of the work.

D. Shop Drawing and Diagram: Contractor shall submit the following.

1. Name of Contractor's onsite Competent Person responsible for compliance with all Federal, State and Local regulations and plans and specifications.

2. Preparation of the work area.

3. Any personal protective equipment including respiratory protection and protective clothing approved by the Engineer.

4. Employees who will participate in the project, including delineation of experience, training, and assigned responsibilities during the project.

5. Decontamination procedures for the personnel, work area and equipment.

6. Work methods and procedures to be used during the removal of loose, peeling, flaking, chalky and/or blistering paint and during demolition of surfaces containing lead paint including methods to suppress dust emissions during the disturbance of lead-based and/or lead-containing paint.

7. Required air monitoring procedures and sampling protocols when the likelihood of airborne exposure of lead-containing dust and fumes are probable.

8. Procedures for handling and transporting waste materials.

9. Procedures for final decontamination and clean-up.

10. A sequence of work and performance schedule in coordination with other trades.

11. Emergency procedures.

E. Product Data: The Contractor shall submit samples or product data sheet for approval. Product data sheet items shall include manufacturer's name, trade name, catalog number, size, specification reference, applicable federal and military specification references, and all other information necessary to establish contract compliance.

F. SDS Sheet: Liquid sanders, encapsulants and any other materials brought on- site that are considered as hazardous materials under 29 CFR 1910.1200, shall include Safety Data Sheets.

G. Other: The Engineer with the Contractor may inspect the work area wherein all associated activities will occur and submit a

statement signed by both, agreeing on building and fixture condition prior to the commencement of work.

H. Certificate - Documentation for Instruction:

1. Submit documentation satisfactory to the Engineer that the Contractor's employees, including foreman, supervisors and any other company personnel or agents who may be exposed to airborne lead dust or who may be responsible for any aspects of lead-containing paint removal activities, have received training in accordance with OSHA lead in construction standard for all workers disturbing lead-containing paint.

2. Submit documentation satisfactory to the Engineer that all workers who will be disturbing lead-based paint have received proper training in accordance with EPA's Renovation, Repair and Painting Rule (RRP).

3. Submit to the Engineer, a written respiratory protection program meeting the requirements of 29 CFR 1910.134 (b) (d) (e) and (f), documentation that all employees using respirators have received the training specified in this Section and documentation of respirator fit-testing for all Contractor employees and agents who must wear negative pressure respirators.

I. Other - Documentation from Physician: The Contractor shall submit documentation from a physician that all employees or agents who may be exposed to airborne lead-containing dust or fumes have been medically monitored to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health effects. In addition, the Contractor shall document that his personnel have received medical monitoring as required by 29 CFR 1926.62.

1. Before exposure to lead dust or fumes, the Contractor will provide workers with a comprehensive medical examination as required Federal Register/Volume 55, No. 189; and 29 CFR 1926.62 or whichever is stricter for the operation being performed. This examination will not be required if adequate records show the employees have been examined as required by the aforementioned regulations within the last year.

1.08 The Contractor shall provide information to the examining physician about unusual conditions in the work place environment

that may impact on the employee's ability to perform work activities; a copy of 29 CFR 1910.1025; Federal Register/Volume 55, No. 189; a description of the affected employee's duties as they relate to the employee' s exposure; the employee's representative exposure level or anticipated exposure level; and description of any personal protective and respiratory equipment used or to be used; and information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

1.09 GENERAL REQUIREMENTS

A. The work specified herein shall include the preparation of work area, preparation and/or other special treatment procedures, demolition, and transportation and disposal procedures as required of lead-containing materials by persons trained, knowledgeable and qualified in the techniques of handling and disposing of lead-containing and lead-contaminated materials, and the subsequent cleaning of contaminated areas. This work shall be performed in compliance with all applicable federal, state and local regulations.

B. The Contractor shall submit documentation within 10 consecutive calendar days of award, that employees have had instructions on the dangers of lead exposure on respirator use and decontamination.

C. The Contractor shall give, at a minimum, 10 working days notification to the State's Inspector/Air Monitoring Consultant prior to the start of any lead paint related work.

D. The Contractor shall not begin with any work without the State's Inspector/Air Monitoring Consultant present onsite.

E. Applicable Standards and Guidelines: All work under this contract, and any other trade work conducted with the project, shall be performed in strict accordance with all applicable federal, state and local regulations, standards and codes governing lead-containing paint preparation, removal, disposal, treatment, transportation and disposal of lead materials.

1. The most recent edition of any relevant regulation, standard, document code shall be in effect.

2. The Contractor shall have copies of all standards,

regulations, codes and other applicable documents available at the work site in an area assigned to the Contractor throughout the execution of this project.

F. Specific Statutory and Regulatory Requirements:

1. Office of Public and Indian Housing, Department of Housing and Urban Development: Lead Paint Guidelines dated June 1995.

2. Title 29 Code of Federal Regulations Part 1926.62, Safety and Health Standards (Lead Exposure in Construction, May 1993).

3. Title 29 Code of Federal Regulations Part 1910.134, Respiratory Protection.

4. Title 40 Code of Federal Regulations Part 261, Identification and Listing of Hazardous Waste.

5. Title 40 Code of Federal Regulations Part 262, Standards Applicable to Generators of Hazardous Waste.

6. Title 40 Code of Federal Regulations Part 263, Regulations Hazardous Waste Transporters.

7. Federal Register/Vol. 54, No. 131; Tuesday, July 11, 1989. Department of Labor, Occupational Safety and Health Administration; 29 CFR Parts 1910, 1915, 1917 and 1918; Occupational Exposure to Lead; Statement of Reasons; Final Rule.

G. Alternative Procedures:

1. Requests for Alternative Procedures: Procedures described in this specification are to be used at all times. However, if specified procedures cannot be used, a request must be made in writing to the Engineer providing details of the problem encountered and recommended alternatives.

2. Requirements for Alternative Procedures: Alternative procedures shall provide equivalent or greater protection than the procedures that they replace.

3. Approval of Alternative Procedures: Any alternative procedure must be approved in writing by the Engineer before implementation.

1.10 DEFINITIONS

A. Abatement: Procedure to control lead dust release from lead-containing paint.

B. Removal: All herein specified procedures necessary to remove lead paint that is peeling, blistering, flaking, chalky, delaminating, in poor condition, not adhering to the existing substrate, fails adhesion testing, going to be disturbed in an acceptable manner and/or the removal of all paint regardless of condition to structural substrate.

C. Action Level (AL): Employee exposure averaged over an 8-hour period, without regard to the use of respirators, to a particular airborne concentration. OSHA requirements become effective at this level. Lead: 30 micrograms/cubic meter.

D. Air Monitoring: The process of measuring the content of a specific, known, volume of air in a stated period of time. NIOSH Method 7082 or 7702 shall be used to determine airborne lead concentration.

E. Authorized Visitor: The Engineer, their representatives, air monitoring personnel, or representative of any regulatory or other agency having jurisdiction over the project.

F. Contaminated Area: An area where unwanted toxic or harmful substances have been introduced.

G. Fixed Object: A unit of equipment or furniture in the area which cannot be removed from the work area without dismantling.

H. HEPA Filter: A High Efficiency Particulate Air filter capable of trapping and retaining 99.97 percent of particulate greater than 0.3 micron in length.

I. HEPA Vacuum Equipment: Vacuuming equipment that utilizes a High Efficiency Particulate Air (HEPA) filter.

J. Holding Area: A secure area used for the storage of properly

contained lead- containing material before removal from the project site to an approved disposal site.

K. Lead: Metallic lead, all inorganic lead compounds, and inorganic lead soaps. Excluded are all other organic lead compounds.

L. Lead Paint: Lead-containing paint, lead-based paint and/or paint containing any amount of lead.

M. Lead-Containing Paint: Lead-containing paint, lead-based paint and/or paint containing any amount of lead.

N. Lead Control Area: An Area where lead-containing paint removal, treatment and preparation operations are performed which is isolated by physical boundaries to prevent unauthorized entry of personnel and to prevent the spread of lead dust, paint chips or debris.

O. Permissible Exposure Limit (PEL): The employer shall ensure that no employee is exposed to concentrations greater than the PEL as determined from an 8-hour time-weighted average. Lead: 50 micrograms/cubic meter.

P. Personal Monitoring: Sampling of lead paint dust concentrations within the breathing zone of an employee to determine the 8-hour time weighted average. The samples shall be representative of the employee's work tasks. The breathing zone shall be considered an area within 12 inches of the nose or mouth of an employee.

Q. Plasticizing: Procedures necessary to use polyethylene sheeting, adhesives and (or) taping.

1.10 ABBREVIATIONS

A. ANSI - American National Standards Institute, Inc.

B. CFR - Code of Federal Regulations

C. EPA - U.S. Environmental Protection Agency

D. HIOSH - Department of Occupational Safety and Health, Department of Labor and Industrial Relations, State of Hawaii

E. NIOSH - National Institute for Occupational Safety and Health

F. OSHA - Occupational Safety and Health Administration

G. NESHAPS - National Emissions Standards for Hazardous Air Pollutants

H. LBP - Lead-based PaintPART 2 - PRODUCTS

2.01 MATERIALS

A. Plastic Sheeting: Minimum thickness is 6-mil polyethylene film.

B. Tapes: Tape shall be capable of sealing joints of adjacent sheets of polyethylene and for attaching polyethylene sheets to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including the use of amended water. Silver cloth duct tape, minimum 2 inches wide; red or orange tape, minimum 2 inches wide for exit arrows.

C. Adhesives: Adhesives shall be capable of sealing joints of adjacent sheets of polyethylene and for attachment of dissimilar materials and capable of adhering under both dry and wet conditions, including use of amended water.

D. Warning Labels and Signs: As required by 29 CFR 1926.62.

E. Protective Clothing: The Contractor shall have all the required sets of coveralls required for this project prior to the start of work. There will be no time extension for the unavailability of coveralls or related equipment.

F. Liquid Sanders: Product shall be specifically designed for the preparation of paint where dry sanding is not allowed or not appropriate. Liquid sanders are not to be used to remove paint.

G. Other Materials: Provide all other materials which may be required to prepare properly and complete this project.

2.02 TOOLS AND EQUIPMENT

A. General: Provide and fabricate suitable tools for the lead treatment/preparation procedures.

B. Other tools and equipment as necessary to accomplish the specified work.

2.03 PERSONNEL PROTECTION REQUIREMENTS

A. The Contractor acknowledges that he alone is responsible for the instruction and for enforcing personnel protection requirements, and that these specifications provide only a minimum acceptable standard. If other potentially hazardous materials are used, the Contractor shall comply with all applicable regulations that exist for that particular hazardous material and to ensure worker safety and health.

B. Respiratory Protection: The Contractor shall provide all respiratory protection to workers in accordance with the submitted written respiratory protection program, which includes all items in 29CFR1910.134(b)(I-II).Protective Clothing:

1. Clothing: The Contractor shall provide clothing including head, hands, foot and full body protection consisting of material impenetrable by bulk material in sufficient quantities and adequate size for all workers, and Authorized Visitors. Disposable or reusable clothing are acceptable, however, disposable clothing shall be disposed of in accordance with all federal, state and local regulations.

2. Miscellaneous Safety Equipment: The Contractor shall provide hard hats (meeting the requirements of ANSI Standard Z89.1-1981), protective eyewear (meeting the requirements of ANSI Standard Z87.1-1979), and disposable gloves to all workers. Safety shoes (meeting the requirements of ANSI Standard Z41.1-1987) may be required for some activities.

3. Footwear: The Contractor shall require appropriate footwear for all workers.

PART 3 - EXECUTION

3.01 POTENTIAL LEAD HAZARD

A. The disturbance or dislocation of lead-containing materials may cause lead- containing dust to be released into the atmosphere, thereby creating a potential health hazard to workmen, building occupants, and neighboring residences. Apprise all worker's supervisory personnel, subcontractors and consultants who will be at the job site of the seriousness of the hazard and of proper work procedures which must be followed.

B. Where in the performance of the work, workers, supervisory personnel, subcontractors or consultants may encounter, disturb, or otherwise function in the immediate vicinity of any identified lead-containing materials, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard of exposure to respirable airborne lead dust and ingestible lead-containing materials. Such measures shall include at the minimum, the procedures and methods described herein, and compliance with regulations of applicable federal, state and local agencies.

3.02 LEAD-CONTAINING MATERIAL

A. Lead-based and/or lead-containing painted components known to be present due the age of the facility and testing conducted. Lead-based paint was detected at some of the painted surfaces location(s) tested. Lead-containing paint was detected at some of the painted surfaces location(s) tested. Lead-containing painted components may be present at some of the painted surfaces location(s) tested, as lead concentration of painted surfaces tested were below lead paint analyzer level of detection of 0.01mg/cm^2.

1. This Section applies to lead-containing painted components that will be disturbed during surface preparation and treatment, demolition, and other activities and as described herein. It does not apply to painted components that do not contain lead, or lead-containing paint that will not be disturbed in any manner during the work to be performed under this contract. The Engineer shall have the authority to require special engineering controls described under this Section of any lead painted components that are disturbed.

3.03 WORK AREA PREPARATION

A. Posting of Caution Signs: The Contractor shall post caution signs in accordance with OSHA regulations at any location and approaches to a location where airborne concentrations of lead may exceed ambient background levels. The Contractor shall post signs at a distance sufficiently far enough away from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of work place barriers.

B. Isolation Barriers: Isolation barriers shall be installed in

accordance with the Contractor's approved work plan wherever it is necessary to protect the public, employees of the facility and non-working personnel from leaded dust. The isolation barriers shall provide sufficient protection from contaminating the exterior of the work area.

C. Inspect the Building Openings: At the beginning of each work day, the Contractor shall inspect and ensure that all doors, windows and other openings of affected building(s) and all surrounding buildings are closed or sealed.

3.04 LEAD PAINT TREATMENT/PREPARATION PROCEDURES

A. General:

1. Provide temporary utilities, security, safety, worker protection, clean-up and disposal of waste materials as described in this section and elsewhere in these specifications.

2. Isolating the Work Area: The Contractor shall isolate work area, with barricades and signs to prevent un-authorized persons from entering into the work area.

3. The Contractor shall post signs at a distance sufficiently far enough away from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of work place barriers.

4. The Contractor shall at all times suppress dust emissions while disturbing any material containing lead paint. No visible emission will be permitted.

5. Re-establishment of the work area shall only occur when clean-up procedures have been completed, all repairs necessitated by paint treatment activities have been performed, no visible lead paint debris is present and lead dust wipe samples conducted by the Engineer and/or it’s representative are below 5 micrograms per square foot (ug/ft^2) from floor surfaces (if interior work is performed), are below 40 micrograms per square foot (ug/ft^2) from interior window sills (if interior work is performed), are below 100 micrograms per square foot (ug/ft^2) from window troughs (wells), are below 40 micrograms per square foot (ug/ft^2) from exterior concrete surfaces, and all work has been

documented to the satisfaction of the Engineer and/or it's representative. Any variation from this shall be at the Engineer's discretion.

6. Ground contamination of lead-based and/or lead-containing paint and other paint preparatory/demolition materials shall be cleaned before leaving the premises.

7. If the Contractor's operation results in lead levels in the soil, near or adjacent to the work area, which exceeds 200 parts per million in play areas and in non-play areas, the Contractor shall pay for any State coordinated remediation and testing to clean up the soil to a lower lead concentration.

B. Paint Removal: Paint removal shall only be allowed in locations where paint is peeling, blistering, flaking, chalky, not adhering to the existing substrate, and/or fails adhesion testing.

C. Paint Stripping:

1. Work included under this sub-section includes the furnishing of all labor, materials and equipment required to remove lead-containing paint by scraping and/or brushing after the paint has been softened by the application of a chemical stripping agent.

2. Chemical removers shall contain no methylene chloride products. Chemical removers shall be compatible with, and not harmful to the substrate to which they are applied and shall not discolor the surface being abated.

3. Chemical stripping agent neutralizers may be used on exterior surfaces only. Neutralizers shall be compatible with and not harmful to the substrate that they are applied to. Neutralizers shall be compatible with the stripping agent that has been applied to the surface substrate.

4. Chemical stripping agents and neutralizers shall be applied in accordance with the recommendations of the manufacturer. Care must be taken to adhere to all SDS, health/safety code and other specification section requirements. Stripping agents shall not be allowed to penetrate wood or other fibrous substrates.

5. Apply paint strippers in accordance with the manufacturer's

printed instructions by spray equipment or trowel to a minimum thickness of 1/8 inch. Cover past with fibrous rubbing gently to remove air and pierce remaining air bubbles with knife. Leave on for period of not less than 24 hours or longer according to test patch findings.

6. Neutralize Area: Rinse off the residue with water into an approved collection- filtration system and neutralize the area in accordance with the manufacturer's recommendations.
7. Protective Clothing: All workers shall be protected by rubber or polyethylene full body coverage suits, boots, gloves, face shield and protective head gear. Avoid contact with eyes and skin.

D. Abrasive Removers Machine Sander:

1. Work included under this sub-section includes the furnishing of all labor, materials, and equipment required to remove lead paint by machine sanding using a HEPA filtered vacuum system, as called out in these specifications.

2. Sanders shall be of the dual action, rotary action, orbital or straight line system type, capable of being fitted with a HEPA dust pick-up system.

3. Wet sanding shall be conducted by hand or pneumatic driven sanders. Electric powered sanders shall not be used for wet sanding.

4. Dry sanding shall only be done on flat surfaces which allow the HEPA dust collection system come into tight contact with the surface being sanded. Surfaces to be sanded shall be wide enough to allow maximum efficiency of the HEPA dust collection system.

5. All lead-containing paint shall be removed down to the bare substrate surface. In cases that some pigment may remain embedded in wood grain and similar porous substrate, care shall be taken to avoid damage to the substrate with the sanding machine. If the pigment cannot be removed without damaging the substrate, the Contractor shall notify the Engineer for further instructions.

E. Paint Preparation:

1. Work included under this Sub-Section includes the

furnishing of all labor, materials and equipment required to prepare lead-containing painted components by non-abrasive or wet abrasive techniques.

2. Application:

   a. Protective clothing shall be worn at all times during the work. Tyvek suits or coveralls shall be worn with protective shoes and gloves.

   b. Plastic drop cloths shall cover the floor and other areas not being repainted.

   c. Remove from surface to be repainted all foreign matter such as tape and gum.

   d. Where existing finish remains clean, tight and firm, prepare surface by using a commercial paint preparation solution (liquid sandpaper) or wet sandpaper to remove the glossy coat. Completely wipe or wash all surfaces with mineral spirits, T.S.P. (tri- sodium phosphate), or other appropriate solution as required to remove any accumulated film of wax, oil, grease, smoke, dust, dirt, chalky or other foreign matter which would impair bond of, or bleed through new finish.

   e. Immediately, spot prime with specified primer, areas where bare metal is exposed.

   f. Dispose of waste, gloves, suits, plastic, and disposable equipment in accordance with 40 CFR 261 and specifications herein.

3. Ground contamination of lead-containing paint and other paint preparatory materials shall be cleaned before leaving the premises.

3.05 LEAD PAINT - DEMOLITION PROCEDURES

A. General:

1. Provide temporary utilities, security, safety, worker protection, clean-up and disposal of waste materials as described in this Section and elsewhere in these specifications.

2. Isolating the Work Area: The Contractor shall isolate work area, with barricades and signs to prevent un-authorized persons from entering into the work area.

H. The Contractor shall post signs at a distance sufficiently far enough away from the work area to permit an employee to read the sign and take the necessary protective measures to avoid exposure. Additional signs may need to be posted following construction of work place barriers.

4. The Contractor shall at all times suppress dust emission while disturbing any material containing lead. No visible emission will be permitted.

5. Re-establishment of the work area shall only occur when clean-up procedures have been completed, all repairs necessitated by paint treatment activities have been performed, no visible lead paint debris is present and lead dust wipe samples conducted by the Engineer and/or it's representative are below 5 micrograms per square foot (ug/ft^2) from floor surfaces (if interior work is performed), are below 40 micrograms per square foot (ug/ft^2) from interior window sills (if interior work is performed), are below 100 micrograms per square foot (ug/ft^2) from window troughs (wells), are below 40 micrograms per square foot (ug/ft^2) from exterior concrete surfaces, and all work has been documented to the satisfaction of the Engineer and/or it's representative. Any variation from this shall be at the Engineer's discretion.

6. Ground contamination of lead-based and/or lead-containing paint and other paint preparatory/demolition materials shall be cleaned before leaving the premises. If the Contractor's operation results in lead levels in the soil, near or adjacent to the work area, which exceeds 200 parts per million in play areas and in non-play areas, the Contractor shall pay for any State coordinated remediation and testing to clean up the soil to a lower lead concentration.

3.06 STORAGE AND DISPOSAL REQUIREMENTS

A. Storage Requirements: The Contractor shall store Non-Hazardous and Hazardous Waste Material within the Contractor's trailer or secured storage area.

1. Bagged Waste Material: If bagged waste material is to be stored, the Contractor shall use dumpsters for this purpose. The dumpsters shall have doors and tops that can be closed and locked to prevent vandalism, wind dispersion of lead dust, or other disturbance of the bagged debris. The Contractor shall not store unbagged lead-containing waste, liquid waste or non-lead-containing waste in these dumpsters. The Contractor also shall ensure that the bags in the dumpsters are not damaged. The Contractor shall post warning signs on the dumpsters as specified in OSHA requirement 29 CFR 1926.62.

2. Drummed Waste Material: If waste material is to be stored in drums, the Contractor shall use a secured storage area for this purpose. This storage area shall have doors that can be closed and locked to prevent vandalism. The Contractor shall only store waste material contained in drums or dumpsters in the secured area. The Contractor shall ensure that the drums in this secured storage area is not damaged. The Contractor shall post warning signs outside the secured storage area as specified in the OSHA requirement 29 CFR 1926.62.

3. Dumpster Waste Material: If waste material is to be stored in dumpster, the Contractor shall use a secured storage area for this purpose. Dumpster shall have doors that can be closed and locked to prevent vandalism. The Contractor shall only store non-hazardous waste material in the dumpster(s). The Contractor shall ensure that the dumpsters are not damaged. The Contractor shall post warning signs outside the secured storage area as required by OSHA, DOT and any other applicable Federal, State and Local regulations.

B. Waste Disposal and Landfill Requirements:

1. Representative sample(s), of paint chip debris and demolition debris, shall be submitted for hazardous/special/regulated waste determination (characterization) as required by the landfill and all applicable regulations. All testing and any other associated costs related to hazardous/special/regulated waste determination shall be paid for by the Contractor. If results are below the EPA limit(s) and characterized as a non-hazardous waste, the materials shall be disposed of at a landfill approved for such purposes. The Contractor shall submit to the Engineer, documentation that the waste

material removed from the work area has been accepted by the landfill owner.

2. If waste characterization or other required landfill testing result(s) of the demolition and/or paint chip debris are above EPA limits or landfill limits the materials shall be disposed of at an approved facility for receiving hazardous, regulated or special waste materials. The Contractor shall be responsible for all disposal costs including all transportation fees. The Contractor shall submit to the Engineer, documentation that the waste material removed from the work area has been accepted by the hazardous materials approved landfill owner.

C. Disposal of Non-Hazardous Lead-Containing Waste:

1. Notifying Landfill Operator: If required by the landfill or its agents, the Contractor shall advise the landfill operator with sufficient time prior to transportation of the quantity of material to be delivered.

2. Unloading: Upon reaching the landfill, the Contractor's trucks are to approach the dump location as close as possible for unloading the Lead-Containing Waste Material.

   a. The Contractor shall inspect containers as they are unloaded at the disposal site. Material in damaged containers shall be repacked in empty containers, as necessary.

   b. The Contractor shall carefully place waste Containers on the ground at the disposal site, not push or throw the containers out of the trucks.

3. Clean-up Procedures:

   a. If containers are broken or damaged, the Contractor shall leave the containers in the truck and clean the entire truck and its contents using HEPA vacuums and wet cleaning methods, until no visible residue is observed.

   b. Following the removal of all contaminated waste, the Contractor shall decontaminate the truck cargo area using HEPA Vacuums and/or wet cleaning methods until no visible residue is observed. Polyethylene

sheeting shall be removed and discarded as lead-contaminated waste material, along with contaminated cleaning materials and protective clothing, in containers at the disposal site.

D. Recycling of Non-Hazardous Lead-Containing Waste:

1. The Contractor is responsible for all cost relating to materials with lead painted surfaces to be recycled. It is the responsibility of the Contractor to determine which materials may or may not be re-cycled.

2. The Contractor is to perform all testing, at his own cost, to ensure the material to be recycled may be accepted and recycled in accordance the recyclers permit conditions.

3.07 It the material cannot be recycled, the Contractor shall be responsible for the proper disposal of the debris at his own cost.

3.08 TESTING/AIR MONITORING

A. Contractor Responsibilities:

1. The Contractor shall provide the personal monitoring and necessary records for all of the Contractor's employees as required by OSHA (29 CFR 1926.62), and all other applicable law.

2. Area air/dust monitoring and testing which becomes necessary in order to follow up on work by the Contractor that has been rejected as not conforming to the requirements shall be the responsibility of the Contractor. The full cost of additional monitoring and testing shall be borne by the Contractor, and shall be deducted from the final contract payment in the event of working double shifts to meet deadlines, working longer hours than stated in the accepted proposal, for working beyond the scheduled completion date, violating regulations, not conforming to specifications and plans, or for failing clearance test requirements.

END OF SECTION

EnvironMETeo Services, Inc.
Environmental / Industrial Health & Safety

Project Specific Asbestos and Lead Paint Survey Report

For:

Mason Architects, Inc.

119 Merchant Street, Suite 501

Honolulu, Hawaii 96813

Facility Surveyed:

‘Iolani Palace

364 South King Street

Honolulu, Hawaii 96813

Project:

‘Iolani Palace Windows and Doors

Conducted by:

EnvironMETeo Services, Inc. (EMET)

94-520 Uke'e Street, Suite A

Waipahu, Hawaii 96797

Date of Report: January 26, 2026

EMET ID: 2505210

Table of Contents

Certification of Report ..... Page 2
Summary ..... Page 4
Asbestos-Containing Material ..... Page 6
Asbestos Bulk Sampling ..... Page 6
Asbestos Analyses ..... Page 7
Lead Paint ..... Page 8
Lead Paint Sampling and Analyses ..... Page 9
Limitations ..... Page 11

Asbestos Survey Report ..... Appendix A
Lead Paint Test Results ..... Appendix B
Certifications ..... Appendix C

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Certification of Report

We certify that this report is based on a physical survey of EMET scope of work areas as impacted by this project at ‘Iolani Palace, located at 364 South King Street, Honolulu, Hawaii. The survey included an inspection for asbestos-containing materials (ACM) and lead paint on surfaces/building components.

The survey was conducted by EnvironMETeo Services, Inc. (EMET) on July 29 and September 2, 2025 and was limited to the following scope of work:

Asbestos/Lead Paint Investigation

1. Inspection, evaluation, and sample collection of safely accessible suspect asbestos-containing materials by EPA-accredited inspectors in accordance with H.A.R. 11-501 from the following:

   ‘Iolani Palace

   - perimeter windows and doors on basement, 1st, 2nd and attic floor levels

2. Lead paint inspection by EPA-accredited inspectors from the areas indicated in item 1.

The survey results are based on analyses of samples of suspect materials collected from visually and physically accessible areas/materials.

Bulk samples of suspect asbestos-containing materials taken during the survey were analyzed for asbestos content by a National Institute of Standards and Technology (NIST) accredited laboratory under the National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos fiber analysis. Laboratory analyses performed by Polarized Light Microscopy (PLM) for asbestos identification are in accordance with U.S. Environmental Protection Agency (EPA) Test Method 600/R-93/116.

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke‘e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Painted surfaces were tested for lead concentrations using an X-Ray Fluorescence (XRF) spectrum analyzer, a testing methodology approved by the EPA and the U.S. Department of Housing and Urban Development (HUD).

EMET makes no warranty and assumes no liability for the inappropriate use or misuse of this document.

Andrew Uyeda
Asbestos Building Inspector
Hawaii State Certification # HIASB-2432
Lead Based Paint Risk Assessor
Hawaii State Certification # PB-0669

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Summary

EnvironMETeo Services, Inc. (EMET) conducted a survey for asbestos-containing materials (ACM) and lead paint on surfaces/building components at ‘Iolani Palace, located at 364 South King Street, Honolulu, Hawaii, on July 29 and September 2, 2025. Bronson Groendyke, Joseph Iopa and Andrew Uyeda of EMET conducted the survey in accordance with Hawaii Administrative Rules (H.A.R) 11-501 as well as EMET's scope of work. The survey was requested and authorized by Glenn Mason of Mason Architects, Inc. and was performed in preparation for planned renovations.

This report is for informational purposes only and should only be used as such. This report is not a specification and should not be used as such.

Asbestos Summary

ACM was not detected in the samples collected for this survey, but trace (less than 1%) asbestos was detected in the white caulking around the attic level window frames. The Occupational Safety and Health Administration (OSHA) Asbestos in Construction standard applies to the workers disturbing this caulking.

Lead Paint Summary

Based on XRF test results, lead-based paint (LBP) was detected on the following painted components.

Attic LBP

stain on wooden window frames	stain on wooden window sills

Basement LBP

yellow paint on wooden windows	stain on wooden windows

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke‘e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

1st Floor LBP

gray paint on wooden door frames	stain on wooden windows

2nd Floor LBP

stain on wooden door frames	stain on wooden window frames
gray paint on wooden window frames	-

The paints on the following testing combinations contain lead in a concentration of less than 1.0 mg/cm^2. The paints on theses surfaces are lead-containing paint (LCP). Paint on testing combinations similar to those identified with LBP or LCP should also be treated as LBP or LCP, respectively.

Attic LCP

gray paint on wooden window sill	-

Basement LCP

yellow paint on wooden door	stain on wooden door
gray paint on wooden door frame	stain on wooden door frame
gray paint on window frame	stain on wooden window frame
stain on wooden window sill	-

1st Floor LCP

gray paint on window frame	stain on wooden window frame

2nd Floor LCP

gray paint on wooden door	stain on wooden door
silver paint on wooden window	stain on wooden window
gray paint on window sill	stain on wooden window blinds
stain on wooden window frame	stain on wooden floor

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Some of the painted surfaces tested using the XRF analyzer may have paint with lead at concentrations below the instrument level of detection (0.01 mg/cm^2).

Workers disturbing paint which may cause exposure to airborne lead must abide by the OSHA Lead in Construction standard.

Asbestos-Containing Material

The State of Hawaii, OSHA, and EPA define ACM as any material containing more than one percent asbestos by area. This definition can be found in the following regulations:

- Hawaii Administrative Rules (HAR), Title 11, Department of Health, Chapter 501 (11-501), *Asbestos Requirements.*

- 29 CFR 1926.1101 Occupational Safety and Health Administration (OSHA), *Asbestos Standards for the Construction Industry.*

- EPA 40 CFR Part 61, Subpart M - National Emission Standards for Hazardous Air Pollutants (NESHAP), Final Rule revised July 20, 2004, *National Emission Standard for Asbestos.*

Asbestos Bulk Sampling

A total of 24 samples of suspect ACM were collected and analyzed. The samples were placed in plastic containers with a unique identification number assigned to each sample and entered on a field data sheet. The sample locations are described on the Sample Logs in Appendix A.

Samples were collected of the following observed suspect asbestos-containing material:

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Basement Suspect ACM

white window gazing	gray textured coating on frames/casing
white caulking at window frame	-

1st Floor Suspect ACM

gray textured coating on window frame/casing	-

2nd Floor Suspect ACM

gray textured coating on window frame/casing	-

Attic Suspect ACM

white caulking at window frame	gray textured coating on window frame/casing
gypsum wallboard/mudjoint wall system	-

Asbestos Analyses

Bulk samples were analyzed for asbestos using Polarized Light Microscopy (PLM) for the identification of asbestos, in accordance with EPA Test Method 600/R-93/116. Laboratory analytical data sheets are provided in Appendix A.

Based on the visual inspection and laboratory results of the samples collected, ACM was not detected in the materials sampled for this survey. Materials with trace levels (less than 1%) of asbestos were detected and are listed in the following table.

Asbestos Details

Material Description	Observed Quantity	Material Location	Asbestos
white caulking at window frame	100 lf	around exterior side of attic level window frames	<1% chrysotile

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Although this material is not ACM by definition, it does contain asbestos and the OSHA 1926.1101 Asbestos in Construction standard applies to workers disturbing the material. The landfill or other destination for the disposal of this window caulking should also be notified of the trace asbestos content.

Lead Paint

U.S. Department of Housing and Urban Development (HUD) *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, 2012 Edition, defines lead-based paint (LBP) as paint with a lead content greater than or equal to 1.0 milligrams per square centimeter (mg/cm^2). The concentration 1.0 mg/cm^2 is equivalent to 5000 parts per million (ppm) and 0.5 percent weight (% wt.). EPA regulation 40 CFR Part 745 *Lead-based Paint Activities* similarly defines LBP as stated in HUD regulations.

OSHA regulates any activity disturbing paint that contains lead (referred to as lead-containing paint or LCP), even if the lead content is below the EPA/HUD standard for lead-based paint.

XRF test results of painted surfaces equal to or greater than 1.0 mg/cm^2 are defined as LBP in accordance with EPA and HUD regulations.

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Lead Paint Sampling and Analyses

Painted surfaces were analyzed for lead using an XRF analyzer. A total of 159 analyses of painted surfaces/building components and calibrations were performed. A unique identification number was assigned to each test location and entered on a field data sheet. The ID number, location, description, and lead concentration of each sample is indicated in the XRF analyzer test results, which are provided in Appendix B.

The test results indicate that a lead content equal to or greater than 1.0 mg/cm^2 was detected in paints on the following testing combinations:

LBP Details

XRF No. and Location	Testing Combination Component/Substrate	Condition	Color
18, Basement exterior	window / wood	poor	yellow
33, 40, and 50 Basement interior	window / wood	intact	stain
61 and 68, 1st floor exterior	door frame / wood	intact	gray
57, 63, 66, and 71, 1st floor exterior	window / wood	intact	stain
94, 2nd floor exterior	door frame / wood	intact	stain
91, 2nd floor exterior	window / wood	intact	stain
88, 90, and 98, 2nd floor exterior	window frame / wood	intact	gray
92, 2nd floor exterior	window frame / wood	intact	stain
213 and 230, attic level, interior	window sill / wood	intact	stain
226 and 231, attic level, interior	window frame / wood	intact	stain

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

The paints on the following tested surfaces are confirmed to contain lead in concentrations of less than 1.0 mg/cm^2. The paints on these surfaces are LCP. Testing combinations similar to those identified with LBP or LCP should also be treated as having LBP or LCP, respectively.

Workers disturbing paint which may cause airborne exposure to lead must abide by the OSHA Lead in Construction standard.

LCP Details

Location	Testing Combination Component/Substrate	Condition	Color
Basement exterior	door / wood	poor	yellow
Basement exterior	door frame / wood	poor	gray
Basement exterior	window frame / wood	poor	gray
Basement interior	door / wood	intact	stain
Basement interior	door frame / wood	intact	stain
Basement interior	window frame / wood	intact	stain
Basement interior	window frame / wood	intact	gray
Basement interior	window sill / wood	intact	stain
1st floor exterior	window frame / wood	intact	stain
1st floor exterior	window frame / wood	intact	gray
2nd floor exterior	door / wood	intact	stain
2nd floor exterior	footing front of door / wood	intact	gray
2nd floor exterior	window / wood	intact	silver
2nd floor exterior	window sill / wood	intact	gray
2nd floor interior	blinds / wood	intact	stain
2nd floor interior	door / wood	intact	stain
2nd floor interior	floor / wood	intact	stain
attic level, exterior	window sill / wood	poor	gray

Some of the painted surfaces tested may have paint with lead at concentrations below the instrument level of detection (0.01 mg/cm^2).

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Painted surfaces may vary in paint type, color, and condition. Any damaged painted surfaces may vary significantly from area to area in terms of the condition and degree of damage. The results provide the lead content of all paint layers in a tested surface, as there may be more than one layer of paint on the tested surface.

Limitations

This hazardous materials survey was performed to identify suspect materials in areas scheduled for planned renovations. Original building plans and specifications and those for past renovations, if any, were not available for review.

Because of these limitations, the highly variable nature of building construction, and the limits to the survey as defined by EMET's scope of work, the potential remains for undiscovered hazardous materials.

This report is for informational purposes only and should only be used as such. This report is not a specification and should not be used as such.

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Appendix A

Asbestos Survey Report

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Building Information Sheet

Job Code /EMET ID	Client Name	Inspection date
2505210	Mason Architects, Inc.	7/29/2025, 9/2/2025

Building Number	Building Name	No. of Floors Surveyed
IP	IOLANI PALACE	4

Location

364 S. King St.
Honolulu, HI 96813

No. of Other Levels Surveyed

Building Construction Type	Building Use	% Floor Space
LOAD BEARING MASONRY	Use #1: MUSEUM	100
	Use #2:	
	Use #3:	

Structural Concrete with: Metal Decks, Flat Slab, Beam/Joist or Waffle Slabs; Structural Tees
Steel Frame
Wood Frame
Load Bearing Masonry

Academic Classes, Administration Offices, Food Services, Dormitory, Mechanical Spaces, Gymnasium, Laboratory, Library, Residential or Other (Specify)

ACBM PRESENT?

NO

YES = PRESENT
NO = NOT PRESENT
ASM = ASSUMED

Inspector Identification

Name: Andrew Uyeda
State of HI Certification No. HIASB-2432
State of HI Certification Expiration Date: 6/1/2026
Building Inspector Certification Exp. Date: 11/25/2025

Specific areas surveyed

perimeter door and window frames of basement, 1st floor, 2nd floor, and attic

Inspector Comments

EMET's scope of work was limited to the areas listed above in Specific Areas Surveyed. This report is not a specification for the removal of asbestos-containing material and should not be used as such. Results of the presence or absence of asbestos are based on the survey and on analyses of the suspect materials encountered. Original building plans and specifications were not available for review. Therefore, because of these limitations and the highly variable nature of building construction, the potential remains for undiscovered ACM. EMET makes no warranty and assumes no liability for the inappropriate use or misuse of this document.

EMET Services, Inc. • 94-520 Uke`e Street, Suite A • Waipahu, Hawaii 96797
Phone: (808) 671-8383 • FAX: (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

Unified Homogeneous/Sample Area ACM - Space and Salient Cross Reference

Building ID and Name

IP	IOLANI PALACE

For the ACM - Space Identified as:

210-IP-1

Building Location

364 S. King St.
Honolulu, HI 96813

EMET ID

2505210

Inspection Date(s): 7/29/2025, 9/2/2025

Unified Sample Area	Homogeneous Sample Area or Salient Description	Comments	ACM Present			Material Type*			Response Action	Estimated Cost to Remove
			Suspected	Confirmed	Friable	T	DC	PD		
210-IP-1A	GRAY TEXTURED COATING ON FRAMES		YES	NO						

*** Refers to Material Type and Damage Conditions**

T = Material Type:	DC = Damage Condition:	PD = Potential Damage Condition:
S = Surfacing	ND = No Damage	NPD = No Potential Damage
M = Miscellaneous	D = Damaged	PD = ACBM w/ Potential Damage
T = Thermal Systems	SD = Significant Damage	PSD = Potential Significant Damage

**** Recommended Response Actions:**

1. Isolate area and restrict access. Remove or repair ASAP.
2. Continue Operations and Maintenance (O&M) program. Remove or repair ASAP or reduce potential for disturbance.

3-5. Repair, continue O&M. Lower number indicates higher priority if all repair cannot be done immediately.

6-7. Continue O&M. Take preventive measures to reduce disturbance. Number indicates priority for removal.

8. Continue O&M until major renovation or demolition requires removal under NESHAPS, or until hazard assessment factors change.

Note: An O&M program may include enclosure and encapsulation.

© 2013 EnvironMETeo Services, Inc.

Sample Area Report - Area Master

EMET ID	Building Number and Name		Inspection Date
2505210	IP	IOLANI PALACE	7/29/2025
	Material ID and Description		
Document Number	210-IP-1A	GRAY TEXTURED COATING ON FRAMES	Unified Sample Area Number
	Drawing/Sketch Number		210-IP-1A

A Sample Area should contain material of one, and only one, composition or matrix. An exception can be made in the case of layered applications of materials, such as occurs with a Three Coat Plaster system, that generally matches the same physical locations. Special care must be taken while collecting samples of layered materials, to enable the analysis to discern the several matrices present. Such conditions should be described in detail on the Sample Notes form for the analyst.

Unified Sample Area/Homogeneous Material

GRAY TEXTURED COATING ON FRAMES

Location of Confirmed, Assumed, or New ACM within Building

Not Applicable

SAMPLING STRATEGY DATA

Ceiling Height #1		#2	
Square Feet of Ceiling Materials			
Square Feet of Wall Materials			
Square Feet of Floor Surface			
Linear Feet of TSI			
Square Feet of Structural Steel Coatings (including over-spray)			
Square Feet of Other ACM			
Linear Feet of Other ACM			
Total square and/or linear feet of ACM in this Sample Space:			

RISK ASSESSMENT DETERMINATION

Physical Condition	Potential Damage	Water Damage
- -	- -	- -
Visible	**Reachable**	**Texture**
- -	- -	- -

Barriers	Ventilation	If Yes	Friable Surface	
- -	- -	- -	- -	- -

Air Movement	Proximity to Repair Items	Activity
- -	- -	- -

SAMPLE ANALYSIS SUMMARY SECTION

Total Number of Samples Collected	3
Samples Collected by	EMET
Sample Numbers	210-IP-1A1, 210-IP-1A2, 210-IP-1A3
Total Number of Samples Analyzed	3
Samples Analyzed by	EMET
ASBESTOS-CONTAINING MATERIAL ?	**NO**
Number of Salient Designations:	

PHOTOGRAPH

© 2013 EnvironMETeo Services, Inc.

Sample Log and Notes

Building Number and Name		EMET ID
IP	IOLANI PALACE	2505210

Sample Area/Lot Number and Name	
210-IP-1A	GRAY TEXTURED COATING ON FRAMES

Sample Number	% Asbestos	Description of Sampled Material	Sample Location
210-IP-1A1	0	GRAY TEXTURED COATING ON FRAMES	Dining Room
210-IP-1A2	0	GRAY TEXTURED COATING ON FRAMES	Throne Room
210-IP-1A3	0	GRAY TEXTURED COATING ON FRAMES	Throne Room

Inspector's Name	Signature	Date Samples Collected
Andrew Uyeda		7/29/2025

EMET Services, Inc. 94-520 Uke`e Street, Suite A Waipahu, HI 96797
Phone (808) 671-8383 Fax (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

LABORATORY REPORT

Asbestos Bulk Sample Analysis by Polarized Light Microscopy
in accordance with 40 CFR Part 763 Appendix E to Subpart E

NVLAP LAB CODE 101807-0

Client: Mason Architects, Inc.

Address: 119 Merchant Street, Suite 501
Honolulu, HI 96813

Building: IOLANI PALACE

Address: 364 S. King St.
Honolulu, HI 96813

Approved Signatory:

Sample/Homogeneous Area: 210-IP-1A Analysis Date: 8/5/2025 Report Date: 8/5/2025

Lab ID	Sample ID	Color	Homogeneity	Asbestos Detected	Asbestos (Type) Area %	Fibrous Components Area %	Non-fibrous Components Area %	Comments
210-010	210-IP-1A1	gray	Yes	No	-	wollastonite	misc. part.	
					-	< 1	99	
210-011	210-IP-1A2	gray	Yes	No	-	wollastonite	misc. part.	
					-	< 1	99	
210-012	210-IP-1A3	gray	Yes	No	-	wollastonite	misc. part.	
					-	< 1	99	

Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for the scope specific under Lab Code 101807-0.
State of Hawaii Asbestos Requirements mandates all samples to be collected by a certified Asbestos Inspector in accordance with § 11-501, 11-502, and 11-504. Results of samples collected by someone other than a certified Asbestos Inspector may be invalid.
Note: EPA, OSHA, and HIOSH define “asbestos-containing material” as any material or product which contains more than one percent asbestos.

*Laboratory test report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.
*Laboratory test report relates only to items tested.
*Asbestos fiber percentage is approximate - performed by visual observation only, unless otherwise indicated.

*This method is not reliable for analysis of tile or other materials when fiber size is less than 10 microns and/or below detection limit (appr. 1%) of current PLM techniques.
*Samples analyzed as received by the laboratory, interpretation is responsibility of the client.

This report may not be reproduced except in full and with the permission of EMET.
EMET Services, Inc. 94-520 Uke`e Street, Suite A, Waipahu, Hawaii 96797 Phone: (808) 671-8383 FAX: (808) 6717979

© 2013 EnvironMETeo Services, Inc.

Unified Homogeneous/Sample Area ACM - Space and Salient Cross Reference

Building ID and Name

IP	IOLANI PALACE

For the ACM - Space Identified as:

210-IP-2

Building Location

364 S. King St.
Honolulu, HI 96813

EMET ID

2505210

Inspection Date(s): 7/29/2025, 9/2/2025

Unified Sample Area	Homogeneous Sample Area or Salient Description	Comments	ACM Present			Material Type*			Response Action	Estimated Cost to Remove
			Suspected	Confirmed	Friable	T	DC	PD		
210-IP-2A	GRAY TEXTURED COATING ON FRAMES		YES	NO						

*** Refers to Material Type and Damage Conditions**

T = Material Type:	DC = Damage Condition:	PD = Potential Damage Condition:
S = Surfacing	ND = No Damage	NPD = No Potential Damage
M = Miscellaneous	D = Damaged	PD = ACBM w/ Potential Damage
T = Thermal Systems	SD = Significant Damage	PSD = Potential Significant Damage

**** Recommended Response Actions:**

1. Isolate area and restrict access. Remove or repair ASAP.
2. Continue Operations and Maintenance (O&M) program. Remove or repair ASAP or reduce potential for disturbance.

3-5. Repair, continue O&M. Lower number indicates higher priority if all repair cannot be done immediately.

6-7. Continue O&M. Take preventive measures to reduce disturbance. Number indicates priority for removal.

8. Continue O&M until major renovation or demolition requires removal under NESHAPS, or until hazard assessment factors change.

Note: An O&M program may include enclosure and encapsulation.

© 2013 EnvironMETeo Services, Inc.

Sample Area Report - Area Master

EMET ID	Building Number and Name		Inspection Date
2505210	IP	IOLANI PALACE	7/29/2025
	Material ID and Description		
Document Number	210-IP-2A	GRAY TEXTURED COATING ON FRAMES	Unified Sample Area Number
	Drawing/Sketch Number		210-IP-2A

A Sample Area should contain material of one, and only one, composition or matrix. An exception can be made in the case of layered applications of materials, such as occurs with a Three Coat Plaster system, that generally matches the same physical locations. Special care must be taken while collecting samples of layered materials, to enable the analysis to discern the several matrices present. Such conditions should be described in detail on the Sample Notes form for the analyst.

Unified Sample Area/Homogeneous Material

GRAY TEXTURED COATING ON FRAMES

Location of Confirmed, Assumed, or New ACM within Building

Not Applicable

SAMPLING STRATEGY DATA

Ceiling Height #1		#2	
Square Feet of Ceiling Materials			
Square Feet of Wall Materials			
Square Feet of Floor Surface			
Linear Feet of TSI			
Square Feet of Structural Steel Coatings (including over-spray)			
Square Feet of Other ACM			
Linear Feet of Other ACM			
Total square and/or linear feet of ACM in this Sample Space:			

RISK ASSESSMENT DETERMINATION

Physical Condition	Potential Damage	Water Damage
- -	- -	- -
Visible	**Reachable**	**Texture**
- -	- -	- -

Barriers	Ventilation	If Yes	Friable Surface	
- -	- -	- -	- -	- -

Air Movement	Proximity to Repair Items	Activity
- -	- -	- -

SAMPLE ANALYSIS SUMMARY SECTION

Total Number of Samples Collected	3
Samples Collected by	EMET
Sample Numbers	210-IP-2A1, 210-IP-2A2, 210-IP-2A3
Total Number of Samples Analyzed	3
Samples Analyzed by	EMET
ASBESTOS-CONTAINING MATERIAL ?	**NO**
Number of Salient Designations:	

PHOTOGRAPH

© 2013 EnvironMETeo Services, Inc.

Sample Log and Notes

Building Number and Name		EMET ID
IP	IOLANI PALACE	2505210

Sample Area/Lot Number and Name	
210-IP-2A	GRAY TEXTURED COATING ON FRAMES

Sample Number	% Asbestos	Description of Sampled Material	Sample Location
210-IP-2A1	0	GRAY TEXTURED COATING ON FRAMES	makai Guest Bedroom
210-IP-2A2	0	GRAY TEXTURED COATING ON FRAMES	Queen's Bedroom
210-IP-2A3	0	GRAY TEXTURED COATING ON FRAMES	King's Bedroom

Inspector's Name	Signature	Date Samples Collected
Andrew Uyeda		7/29/2025

EMET Services, Inc. 94-520 Uke`e Street, Suite A Waipahu, HI 96797
Phone (808) 671-8383 Fax (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

LABORATORY REPORT

Asbestos Bulk Sample Analysis by Polarized Light Microscopy
in accordance with 40 CFR Part 763 Appendix E to Subpart E

NVLAP LAB CODE 101807-0

Client: Mason Architects, Inc.

Address: 119 Merchant Street, Suite 501
Honolulu, HI 96813

Building: IOLANI PALACE

Address: 364 S. King St.
Honolulu, HI 96813

Approved Signatory:

Sample/Homogeneous Area: 210-IP-2A Analysis Date: 8/5/2025 Report Date: 8/5/2025

Lab ID	Sample ID	Color	Homogeneity	Asbestos Detected	Asbestos (Type) Area %	Fibrous Components Area %	Non-fibrous Components Area %	Comments
210-013	210-IP-2A1	gray	Yes	No	-	wollastonite	misc. part.	
					-	< 1	99	
210-014	210-IP-2A2	gray	Yes	No	-	wollastonite	misc. part.	
					-	< 1	99	
210-015	210-IP-2A3	gray	Yes	No	-	wollastonite	misc. part.	
					-	< 1	99	

Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for the scope specific under Lab Code 101807-0.
State of Hawaii Asbestos Requirements mandates all samples to be collected by a certified Asbestos Inspector in accordance with § 11-501, 11-502, and 11-504. Results of samples collected by someone other than a certified Asbestos Inspector may be invalid.
Note: EPA, OSHA, and HIOSH define "asbestos-containing material" as any material or product which contains more than one percent asbestos.

*Laboratory test report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.
*Laboratory test report relates only to items tested.
*Asbestos fiber percentage is approximate - performed by visual observation only, unless otherwise indicated.

*This method is not reliable for analysis of tile or other materials when fiber size is less than 10 microns and/or below detection limit (appr. 1%) of current PLM techniques.
*Samples analyzed as received by the laboratory, interpretation is responsibility of the client.

This report may not be reproduced except in full and with the permission of EMET.
EMET Services, Inc. 94-520 Uke`e Street, Suite A, Waipahu, Hawaii 96797 Phone: (808) 671-8383 FAX: (808) 6717979

© 2013 EnvironMETeo Services, Inc.

Unified Homogeneous/Sample Area ACM - Space and Salient Cross Reference

Building ID and Name

IP	IOLANI PALACE

For the ACM - Space Identified as:

210-IP-A

Building Location

364 S. King St.
Honolulu, HI 96813

EMET ID

2505210

Inspection Date(s): 7/29/2025, 9/2/2025

Unified Sample Area	Homogeneous Sample Area or Salient Description	Comments	ACM Present			Material Type*			Response Action	Estimated Cost to Remove
			Suspected	Confirmed	Friable	T	DC	PD		
210-IP-AA	WHITE CAULKING AT WINDOW FRAME	trace (<1%) asbestos detected	YES	NO						
210-IP-AB	GRAY TEXTURED COATING		YES	NO						
210-IP-AC	GYPSUM WALLBOARD/MUDJOINT WALL SYSTEM		YES	NO						

*** Refers to Material Type and Damage Conditions**

T = Material Type:	DC = Damage Condition:	PD = Potential Damage Condition:
S = Surfacing	ND = No Damage	NPD = No Potential Damage
M = Miscellaneous	D = Damaged	PD = ACBM w/ Potential Damage
T = Thermal Systems	SD = Significant Damage	PSD = Potential Significant Damage

**** Recommended Response Actions:**

1. Isolate area and restrict access. Remove or repair ASAP.
2. Continue Operations and Maintenance (O&M) program. Remove or repair ASAP or reduce potential for disturbance.

3-5. Repair, continue O&M. Lower number indicates higher priority if all repair cannot be done immediately.

6-7. Continue O&M. Take preventive measures to reduce disturbance. Number indicates priority for removal.

8. Continue O&M until major renovation or demolition requires removal under NESHAPS, or until hazard assessment factors change.

Note: An O&M program may include enclosure and encapsulation.

© 2013 EnvironMETeo Services, Inc.

Sample Area Report - Area Master

EMET ID	Building Number and Name		Inspection Date
2505210	IP	IOLANI PALACE	9/2/2025
	Material ID and Description		
Document Number	210-IP-AA	WHITE CAULKING AT WINDOW FRAME	Unified Sample Area Number
	Drawing/Sketch Number		210-IP-AA

A Sample Area should contain material of one, and only one, composition or matrix. An exception can be made in the case of layered applications of materials, such as occurs with a Three Coat Plaster system, that generally matches the same physical locations. Special care must be taken while collecting samples of layered materials, to enable the analysis to discern the several matrices present. Such conditions should be described in detail on the Sample Notes form for the analyst.

Unified Sample Area/Homogeneous Material

WHITE CAULKING AT WINDOW FRAME

trace (<1%) asbestos detected

Location of Confirmed, Assumed, or New ACM within Building

Not Applicable

around perimeter window frames

SAMPLING STRATEGY DATA

Ceiling Height #1	
#2	
Square Feet of Ceiling Materials	
Square Feet of Wall Materials	
Square Feet of Floor Surface	
Linear Feet of TSI	
Square Feet of Structural Steel Coatings (including over-spray)	
Square Feet of Other ACM	
Linear Feet of Other ACM	100
Total square and/or linear feet of ACM in this Sample Space:	±100

RISK ASSESSMENT DETERMINATION

Physical Condition	Potential Damage	Water Damage
- -	- -	- -
Visible	**Reachable**	**Texture**
- -	- -	- -
Barriers	**Ventilation** / **If Yes**	**Friable Surface**
- -	- - / - -	- - / - -
Air Movement	**Proximity to Repair Items**	**Activity**
- -	- -	- -

SAMPLE ANALYSIS SUMMARY SECTION

Total Number of Samples Collected	3
Samples Collected by	EMET
Sample Numbers	210-IP-AA1, 210-IP-AA2, 210-IP-AA3
Total Number of Samples Analyzed	3
Samples Analyzed by	EMET
ASBESTOS-CONTAINING MATERIAL ?	**NO**
Number of Salient Designations:	

PHOTOGRAPH

© 2013 EnvironMETeo Services, Inc.

Sample Log and Notes

Building Number and Name		EMET ID
IP	IOLANI PALACE	2505210

Sample Area/Lot Number and Name	
210-IP-AA	WHITE CAULKING AT WINDOW FRAME

Sample Number	% Asbestos	Description of Sampled Material	Sample Location
210-IP-AA1	< 1	WHITE CAULKING AT WINDOW FRAME	mauka end, Waikiki window
210-IP-AA2	< 1	WHITE CAULKING AT WINDOW FRAME	mauka end, Ewa window
210-IP-AA3	< 1	WHITE CAULKING AT WINDOW FRAME	makai end, Waikiki window

Inspector's Name	Signature	Date Samples Collected
Andrew Uyeda		9/2/2025

EMET Services, Inc. 94-520 Uke`e Street, Suite A Waipahu, HI 96797
Phone (808) 671-8383 Fax (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

LABORATORY REPORT

Asbestos Bulk Sample Analysis by Polarized Light Microscopy
in accordance with 40 CFR Part 763 Appendix E to Subpart E

NVLAP®

Client: Mason Architects, Inc.

Address: 119 Merchant Street, Suite 501
Honolulu, HI 96813

Building: IOLANI PALACE

Address: 364 S. King St.
Honolulu, HI 96813

NVLAP LAB CODE 101807-0

Approved Signatory:

Sample/Homogeneous Area: 210-IP-AA Analysis Date: 9/4/2025 Report Date: 9/4/2025

Lab ID	Sample ID	Color	Homogeneity	Asbestos Detected	Asbestos (Type) Area %	Fibrous Components Area %	Non-fibrous Components Area %	Comments
210-022	210-IP-AA1	white	Yes	Yes	chrysotile	-	misc. part.	
					< 1	-	99	
210-023	210-IP-AA2	white	Yes	Yes	chrysotile	-	misc. part.	
					< 1	-	99	
210-024	210-IP-AA3	white	Yes	Yes	chrysotile	-	misc. part.	
					< 1	-	99	

Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for the scope specific under Lab Code 101807-0.
State of Hawaii Asbestos Requirements mandates all samples to be collected by a certified Asbestos Inspector in accordance with § 11-501, 11-502, and 11-504. Results of samples collected by someone other than a certified Asbestos Inspector may be invalid.
Note: EPA, OSHA, and HIOSH define "asbestos-containing material" as any material or product which contains more than one percent asbestos.

*Laboratory test report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.
*Laboratory test report relates only to items tested.
*Asbestos fiber percentage is approximate - performed by visual observation only, unless otherwise indicated.

*This method is not reliable for analysis of tile or other materials when fiber size is less than 10 microns and/or below detection limit (appr. 1%) of current PLM techniques.
*Samples analyzed as received by the laboratory, interpretation is responsibility of the client.

This report may not be reproduced except in full and with the permission of EMET.
EMET Services, Inc. 94-520 Uke`e Street, Suite A, Waipahu, Hawaii 96797 Phone: (808) 671-8383 FAX: (808) 6717979

© 2013 EnvironMETeo Services, Inc.

Sample Area Report - Area Master

EMET ID	Building Number and Name		Inspection Date
2505210	IP	IOLANI PALACE	9/2/2025
	Material ID and Description		
Document Number	210-IP-AB	GRAY TEXTURED COATING	Unified Sample Area Number
	Drawing/Sketch Number		210-IP-AB

A Sample Area should contain material of one, and only one, composition or matrix. An exception can be made in the case of layered applications of materials, such as occurs with a Three Coat Plaster system, that generally matches the same physical locations. Special care must be taken while collecting samples of layered materials, to enable the analysis to discern the several matrices present. Such conditions should be described in detail on the Sample Notes form for the analyst.

Unified Sample Area/Homogeneous Material

GRAY TEXTURED COATING

Location of Confirmed, Assumed, or New ACM within Building

Not Applicable

SAMPLING STRATEGY DATA

Ceiling Height #1	
#2	
Square Feet of Ceiling Materials	
Square Feet of Wall Materials	
Square Feet of Floor Surface	
Linear Feet of TSI	
Square Feet of Structural Steel Coatings (including over-spray)	
Square Feet of Other ACM	
Linear Feet of Other ACM	
Total square and/or linear feet of ACM in this Sample Space:	

RISK ASSESSMENT DETERMINATION

Physical Condition	Potential Damage	Water Damage
- -	- -	- -
Visible	**Reachable**	**Texture**
- -	- -	- -

Barriers	Ventilation	If Yes	Friable Surface	
- -	- -	- -	- -	- -

Air Movement	Proximity to Repair Items	Activity
- -	- -	- -

SAMPLE ANALYSIS SUMMARY SECTION

Total Number of Samples Collected	3
Samples Collected by	EMET
Sample Numbers	210-IP-AB1, 210-IP-AB2, 210-IP-AB3
Total Number of Samples Analyzed	3
Samples Analyzed by	EMET
ASBESTOS-CONTAINING MATERIAL ?	**NO**
Number of Salient Designations:	

PHOTOGRAPH

© 2013 EnvironMETeo Services, Inc.

Sample Log and Notes

Building Number and Name		EMET ID
IP	IOLANI PALACE	2505210

Sample Area/Lot Number and Name	
210-IP-AB	GRAY TEXTURED COATING

Sample Number	% Asbestos	Description of Sampled Material	Sample Location
210-IP-AB1	0	GRAY TEXTURED COATING	mauka end, Waikiki window
210-IP-AB2	0	GRAY TEXTURED COATING	makai end, Ewa window
210-IP-AB3	0	GRAY TEXTURED COATING	makai end, Waikiki window

Inspector's Name	Signature	Date Samples Collected
Andrew Uyeda		9/2/2025

EMET Services, Inc. 94-520 Uke`e Street, Suite A Waipahu, HI 96797
Phone (808) 671-8383 Fax (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

LABORATORY REPORT

Asbestos Bulk Sample Analysis by Polarized Light Microscopy
in accordance with 40 CFR Part 763 Appendix E to Subpart E

NVLAP LAB CODE 101807-0

Client: Mason Architects, Inc.

Address: 119 Merchant Street, Suite 501
Honolulu, HI 96813

Building: IOLANI PALACE

Address: 364 S. King St.
Honolulu, HI 96813

Approved Signatory:

Sample/Homogeneous Area: 210-IP-AB Analysis Date: 9/4/2025 Report Date: 9/4/2025

Lab ID	Sample ID	Color	Homogeneity	Asbestos Detected	Asbestos (Type) Area %	Fibrous Components Area %	Non-fibrous Components Area %	Comments
210-025	210-IP-AB1	gray	Yes	No	-	-	misc. part.	
					-	-	100	
210-026	210-IP-AB2	gray	Yes	No	-	-	misc. part.	
					-	-	100	
210-027	210-IP-AB3	gray	Yes	No	-	-	misc. part.	
					-	-	100	

Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for the scope specific under Lab Code 101807-0.
State of Hawaii Asbestos Requirements mandates all samples to be collected by a certified Asbestos Inspector in accordance with § 11-501, 11-502, and 11-504. Results of samples collected by someone other than a certified Asbestos Inspector may be invalid.
Note: EPA, OSHA, and HIOSH define “asbestos-containing material” as any material or product which contains more than one percent asbestos.

*Laboratory test report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.
*Laboratory test report relates only to items tested.
*Asbestos fiber percentage is approximate - performed by visual observation only, unless otherwise indicated.

*This method is not reliable for analysis of tile or other materials when fiber size is less than 10 microns and/or below detection limit (appr. 1%) of current PLM techniques.
*Samples analyzed as received by the laboratory, interpretation is responsibility of the client.

This report may not be reproduced except in full and with the permission of EMET.
EMET Services, Inc. 94-520 Uke`e Street, Suite A, Waipahu, Hawaii 96797 Phone: (808) 671-8383 FAX: (808) 6717979

© 2013 EnvironMETeo Services, Inc.

Sample Area Report - Area Master

EMET ID	Building Number and Name		Inspection Date
2505210	IP	IOLANI PALACE	9/2/2025
	Material ID and Description		
Document Number	210-IP-AC	GYPSUM WALLBOARD/MUDJOINT WALL SYSTEM	Unified Sample Area Number
	Drawing/Sketch Number		210-IP-AC

A Sample Area should contain material of one, and only one, composition or matrix. An exception can be made in the case of layered applications of materials, such as occurs with a Three Coat Plaster system, that generally matches the same physical locations. Special care must be taken while collecting samples of layered materials, to enable the analysis to discern the several matrices present. Such conditions should be described in detail on the Sample Notes form for the analyst.

Unified Sample Area/Homogeneous Material

GYPSUM WALLBOARD/MUDJOINT WALL SYSTEM

Location of Confirmed, Assumed, or New ACM within Building

Not Applicable

interior

SAMPLING STRATEGY DATA

Ceiling Height #1		#2	
Square Feet of Ceiling Materials			
Square Feet of Wall Materials			
Square Feet of Floor Surface			
Linear Feet of TSI			
Square Feet of Structural Steel Coatings (including over-spray)			
Square Feet of Other ACM			
Linear Feet of Other ACM			
Total square and/or linear feet of ACM in this Sample Space:			

RISK ASSESSMENT DETERMINATION

Physical Condition	Potential Damage	Water Damage
- -	- -	- -
Visible	**Reachable**	**Texture**
- -	- -	- -

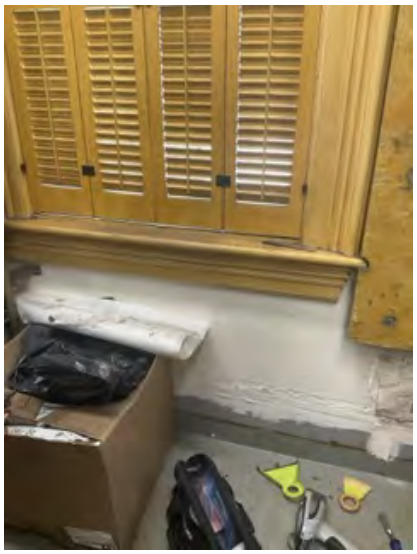
Barriers	Ventilation	If Yes	Friable Surface	
- -	- -	- -	- -	- -

Air Movement	Proximity to Repair Items	Activity
- -	- -	- -

SAMPLE ANALYSIS SUMMARY SECTION

Total Number of Samples Collected	3
Samples Collected by	EMET
Sample Numbers	210-IP-AC1, 210-IP-AC2, 210-IP-AC3
Total Number of Samples Analyzed	3
Samples Analyzed by	EMET
ASBESTOS-CONTAINING MATERIAL ?	**NO**
Number of Salient Designations:	

PHOTOGRAPH



EMET Services, Inc. • 94-520 Uke`e Street, Suite A • Waipahu, Hawaii 96797
Phone: (808) 671-8383 • FAX: (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

Sample Log and Notes

Building Number and Name		EMET ID
IP	IOLANI PALACE	2505210

Sample Area/Lot Number and Name	
210-IP-AC	GYPSUM WALLBOARD/MUDJOINT WALL SYSTEM

Sample Number	% Asbestos	Description of Sampled Material	Sample Location
210-IP-AC1	0	GYPSUM WALLBOARD/MUDJOINT WALL SYSTEM	interior of makai/Waikiki window
210-IP-AC2	0	GYPSUM WALLBOARD/MUDJOINT WALL SYSTEM	interior of makai/Waikiki window
210-IP-AC3	0	GYPSUM WALLBOARD/MUDJOINT WALL SYSTEM	interior of mauka/Waikiki window

Inspector's Name	Signature	Date Samples Collected
Andrew Uyeda		9/2/2025

EMET Services, Inc. 94-520 Uke`e Street, Suite A Waipahu, HI 96797
Phone (808) 671-8383 Fax (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

LABORATORY REPORT

Asbestos Bulk Sample Analysis by Polarized Light Microscopy
in accordance with 40 CFR Part 763 Appendix E to Subpart E

NVLAP®

Client: Mason Architects, Inc.

Address: 119 Merchant Street, Suite 501
Honolulu, HI 96813

Building: IOLANI PALACE

Address: 364 S. King St.
Honolulu, HI 96813

NVLAP LAB CODE 101807-0

Approved Signatory:

Sample/Homogeneous Area: 210-IP-AC Analysis Date: 9/4/2025 Report Date: 9/4/2025

Lab ID	Sample ID	Color	Homogeneity	Asbestos Detected	Asbestos (Type) Area %	Fibrous Components Area %	Non-fibrous Components Area %	Comments
210-028	210-IP-AC1	white	Yes	No	-	-	misc. part.	
					-	-	100	
210-029	210-IP-AC2	white	Yes	No	-	-	misc. part.	
					-	-	100	
210-030	210-IP-AC3	white	Yes	No	-	-	misc. part.	
					-	-	100	

Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for the scope specific under Lab Code 101807-0.
State of Hawaii Asbestos Requirements mandates all samples to be collected by a certified Asbestos Inspector in accordance with § 11-501, 11-502, and 11-504. Results of samples collected by someone other than a certified Asbestos Inspector may be invalid.
Note: EPA, OSHA, and HIOSH define "asbestos-containing material" as any material or product which contains more than one percent asbestos.

*Laboratory test report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.
*Laboratory test report relates only to items tested.
*Asbestos fiber percentage is approximate - performed by visual observation only, unless otherwise indicated.

*This method is not reliable for analysis of tile or other materials when fiber size is less than 10 microns and/or below detection limit (appr. 1%) of current PLM techniques.
*Samples analyzed as received by the laboratory, interpretation is responsibility of the client.

This report may not be reproduced except in full and with the permission of EMET.
EMET Services, Inc. 94-520 Uke`e Street, Suite A, Waipahu, Hawaii 96797 Phone: (808) 671-8383 FAX: (808) 6717979

© 2013 EnvironMETeo Services, Inc.

Unified Homogeneous/Sample Area ACM - Space and Salient Cross Reference

Building ID and Name

IP	IOLANI PALACE

For the ACM - Space Identified as:

210-IP-B

Building Location

364 S. King St.
Honolulu, HI 96813

EMET ID

2505210

Inspection Date(s): 7/29/2025, 9/2/2025

Unified Sample Area	Homogeneous Sample Area or Salient Description	Comments	ACM Present			Material Type*			Response Action	Estimated Cost to Remove
			Suspected	Confirmed	Friable	T	DC	PD		
210-IP-BA	WHITE WINDOW GLAZING		YES	NO						
210-IP-BB	GRAY TEXTURED COATING ON FRAMES		YES	NO						
210-IP-BC	WHITE CAULKING AT WINDOW FRAME		YES	NO						

*** Refers to Material Type and Damage Conditions**

T = Material Type:	DC = Damage Condition:	PD = Potential Damage Condition:
S = Surfacing	ND = No Damage	NPD = No Potential Damage
M = Miscellaneous	D = Damaged	PD = ACBM w/ Potential Damage
T = Thermal Systems	SD = Significant Damage	PSD = Potential Significant Damage

**** Recommended Response Actions:**

1. Isolate area and restrict access. Remove or repair ASAP.
2. Continue Operations and Maintenance (O&M) program. Remove or repair ASAP or reduce potential for disturbance.

3-5. Repair, continue O&M. Lower number indicates higher priority if all repair cannot be done immediately.

6-7. Continue O&M. Take preventive measures to reduce disturbance. Number indicates priority for removal.

8. Continue O&M until major renovation or demolition requires removal under NESHAPS, or until hazard assessment factors change.

Note: An O&M program may include enclosure and encapsulation.

© 2013 EnvironMETeo Services, Inc.

Sample Area Report - Area Master

EMET ID	Building Number and Name		Inspection Date
2505210	IP	IOLANI PALACE	7/29/2025
	Material ID and Description		
Document Number	210-IP-BA	WHITE WINDOW GLAZING	Unified Sample Area Number
	Drawing/Sketch Number		210-IP-BA

A Sample Area should contain material of one, and only one, composition or matrix. An exception can be made in the case of layered applications of materials, such as occurs with a Three Coat Plaster system, that generally matches the same physical locations. Special care must be taken while collecting samples of layered materials, to enable the analysis to discern the several matrices present. Such conditions should be described in detail on the Sample Notes form for the analyst.

Unified Sample Area/Homogeneous Material

WHITE WINDOW GLAZING

Location of Confirmed, Assumed, or New ACM within Building

Not Applicable

door lites

SAMPLING STRATEGY DATA

Ceiling Height #1		#2	
Square Feet of Ceiling Materials			
Square Feet of Wall Materials			
Square Feet of Floor Surface			
Linear Feet of TSI			
Square Feet of Structural Steel Coatings (including over-spray)			
Square Feet of Other ACM			
Linear Feet of Other ACM			
Total square and/or linear feet of ACM in this Sample Space:			

RISK ASSESSMENT DETERMINATION

Physical Condition	Potential Damage	Water Damage
- -	- -	- -
Visible	**Reachable**	**Texture**
- -	- -	- -

Barriers	Ventilation	If Yes	Friable Surface	
- -	- -	- -	- -	- -

Air Movement	Proximity to Repair Items	Activity
- -	- -	- -

SAMPLE ANALYSIS SUMMARY SECTION

Total Number of Samples Collected	3
Samples Collected by	EMET
Sample Numbers	210-IP-BA1, 210-IP-BA2, 210-IP-BA3
Total Number of Samples Analyzed	3
Samples Analyzed by	EMET
ASBESTOS-CONTAINING MATERIAL ?	**NO**
Number of Salient Designations:	

PHOTOGRAPH

EMET Services, Inc. • 94-520 Uke`e Street, Suite A • Waipahu, Hawaii 96797
Phone: (808) 671-8383 • FAX: (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

Sample Log and Notes

Building Number and Name		EMET ID
IP	IOLANI PALACE	2505210

Sample Area/Lot Number and Name	
210-IP-BA	WHITE WINDOW GLAZING

Sample Number	% Asbestos	Description of Sampled Material	Sample Location
210-IP-BA1	0	WHITE WINDOW GLAZING	middle of Ewa side
210-IP-BA2	0	WHITE WINDOW GLAZING	middle of Ewa side
210-IP-BA3	0	WHITE WINDOW GLAZING	middle of Waikiki side

Inspector's Name	Signature	Date Samples Collected
Andrew Uyeda		7/29/2025

EMET Services, Inc. 94-520 Uke`e Street, Suite A Waipahu, HI 96797
Phone (808) 671-8383 Fax (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

LABORATORY REPORT

Asbestos Bulk Sample Analysis by Polarized Light Microscopy
in accordance with 40 CFR Part 763 Appendix E to Subpart E

NVLAP®

Client: Mason Architects, Inc.

Address: 119 Merchant Street, Suite 501
Honolulu, HI 96813

Building: IOLANI PALACE

Address: 364 S. King St.
Honolulu, HI 96813

NVLAP LAB CODE 101807-0

Approved Signatory:

Sample/Homogeneous Area: 210-IP-BA Analysis Date: 8/5/2025 Report Date: 8/5/2025

Lab ID	Sample ID	Color	Homogeneity	Asbestos Detected	Asbestos (Type) Area %	Fibrous Components Area %	Non-fibrous Components Area %	Comments
210-001	210-IP-BA1	white	Yes	No	-	-	misc. part.	
					-	-	100	
210-002	210-IP-BA2	white	Yes	No	-	-	misc. part.	
					-	-	100	
210-003	210-IP-BA3	white	Yes	No	-	-	misc. part.	
					-	-	100	

Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for the scope specific under Lab Code 101807-0.
State of Hawaii Asbestos Requirements mandates all samples to be collected by a certified Asbestos Inspector in accordance with § 11-501, 11-502, and 11-504. Results of samples collected by someone other than a certified Asbestos Inspector may be invalid.
Note: EPA, OSHA, and HIOSH define "asbestos-containing material" as any material or product which contains more than one percent asbestos.

*Laboratory test report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.
*Laboratory test report relates only to items tested.
*Asbestos fiber percentage is approximate - performed by visual observation only, unless otherwise indicated.

*This method is not reliable for analysis of tile or other materials when fiber size is less than 10 microns and/or below detection limit (appr. 1%) of current PLM techniques.
*Samples analyzed as received by the laboratory, interpretation is responsibility of the client.

This report may not be reproduced except in full and with the permission of EMET.
EMET Services, Inc. 94-520 Uke`e Street, Suite A, Waipahu, Hawaii 96797 Phone: (808) 671-8383 FAX: (808) 6717979

© 2013 EnvironMETeo Services, Inc.

Sample Area Report - Area Master

EMET ID	Building Number and Name		Inspection Date
2505210	IP	IOLANI PALACE	7/29/2025
	Material ID and Description		
Document Number	210-IP-BB	GRAY TEXTURED COATING ON FRAMES	Unified Sample Area Number
	Drawing/Sketch Number		210-IP-BB

A Sample Area should contain material of one, and only one, composition or matrix. An exception can be made in the case of layered applications of materials, such as occurs with a Three Coat Plaster system, that generally matches the same physical locations. Special care must be taken while collecting samples of layered materials, to enable the analysis to discern the several matrices present. Such conditions should be described in detail on the Sample Notes form for the analyst.

Unified Sample Area/Homogeneous Material

GRAY TEXTURED COATING ON FRAMES

Location of Confirmed, Assumed, or New ACM within Building

Not Applicable

SAMPLING STRATEGY DATA

Ceiling Height #1		#2	
Square Feet of Ceiling Materials			
Square Feet of Wall Materials			
Square Feet of Floor Surface			
Linear Feet of TSI			
Square Feet of Structural Steel Coatings (including over-spray)			
Square Feet of Other ACM			
Linear Feet of Other ACM			
Total square and/or linear feet of ACM in this Sample Space:			

RISK ASSESSMENT DETERMINATION

Physical Condition	Potential Damage	Water Damage
- -	- -	- -
Visible	**Reachable**	**Texture**
- -	- -	- -

Barriers	Ventilation	If Yes	Friable Surface	
- -	- -	- -	- -	- -

Air Movement	Proximity to Repair Items	Activity
- -	- -	- -

SAMPLE ANALYSIS SUMMARY SECTION

Total Number of Samples Collected	3
Samples Collected by	EMET
Sample Numbers	210-IP-BB1, 210-IP-BB2, 210-IP-BB3
Total Number of Samples Analyzed	3
Samples Analyzed by	EMET
ASBESTOS-CONTAINING MATERIAL ?	**NO**
Number of Salient Designations:	

PHOTOGRAPH

EMET Services, Inc. • 94-520 Uke`e Street, Suite A • Waipahu, Hawaii 96797
Phone: (808) 671-8383 • FAX: (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

Sample Log and Notes

Building Number and Name		EMET ID
IP	IOLANI PALACE	2505210

Sample Area/Lot Number and Name	
210-IP-BB	GRAY TEXTURED COATING ON FRAMES

Sample Number	% Asbestos	Description of Sampled Material	Sample Location
210-IP-BB1	0	GRAY TEXTURED COATING ON FRAMES	Waikiki/makai corner
210-IP-BB2	0	GRAY TEXTURED COATING ON FRAMES	middle of Waikiki side
210-IP-BB3	0	GRAY TEXTURED COATING ON FRAMES	mauka/Ewa corner

Inspector's Name	Signature	Date Samples Collected
Andrew Uyeda		7/29/2025

EMET Services, Inc. 94-520 Uke`e Street, Suite A Waipahu, HI 96797
Phone (808) 671-8383 Fax (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

LABORATORY REPORT

Asbestos Bulk Sample Analysis by Polarized Light Microscopy
in accordance with 40 CFR Part 763 Appendix E to Subpart E

NVLAP LAB CODE 101807-0

Client: Mason Architects, Inc.

Address: 119 Merchant Street, Suite 501
Honolulu, HI 96813

Building: IOLANI PALACE

Address: 364 S. King St.
Honolulu, HI 96813

Approved Signatory:

Sample/Homogeneous Area: 210-IP-BB Analysis Date: 8/5/2025 Report Date: 8/5/2025

Lab ID	Sample ID	Color	Homogeneity	Asbestos Detected	Asbestos (Type) Area %	Fibrous Components Area %	Non-fibrous Components Area %	Comments
210-004	210-IP-BB1	gray	Yes	No	-	wollastonite	misc. part.	
					-	< 1	99	
210-005	210-IP-BB2	gray	Yes	No	-	wollastonite	misc. part.	
					-	< 1	99	
210-006	210-IP-BB3	gray	Yes	No	-	wollastonite	misc. part.	
					-	2	98	

Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for the scope specific under Lab Code 101807-0.
State of Hawaii Asbestos Requirements mandates all samples to be collected by a certified Asbestos Inspector in accordance with § 11-501, 11-502, and 11-504. Results of samples collected by someone other than a certified Asbestos Inspector may be invalid.
Note: EPA, OSHA, and HIOSH define “asbestos-containing material” as any material or product which contains more than one percent asbestos.

*Laboratory test report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.
*Laboratory test report relates only to items tested.
*Asbestos fiber percentage is approximate - performed by visual observation only, unless otherwise indicated.

*This method is not reliable for analysis of tile or other materials when fiber size is less than 10 microns and/or below detection limit (appr. 1%) of current PLM techniques.
*Samples analyzed as received by the laboratory, interpretation is responsibility of the client.

This report may not be reproduced except in full and with the permission of EMET.
EMET Services, Inc. 94-520 Uke`e Street, Suite A, Waipahu, Hawaii 96797 Phone: (808) 671-8383 FAX: (808) 6717979

© 2013 EnvironMETeo Services, Inc.

Sample Area Report - Area Master

EMET ID	Building Number and Name		Inspection Date
2505210	IP	IOLANI PALACE	7/29/2025
	Material ID and Description		
Document Number	210-IP-BC	WHITE CAULKING AT WINDOW FRAME	Unified Sample Area Number
	Drawing/Sketch Number		210-IP-BC

A Sample Area should contain material of one, and only one, composition or matrix. An exception can be made in the case of layered applications of materials, such as occurs with a Three Coat Plaster system, that generally matches the same physical locations. Special care must be taken while collecting samples of layered materials, to enable the analysis to discern the several matrices present. Such conditions should be described in detail on the Sample Notes form for the analyst.

Unified Sample Area/Homogeneous Material

WHITE CAULKING AT WINDOW FRAME

Location of Confirmed, Assumed, or New ACM within Building

Not Applicable

SAMPLING STRATEGY DATA

Ceiling Height #1		#2	
Square Feet of Ceiling Materials			
Square Feet of Wall Materials			
Square Feet of Floor Surface			
Linear Feet of TSI			
Square Feet of Structural Steel Coatings (including over-spray)			
Square Feet of Other ACM			
Linear Feet of Other ACM			
Total square and/or linear feet of ACM in this Sample Space:			

RISK ASSESSMENT DETERMINATION

Physical Condition	Potential Damage	Water Damage
- -	- -	- -
Visible	**Reachable**	**Texture**
- -	- -	- -

Barriers	Ventilation	If Yes	Friable Surface	
- -	- -	- -	- -	- -

Air Movement	Proximity to Repair Items	Activity
- -	- -	- -

SAMPLE ANALYSIS SUMMARY SECTION

Total Number of Samples Collected	3
Samples Collected by	EMET
Sample Numbers	210-IP-BC1, 210-IP-BC2, 210-IP-BC3
Total Number of Samples Analyzed	3
Samples Analyzed by	EMET
ASBESTOS-CONTAINING MATERIAL ?	**NO**
Number of Salient Designations:	

PHOTOGRAPH

EMET Services, Inc. • 94-520 Uke`e Street, Suite A • Waipahu, Hawaii 96797
Phone: (808) 671-8383 • FAX: (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

Sample Log and Notes

Building Number and Name		EMET ID
IP	IOLANI PALACE	2505210

Sample Area/Lot Number and Name	
210-IP-BC	WHITE CAULKING AT WINDOW FRAME

Sample Number	% Asbestos	Description of Sampled Material	Sample Location
210-IP-BC1	0	WHITE CAULKING AT WINDOW FRAME	mauka/Ewa corner
210-IP-BC2	0	WHITE CAULKING AT WINDOW FRAME	Waikiki/makai corner
210-IP-BC3	0	WHITE CAULKING AT WINDOW FRAME	middle of Waikiki side

Inspector's Name	Signature	Date Samples Collected
Andrew Uyeda		7/29/2025

EMET Services, Inc. 94-520 Uke`e Street, Suite A Waipahu, HI 96797
Phone (808) 671-8383 Fax (808) 671-7979

© 2013 EnvironMETeo Services, Inc.

LABORATORY REPORT

Asbestos Bulk Sample Analysis by Polarized Light Microscopy
in accordance with 40 CFR Part 763 Appendix E to Subpart E

NVLAP®

Client: Mason Architects, Inc.

Address: 119 Merchant Street, Suite 501
Honolulu, HI 96813

Building: IOLANI PALACE

Address: 364 S. King St.
Honolulu, HI 96813

NVLAP LAB CODE 101807-0

Approved Signatory:

Sample/Homogeneous Area: 210-IP-BC Analysis Date: 8/5/2025 Report Date: 8/5/2025

Lab ID	Sample ID	Color	Homogeneity	Asbestos Detected	Asbestos (Type) Area %	Fibrous Components Area %	Non-fibrous Components Area %	Comments
210-007	210-IP-BC1	white	Yes	No	-	-	misc. part.	
					-	-	100	
210-008	210-IP-BC2	white	Yes	No	-	-	misc. part.	
					-	-	100	
210-009	210-IP-BC3	white	Yes	No	-	-	misc. part.	
					-	-	100	

Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for the scope specific under Lab Code 101807-0.
State of Hawaii Asbestos Requirements mandates all samples to be collected by a certified Asbestos Inspector in accordance with § 11-501, 11-502, and 11-504. Results of samples collected by someone other than a certified Asbestos Inspector may be invalid.
Note: EPA, OSHA, and HIOSH define "asbestos-containing material" as any material or product which contains more than one percent asbestos.

*Laboratory test report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.
*Laboratory test report relates only to items tested.
*Asbestos fiber percentage is approximate - performed by visual observation only, unless otherwise indicated.

*This method is not reliable for analysis of tile or other materials when fiber size is less than 10 microns and/or below detection limit (appr. 1%) of current PLM techniques.
*Samples analyzed as received by the laboratory, interpretation is responsibility of the client.

This report may not be reproduced except in full and with the permission of EMET.
EMET Services, Inc. 94-520 Uke`e Street, Suite A, Waipahu, Hawaii 96797 Phone: (808) 671-8383 FAX: (808) 6717979

© 2013 EnvironMETeo Services, Inc.

Appendix B

Lead Paint Test Results

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

Laboratory Report

Painted Surfaces Total Elemental Lead Analyses by X-Ray Fluorescence

EMET ID: 2505210 **Test Date: July 29, 2025**

Iolani Palace
Windows and Doors

XRF#	Location	Side	Component	Substrate	Condition	Color	Lead Pb (mg/cm²)	Lead-Based Paint	Confirmed Lead-Containing Paint
6	Calibration						1.03 ± 0.10		
7	Calibration						1.10 ± 0.10		
8	NULL								
9	Calibration						1.05 ± 0.10		
10	Basement exterior	South	door	wood	poor	yellow	<LOD ± 0.01	no	no
11	Basement exterior	South	door frame	wood	fair	gray	<LOD ± 0.01	no	no
12	Basement exterior	South	window frame	wood	poor	gray	<LOD ± 0.01	no	no
13	NULL								
14	NULL								
15	NULL								
16	Basement exterior		window	wood	poor	yellow	0.12 ± 0.02	no	yes
17	Basement exterior	East	window frame	wood	poor	gray	0.70 ± 0.13	no	yes
18	**Basement exterior**	**East**	**window**	**wood**	**poor**	**yellow**	**1.12 ± 0.16**	**yes**	**yes**
19	Basement exterior	East	door frame	wood	poor	gray	<LOD ± 0.01	no	no
20	Basement exterior	East	door	wood	poor	yellow	0.03 ± 0.01	no	yes
21	Basement exterior	North	window frame	wood	poor	gray	<LOD ± 0.01	no	no
22	Basement exterior	North	window	wood	poor	yellow	0.08 ± 0.02	no	yes
23	Basement exterior	North	door frame	wood	poor	gray	0.12 ± 0.03	no	yes
24	Basement exterior	North	door	wood	poor	yellow	<LOD ± 0.01	no	no
25	Basement exterior	North	muntin	wood	poor	yellow	<LOD ± 0.01	no	no
26	Basement exterior	West	window frame	wood	poor	gray	<LOD ± 0.01	no	no
27	Basement exterior	West	window	wood	poor	yellow	0.17 ± 0.03	no	yes
28	Basement interior	East	wall	concrete	fair	beige	<LOD ± 0.01	no	no
29	Basement interior	South	door frame	wood	intact	stained	0.07 ± 0.01	no	yes
30	Basement interior	South	door	wood	fair	stained	<LOD ± 0.01	no	no
31	Basement interior	South	muntin	wood	intact	stained	0.03 ± 0.01	no	yes
32	Basement interior	South	window frame	wood	intact	stained	0.73 ± 0.10	no	yes
33	**Basement interior**	**South**	**window**	**wood**	**intact**	**stained**	**7.44 ± 0.38**	**yes**	**yes**
34	Basement interior	South	window sill	wood	intact	stained	0.04 ± 0.01	no	yes
35	Basement interior	South	window blinds	wood	intact	stained	<LOD ± 0.01	no	no
36	Basement interior	East	wall	plaster	intact	beige	<LOD ± 0.01	no	no
37	Basement interior	East	door frame	wood	intact	stained	0.55 ± 0.10	no	yes
38	Basement interior	East	muntin	wood	intact	stained	0.34 ± 0.10	no	yes
39	Basement interior	East	window frame	wood	intact	stained	0.19 ± 0.02	no	yes
40	**Basement interior**	**East**	**window**	**wood**	**intact**	**stained**	**2.24 ± 0.14**	**yes**	**yes**
41	Basement interior	East	window sill	wood	intact	stained	0.19 ± 0.02	no	yes
42	Basement interior	East	blinds	wood	intact	stained	<LOD ± 0.01	no	no
43	Basement interior	North	wall	concrete	intact	beige	<LOD ± 0.01	no	no
44	Basement interior	North	door frame	wood	intact	stained	0.04 ± 0.01	no	yes
45	Basement interior	North	door	wood	intact	stained	0.02 ± 0.01	no	yes
46	Basement interior	North	muntin	wood	intact	stained	<LOD ± 0.01	no	no
47	Basement interior		floor	wood	fair	stained	<LOD ± 0.01	no	no
48	Basement interior	West	wall	concrete	intact	beige	<LOD ± 0.01	no	no
49	Basement interior	West	window frame	wood	intact	stained	0.10 ± 0.02	no	yes
50	**Basement interior**	**West**	**window**	**wood**	**intact**	**stained**	**3.88 ± 0.21**	**yes**	**yes**

"**Lead**" column indicates the detected lead content in paint film in mg/cm² (milligrams per square centimeter).
<LOD = less than instrument level of detection, 0.01 mg/cm².

Lead-based paint (LBP) is defined as paint with a lead content greater than or equal to 1.0 milligrams per square centimeter (mg/cm²).

Occupational Safety and Health Administration (OSHA) regulates activities disturbing paint that contains any amount of lead (lead-containing paint or LCP), even if the content is below the HUD standard.

Serial #112969, Model XL3t

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383...Telephone (808) 671-7979...Facsimile emet@emetservices.com...E-mail

EMET ID: 2505210 **Test Date: July 29, 2025**

Iolani Palace
Windows and Doors

XRF#	Location	Side	Component	Substrate	Condition	Color	Lead Pb (mg/cm²)	Lead-Based Paint	Confirmed Lead-Containing Paint
51	Basement interior	West	window sill	wood	intact	stained	0.03 ± 0.01	no	yes
52	Basement interior	West	blinds	wood	intact	stained	<LOD ± 0.01	no	no
53	Basement interior	North	window frame	wood	intact	gray	0.03 ± 0.01	no	yes
54	Basement interior	North	window sill	wood	intact	gray	<LOD ± 0.01	no	no
55	Basement interior	North	window board	wood	intact	gray	<LOD ± 0.01	no	no
56	1st floor exterior	West	window frame	wood	intact	gray	<LOD ± 0.01	no	no
57	**1st floor exterior**	**West**	**window**	**wood**	**intact**	**stained**	**2.64 ± 0.20**	**yes**	**yes**
58	1st floor exterior	West	muntin	wood	intact	stained	<LOD ± 0.01	no	no
59	1st floor exterior	West	window sill	wood	intact	gray	<LOD ± 0.01	no	no
60	1st floor exterior	West	door	wood	intact	stained	<LOD ± 0.01	no	no
61	**1st floor exterior**	**West**	**door frame**	**wood**	**intact**	**gray**	**3.18 ± 0.36**	**yes**	**yes**
62	1st floor exterior	North	window frame	wood	intact	stained	0.02 ± 0.01	no	yes
63	**1st floor exterior**	**North**	**window**	**wood**	**intact**	**stained**	**2.31 ± 0.18**	**yes**	**yes**
64	1st floor exterior	North	window sill	wood	fair	gray	<LOD ± 0.01	no	no
65	1st floor exterior	East	window frame	wood	intact	stained	<LOD ± 0.01	no	no
66	**1st floor exterior**	**East**	**window**	**wood**	**fair**	**stained**	**1.29 ± 0.13**	**yes**	**yes**
67	1st floor exterior	East	window sill	wood	intact	gray	<LOD ± 0.01	no	no
68	**1st floor exterior**	**East**	**door frame**	**wood**	**intact**	**gray**	**5.53 ± 0.52**	**yes**	**yes**
69	1st floor exterior	East	door	wood	intact	stained	<LOD ± 0.01	no	no
70	1st floor exterior	South	window frame	wood	intact	gray	0.21 ± 0.05	no	yes
71	**1st floor exterior**	**South**	**window**	**wood**	**intact**	**stained**	**2.15 ± 0.20**	**yes**	**yes**
72	1st floor interior	East	door frame	wood	intact	stained	<LOD ± 0.01	no	no
73	1st floor interior		door	wood	intact	stained	<LOD ± 0.01	no	no
74	1st floor interior	East	wall	concrete	intact	beige	<LOD ± 0.01	no	no
75	1st floor interior	East	window frame	wood	intact	stained	<LOD ± 0.01	no	no
76	1st floor interior	East	window	wood	intact	stained	<LOD ± 0.01	no	no
77	1st floor interior	East	blinds	wood	intact	stained	<LOD ± 0.01	no	no
78	1st floor interior	North	window frame	wood	intact	stained	<LOD ± 0.01	no	no
79	1st floor interior	North	window	wood	intact	stained	<LOD ± 0.01	no	no
80	1st floor interior	West	door frame	wood	intact	stained	<LOD ± 0.01	no	no
81	1st floor interior	West	door	wood	intact	stained	<LOD ± 0.01	no	no
82	1st floor interior	West	window frame	wood	intact	stained	<LOD ± 0.01	no	no
83	1st floor interior	West	blinds	wood	intact	stained	<LOD ± 0.01	no	no
84	1st floor interior	West	window	wood	intact	stained	<LOD ± 0.01	no	no
85	1st floor interior	South	window frame	wood	intact	stained	<LOD ± 0.01	no	no
86	1st floor interior	South	blinds	wood	intact	stained	<LOD ± 0.01	no	no
87	1st floor interior	South	window	wood	intact	stained	0.02 ± 0.01	no	yes
88	**2nd floor exterior**	**East**	**window frame**	**wood**	**intact**	**gray**	**1.33 ± 0.21**	**yes**	**yes**
89	2nd floor exterior	East	window	wood	intact	stained	0.53 ± 0.10	no	yes
90	**2nd floor exterior**	**South**	**window frame**	**wood**	**intact**	**gray**	**5.51 ± 0.51**	**yes**	**yes**
91	**2nd floor exterior**	**South**	**window**	**wood**	**intact**	**stained**	**1.76 ± 0.10**	**yes**	**yes**
92	**2nd floor exterior**	**West**	**window frame**	**wood**	**intact**	**stained**	**4.80 ± 0.48**	**yes**	**yes**
93	2nd floor exterior	West	window	wood	intact	stained	0.39 ± 0.10	no	yes
94	**2nd floor exterior**	**West**	**door frame**	**wood**	**intact**	**stained**	**2.24 ± 0.31**	**yes**	**yes**
95	2nd floor exterior	West	door	wood	intact	stained	0.15 ± 0.03	no	yes
96	2nd floor exterior	West	footing front of door	wood	intact	gray	0.02 ± 0.01	no	yes
97	2nd floor exterior	West	window sill	wood	intact	gray	0.02 ± 0.01	no	yes
98	**2nd floor exterior**	**North**	**window frame**	**wood**	**intact**	**gray**	**4.71 ± 0.48**	**yes**	**yes**
99	2nd floor exterior	North	window	wood	intact	silver	0.03 ± 0.01	no	yes
100	2nd floor exterior	North	window sill	wood	intact	gray	0.06 ± 0.01	no	yes

"**Lead**" column indicates the detected lead content in paint film in mg/cm² (milligrams per square centimeter).
<LOD = less than instrument level of detection, 0.01 mg/cm².

Lead-based paint (LBP) is defined as paint with a lead content greater than or equal to 1.0 milligrams per square centimeter (mg/cm²).

Occupational Safety and Health Administration (OSHA) regulates activities disturbing paint that contains any amount of lead (lead-containing paint or LCP), even if the content is below the HUD standard.

Serial #112969, Model XL3t

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone (808) 671-7979…Facsimile emet@emetservices.com...E-mail

EMET ID: 2505210 **Test Date: July 29, 2025**

Iolani Palace
Windows and Doors

XRF#	Location	Side	Component	Substrate	Condition	Color	Lead Pb (mg/cm²)	Lead-Based Paint	Confirmed Lead-Containing Paint
101	2nd floor interior	North	window frame	wood	intact	stained	0.02 ± 0.01	no	yes
102	2nd floor interior	North	blinds	wood	intact	stained	0.03 ± 0.01	no	yes
103	2nd floor interior	North	window	wood	intact	stained	0.04 ± 0.01	no	yes
104	2nd floor interior	East	window frame	wood	intact	stained	0.06 ± 0.01	no	yes
105	2nd floor interior	East	blinds	wood	intact	stained	0.05 ± 0.01	no	yes
106	2nd floor interior	East	window	wood	intact	stained	0.07 ± 0.01	no	yes
107	2nd floor interior	West	door frame	wood	intact	stained	0.11 ± 0.01	no	yes
108	2nd floor interior	West	door	wood	intact	stained	0.21 ± 0.01	no	yes
109	2nd floor interior		floor	wood	intact	stained	0.87 ± 0.10	no	yes
110	2nd floor interior	West	window frame	wood	intact	stained	<LOD ± 0.01	no	no
111	2nd floor interior	West	blinds	wood	intact	stained	<LOD ± 0.01	no	no
112	2nd floor interior	West	window	wood	intact	stained	<LOD ± 0.01	no	no
113	2nd floor interior	South	window frame	wood	intact	stained	<LOD ± 0.01	no	no
114	2nd floor interior	South	blinds	wood	intact	stained	<LOD ± 0.01	no	no
115	2nd floor interior	South	window	wood	intact	stained	<LOD ± 0.01	no	no
116	Calibration						1.03 ± 0.10		
117	Calibration						1.06 ± 0.10		
118	Calibration						1.03 ± 0.10		

"**Lead**" column indicates the detected lead content in paint film in mg/cm² (milligrams per square centimeter).
<LOD = less than instrument level of detection, 0.01 mg/cm².

Lead-based paint (LBP) is defined as paint with a lead content greater than or equal to 1.0 milligrams per square centimeter (mg/cm²).

Occupational Safety and Health Administration (OSHA) regulates activities disturbing paint that contains any amount of lead (lead-containing paint or LCP), even if the content is below the HUD standard.

Serial #112969, Model XL3t

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone (808) 671-7979…Facsimile emet@emetservices.com...E-mail

Laboratory Report

Painted Surfaces Total Elemental Lead Analyses by X-Ray Fluorescence

EMET ID: 2505210 **Test Date: September 2, 2025**

Iolani Palace
Windows and Doors

XRF#	Location	Side	Component	Substrate	Condition	Color	Lead Pb (mg/cm²)	Lead-Based Paint	Confirmed Lead-Containing Paint
202	Calibration						1.08 ± 0.10		
203	Calibration						1.17 ± 0.10		
204	Calibration						1.07 ± 0.10		
205	Attic level, exterior	North	window sill	wood	poor	beige	<LOD ± 0.01	no	no
206	Attic level, exterior	North	window frame	concrete	poor	gray	<LOD ± 0.01	no	no
207	Attic level, exterior	North	window	wood	poor	beige	<LOD ± 0.01	no	no
208	Attic level, exterior	North	window frame	concrete	poor	gray	<LOD ± 0.01	no	no
209	Attic level, exterior	North	window sill	wood	poor	gray	0.02 ± 0.01	no	yes
210	Attic level, interior	North	window sill	wood	intact	stained	<LOD ± 0.03	no	no
211	Attic level, interior	North	window	wood	intact	stained	<LOD ± 0.01	no	no
212	Attic level, interior	North	window	wood	intact	stained	<LOD ± 0.02	no	no
213	**Attic level, interior**	**North**	**window sill**	**wood**	**intact**	**stained**	**18.66 ± 3.23**	**yes**	**yes**
214	Attic level, interior	North	wall	gypboard	intact	white	<LOD ± 0.02	no	no
215	Attic level, interior	North	window	wood	intact	stained	<LOD ± 0.01	no	no
216	Attic level, interior	North	wall trim	wood	intact	stained	<LOD ± 0.02	no	no
217	Attic level, interior	North	window frame	wood	intact	stained	0.14 ± 0.03	no	yes
218	Attic level, interior	North	window sill	wood	intact	stained	0.16 ± 0.03	no	yes
219	Attic level, exterior	North	window sill	wood	poor	gray	<LOD ± 0.02	no	no
220	Attic level, exterior	North	window	wood	poor	beige	<LOD ± 0.02	no	no
221	Attic level, exterior	North	window frame	plaster	poor	gray	<LOD ± 0.02	no	no
222	Attic level, exterior	South	window	wood	intact	beige	<LOD ± 0.01	no	no
223	Attic level, exterior	South	window sill	wood	poor	gray	<LOD ± 0.02	no	no
224	Attic level, exterior	South	window frame	plaster	intact	gray	<LOD ± 0.02	no	no
225	Attic level, interior	South	wall	concrete	intact	white	<LOD ± 0.01	no	no
226	**Attic level, interior**	**South**	**window frame**	**wood**	**intact**	**stained**	**2.00 ± 0.28**	**yes**	**yes**
227	Attic level, interior	South	window	wood	intact	stained	0.06 ± 0.02	no	yes
228	Attic level, interior	South	window	wood	intact	stained	<LOD ± 0.01	no	no
229	Attic level, interior	South	wall	concrete	intact	teal	<LOD ± 0.01	no	no
230	**Attic level, interior**	**South**	**window sill**	**wood**	**intact**	**stained**	**12.75 ± 2.01**	**yes**	**yes**
231	**Attic level, interior**	**South**	**window frame**	**wood**	**intact**	**stained**	**16.20 ± 2.37**	**yes**	**yes**
232	Attic level, interior	South	window	wood	intact	stained	<LOD ± 0.01	no	no
233	Attic level, exterior	South	window sill	wood	poor	gray	<LOD ± 0.03	no	no
234	Attic level, exterior	South	window	wood	poor	beige	<LOD ± 0.01	no	no
235	Attic level, exterior	South	window frame	plaster	intact	gray	<LOD ± 0.01	no	no
236	Calibration						1.15 ± 0.10		
237	Calibration						1.10 ± 0.10		
238	Calibration						1.09 ± 0.10		

"**Lead**" column indicates the detected lead content in paint film in mg/cm² (milligrams per square centimeter).
<LOD = less than instrument level of detection, 0.01 mg/cm².

Lead-based paint (LBP) is defined as paint with a lead content greater than or equal to 1.0 milligrams per square centimeter (mg/cm²).

Occupational Safety and Health Administration (OSHA) regulates activities disturbing paint that contains any amount of lead (lead-containing paint or LCP), even if the content is below the HUD standard.

Serial #112969, Model XL3t

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383...Telephone (808) 671-7979...Facsimile emet@emetservices.com...E-mail

Appendix C

Certifications

EnvironMETeo (EMET) Services, Inc. Waipio Gentry Business Park 94-520 Uke'e Street, Suite A Waipahu, Hawaii, USA 96797-4200
(808) 671-8383…Telephone emet@emetservices.com...E-mail

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101807-0

EnvironMETeo Services Inc.

Waipahu, HI

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique on ISO/IEC 17025).

2024-07-01 through 2025-06-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

STATE OF HAWAI'I

DEPARTMENT OF HEALTH

Lead-Based Paint Activities Firm Certification

THIS IS TO CERTIFY THAT

EnvironMETeo Services, Inc.

has fulfilled the requirements of Chapter 11-41 Hawaii Administrative Rules and the Toxic Substance Control Act (TSCA) Section 402(a)(2), and has received certification as a firm pursuant to §11-41-4, HAR to conduct lead-based paint activities in Hawaii.

This certification is valid from the date of issuance and expires on **JUNE 19, 2027**.

Date of Issue: **APRIL 8, 2024**
Certification # **PBF-0024**

FOR DIRECTOR OF HEALTH

NON-TRANSFERABLE

REVOCABLE FOR CAUSE

STATE OF HAWAI'I
ASBESTOS CERTIFICATION

Groendyke
Bronson J.
EnvironMETeo Services, Inc.
HIASB-4452
Training Course Exp Dates

W	n/a	Worker
CS	n/a	Contractor/Supervisor
INS	11/25/25	Inspector
MP	n/a	Management Planner
PD	n/a	Project Designer
PM	04/01/26	Project Monitor

STATE EXP. DATE 3/14/2026

STATE OF HAWA'I
LEAD BASED PAINT ACTIVITIES CERTIFICATION

Expiration Dates:
Inspector: n/a
Supervisor: n/a
Risk Assesor: 05/01/2028
Project Designer: n/a
Worker: n/a

Groendyke
Bronson Joshua
EnvironMETeo Services, Inc. (EMET)

Certification # PB-1099

STATE OF HAWAI'I
ASBESTOS CERTIFICATION

Iopa
Joseph K. III
EnvironMETeo Services, Inc.
HIASB-0585
Training Course Exp Dates

W	n/a	Worker
CS	02/03/26	Contractor/Supervisor
INS	11/25/25	Inspector
MP	n/a	Management Planner
PD	n/a	Project Designer
PM	09/24/25	Project Monitor

STATE EXP. DATE 11/6/2025

State of Hawai'i
Lead Based Paint Activities Certification

Expiration Dates:
Inspector- n/a
Supervisor- 04/08/2027
Risk Assessor- 08/25/2027
Project Designer- n/a
Worker- n/a

Iopa, III
Joseph
Certification # PB-0668

STATE OF HAWAI'I
ASBESTOS CERTIFICATION

Uyeda
Andrew H.
EnvironMETeo Services, Inc.
HIASB-2432
Training Course Exp Dates

W	n/a	Worker
CS	n/a	Contractor/Supervisor
INS	11/25/25	Inspector
MP	n/a	Management Planner
PD	n/a	Project Designer
PM	09/24/25	Project Monitor

STATE EXP. DATE 6/1/2026

STATE OF HAWA'I
LEAD BASED PAINT ACTIVITIES CERTIFICATION

Expiration Dates:
Inspector: n/a
Supervisor: n/a
Risk Assesor: 10/16/2028
Project Designer: n/a
Worker: n/a

Uyeda
Andrew H.
EnvironMETeo Services, Inc.

Certification # PB-0669

End of Report

(This page intentionally left blank.)

SECTION 13288 - TESTING/AIR MONITORING

PART 1 - GENERAL

1.01 SUMMARY

A. Project/air monitoring requirements during lead disturbance related activities.

1.02 LEAD PAINT PROJECT MONITORING BY ENGINEER

A. Daily project air monitoring and testing shall be supplied by the Engineer for the purpose of:

1. Verifying compliance with the specifications listed in SECTION 13283 - DISTURBANCE LEAD-CONTAINING MATERIAL;

2. Insuring that the State's legally required documentation is collected;

3. Providing engineering control during the project.

1.03 COORDINATION WITH OTHER SECTIONS

A. The testing/air monitoring requirements included in the scope of work for any testing/air monitoring consultants or inspectors, and all applicable Federal, State, and local regulations shall be coordinated with this section.

PART 2 - PRODUCTS

Not applicable to this section.

PART 3 - EXECUTION

3.01 LEAD PAINT DISTURBANCE CONTRACTOR RESPONSIBILITIES

A. The Contractor shall be responsible for providing employee exposure monitoring and maintaining necessary records for all of the Contractor's employees as required by OSHA, Hawaii State Law and all other applicable law.

B. The Contractor shall obtain the legally required reports for air monitoring as part of the contract.

C. Monitoring information developed by the Inspector's activities while under the contract with the State shall be for the use of the Engineer. The information will be available and offered to the Contractor when developed, but not thereafter, and shall not waive the Contractor's obligations stated elsewhere in this section.

D. Air monitoring and testing which becomes necessary in order to follow up on work by the Contractor which is rejected as not conforming to the requirements shall be the responsibility of the Engineer. However, the full cost of such additional monitoring and testing shall be borne by the Contractor, and shall paid directly to the State's Air Monitoring Consultant no later than prior to the final contract payment.

E. Employee exposure (OSHA) air monitoring that is part of the Inspector's (Testing/Air Monitoring Consultant) scope of work shall be accommodated by the Contractor and shall not be assumed to be the monitoring required of the Contractor by law or regulation.

F. The Contractor shall contact in writing, the State's Air Monitoring Consultant and DOE Construction Management within 10 days of Award.

G. The Contractor shall give, at a minimum, 10 working days notification to the State's Inspector/Air Monitoring Consultant prior to the start of any lead paint disturbance related work.

3.02 TESTING/AIR MONITORING INSPECTOR (AIR MONITORING CONSULTANT)

A. The Inspector (Testing/Air Monitoring Consultant) will insure that the applicable specifications are being followed using the methods and requirements of the applicable scope of work.

B. The Inspector (Testing/Air Monitoring Consultant) shall have the authority to instigate engineering control measures during the project and stop work if deemed necessary.

C. Air monitoring shall be performed to detect airborne lead concentrations outside the work area for the duration of the project.

D. Environmental air monitoring shall be performed by the Inspector/Air Monitoring Consultant. Payment to the Inspector/Air Monitoring Consultant shall be by the State. Any testing initiated by the Contractor shall be paid for by the Contractor and shall be included in the contract amount.

E. Throughout the entire disturbance and cleaning operations, project monitoring shall be conducted to ensure that the Contractor is complying with this specification, EPA, OSHA and any applicable State and local government regulations.

END OF SECTION