



Food Science & Human Nutrition Elevator Modernization

**Washington State University
Pullman, WA**

Project Manual

Project No. 1153-2020
Issued July 3, 2020
Washington State University
Facilities Services, Capital

CONDITIONS OF THE CONTRACT

00 11 13	Advertisement for Bids
00 21 13	Instructions to Bidders
00 42 13	Form of Proposal Part A: Base Bid & Alternate Bids
00 50 00	Agreement between Owner and Contractor
00 72 00	General Conditions for Washington State Facilities Construction with Washington State University Amendments
	Attachment A: Good Faith Hazardous Material Survey
	Attachment B: Assumed ACM Memo

DIVISION 01 GENERAL REQUIREMENTS

01 11 00	Summary of Work
01 26 00	Change Order Procedures
01 29 00	Applications for Payment
	Current Prevailing Wage Rates
01 29 73	Schedule of Values
01 31 19	Project Meetings
01 31 23	Coordination
01 32 13	Progress Schedule
01 32 33	Construction Photographs
01 33 00	Submittals
01 35 16	Alteration Procedures
01 41 00	Regulatory Requirements
01 41 19	Special Provisions
01 45 00	Quality Control
01 45 23	Testing Laboratory Services
01 45 34	Contract Performance Evaluation Program
01 50 00	Construction Facilities & Temporary Controls
01 60 00	Material and Equipment
01 70 00	Project Close-Out
01 74 19	Construction Waste Management
01 78 23	Operation & Maintenance Manuals
01 78 39	Project Record
01 81 19	Indoor Air Quality Management Plan

DIVISION 14 CONVEYING EQUIPMENT

14 29 00	Elevator Specifications

END OF SECTION 00 01 10

**Washington State University
Food Science & Human Nutrition Elevator Modernization
Pullman, WA**

Sealed bids are being requested by the Board of Regents of Washington State University, for the above referenced project.

Project Scope:

Food Science Human Nutrition Building Elevator: Full modernization and upgrade of traction passenger elevator. Extent of elevator work is described in the schedules, and provisions as specified in the elevator specification section 14 29 00, and is non-inclusive of all possible requirements for a complete, proper, code compliant and fully functional installation. All work shall comply with all applicable National and State codes and procedures. Work shall comply with current code requirements for ASME A17.1 and Washington State Elevator code, 296-96 WAC and other applicable codes, and in the event of conflicts between these standards, the more stringent standard shall prevail. Contract time shall be 300 days from Notice to Proceed Substantial Completion. Proposals must be based on this Contract time.

Project Physical address: 1945 NE Ferdinand's Lane, Pullman, WA 99164

Bid Estimate: \$400,000.00 to \$450,000.00

Alternate No.1 - New UL Label Door Panels-SS#4.

Alternate No.2 - New Entrance Frame Cladding-SS#4.

Bids will be received prior to 2:00 p.m.; August 6, 2020 by fax 509-335-9304 or email to contracts@wsu.edu. Proposals will then be publicly opened and read aloud by Zoom <https://wsu.zoom.us/j/95499088207?pwd=WnhpUG9IK2NPUnQ2OTk3NS9hdmUwUT09> or Phone 253-215-8782 Meeting ID: 954 9908 8207; Password: 809124. Attendance in person is not allowed.

A mandatory pre-bid conference for general contractors will be held at 10:00 am on July 23, 2020. Attendees may attend by Zoom <https://wsu.zoom.us/j/92169410084?pwd=MUdpcGF3NW8xYUJvQXFOeDNTY2S2RhZD09> or Phone 253-215-8782 and entering Meeting ID 921 6941 0084; Password 584251. Attendance in person is not allowed

Parking on campus is enforced 24 hours a day, every day. It is bidder's responsibility to obtain parking permits to attend pre-bid meetings, site visits, and bid openings. Daily permit rates may be found at: <http://transportation.wsu.edu/TempFees.html>. Identify the meeting and project when obtaining the permit to receive appropriate rates.

Bid documents may be obtained at <https://facilities.wsu.edu/facilities-services-capital/contractors/> Contractors who would like to be included on the Planholder's list shall either attend the pre-bid meeting or request to be added by emailing contracts@wsu.edu.

Printing Disclaimer: The bidding documents are available for all interested bidders and plancenters. The University does not provide printing services; it is the bidder's responsibility to print the drawings to the appropriate scale indicated. We encourage the use of professional

printing shops.

Owner reserves the right to reject any and all bids and to waive any informalities or irregularities in the bids received.

Maja S. Huff
509-335-9082
Contracts@wsu.edu
Facilities Services
Washington State University

END OF SECTION 00 11 13

PART 1 GENERAL

1.01 PROJECT IDENTIFICATION

- A. Refer to the Advertisement for Bids for Project identification, availability of bidding documents, Prebid Conference, and Contract completion date. Refer to Summary of Work, Section 01 11 00, for a brief description of the Work.

1.02 BIDDER QUALIFICATIONS

- A. Contractor Registration:
 - 1. Bidders subject to the Contractor's Registration Act (RCW Chapter 18.27) must show their State of Washington Contractor's license number on the Form of Proposal. In addition, bidders are cautioned to verify that all subcontractors submitting bids are also registered and licensed in accordance with the laws of the State of Washington. Owner is prohibited by virtue of RCW 39.06.010 from executing any Contract for public works with any contractor who is not registered or licensed in accordance with the laws of this state. Prior to submitting a bid, bidder must obtain an appropriate clearance and license to do business in the State of Washington as follows:
 - a. Contractor's License: Make license application to the Department of Labor and Industries, Contractor's Registration, P.O. Box 7689, Olympia, Washington 98504.
 - b. Registration Number: Out-of-State Contractors must obtain a registration number and permission to do business in the State of Washington from the Secretary of State, Olympia, Washington 98501.
 - c. Other Registrations: Register with the State Department of Revenue as a contractor engaging in business in this state and register with the State Department of Labor and Industries and the Employment Security Department.
 - 2. Payment and Performance Bonds:
 - a. Bidders must be able to furnish satisfactory separate Payment and Performance Bonds for full amount of the initial Contract Sum, plus sales tax.

1.03 EXAMINATION OF SITE AND CONTRACT DOCUMENTS

- A. Before submitting a bid or proposal, bidders shall carefully examine the Contract Documents, visit the Project site, and fully inform themselves as to all existing conditions and limitations, and shall include in their bid or proposal a sum to cover the cost of all items included in the Work, and shall rely on their own examination in making their bid or proposal. No change in the Work, the

Contract Sum, or the Contract Time will be allowed for issues that would have been reasonably apparent by the foregoing examination.

- B. Bidder acknowledges that it has satisfied itself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Project site, including all exploratory work done by Owner, as well as from the Drawings and Specifications made a part of the Contract Documents.
- C. Bidder acknowledges that adjoining areas will be in normal course during the Work. Bidder should anticipate pedestrian and traffic congestion, limited parking, and the need to coordinate all Work with ongoing operations.
- D. Owner assumes no responsibility for any conclusions or interpretations made by bidder based on the information made available by Owner. Should a bidder find discrepancies or omissions in the Drawings or Specifications, or should bidder be in doubt as to their meaning, bidder shall at once notify Owner. If appropriate, Owner will send written instructions to all bidders by addenda. Questions received less than 7 Days before the time of bid opening may not be answered. All issued addenda shall be incorporated into these Contract Documents.
- E. Parking on campus is enforced 24 hours a day, every day. It is bidder's responsibility to obtain parking permits to visit campus. Due to the possibility of parking at multiple locations on campus, bidders are advised to consider obtaining Orange Temporary Permits. Go to <http://transportation.wsu.edu/TempFees.html> for more information about parking permits.

1.04 PREBID CONFERENCE

- A. All bidders are required to attend a pre-bid conference. WSU Facilities Services is taking precautions to limit exposure and impacts related to COVID-19. Due to the "Stay Home, Stay Healthy" mandate, pre-bid meetings and bid openings may only be attended via Zoom Video Conference/Phone Conference. Refer to the Advertisement for Bids for the date, time and electronic meeting options.
- B. In order to continue providing secure and effective meetings the University is requiring that Zoom be downloaded and installed via a computer client rather than connecting through a web browser plugin. The computer client can be found here: <https://support.zoom.us/hc/en-us/articles/207373866-Zoom-Installers>

1.05 CLARIFICATIONS

- A. Should bidders find discrepancies in, omissions from, or unclear information within the Contract Documents, they should notify Owner at once. Owner shall issue a written instruction in the form of an addendum to all bidders. Neither the Owner nor Architect/Engineer will be responsible for any oral instructions. Questions received less than 7 Days before bid opening may not be answered.

All addenda issued prior to the opening of bids will be incorporated into the Contract.

1.06 SPECIFIED PRODUCTS

- A. Bids must be based upon items identified in the Specifications or approved substitutions. In certain cases, specific items have been named because of operational or maintenance considerations; approval of substitutions should not be assumed.
- B. Requests for approval of substitutions must be made in writing and received by Owner at least 7 Days prior to the date of bid opening. Said request must include complete descriptions, technical data, and performance records. Any approval of the proposed substitution will be made by addendum issued to all bidders.
- C. To submit substitution requests prior to Bid opening:
 - 1. Only one substitution request per bidder will be considered for each product.
 - 2. Requests for substitutions shall provide sufficient data to allow Owner to evaluate the suitability of the proposed product. Bidder must clearly identify product and model number of proposed substitution.
- D. By requesting a substitution, bidder represents and warrants that (1) it has personally investigated the proposed material or product and determined that it is equal or better in all respects to that specified, (2) the same or better warranty will be provided for the substitution, (3) it has coordinated with affected subcontractors, (4) the substitution will not impact other parts of the Work, (5) the aggregate costs associated with the substitution actually reduces its bid amount, (6) all costs associated with the substitution are included in its bid, and (7) it waives any known or unknown future claim for an increase in the Contract Sum or Contract Time associated with the substitution.
- E. Owner retains full discretion over whether to approve a substitution, and Owner's approval does not relieve bidder of the above requirements.

1.07 TAXES

- A. State of Washington Sales Tax shall not be included in the bid price, except that the retail sales tax upon sales and rentals to prime contractors and subcontractors of tools, cranes, air compressors, bulldozers, lubricating oil, sandpaper, form lumber, and similar items of material and equipment which are primarily for use by the bidder rather than for resale as a component part of the finished work, shall be included in the bid price. (See WAC 458-20-170 (State Department of Revenue Rule 170))
- B. Sales tax applicable to the Contract Sum will be added to the Contract Sum by Owner at the time the Contract (Section 00 50 00) is written and shall be paid to

Contractor. Contractor shall then remit payment for the sales tax to the State Department of Revenue in conformance with the law.

1.08 FILING FEES

- A. Applicable state laws concerning prevailing wages, hours, workers' compensation, and other conditions of employment are called to the attention of bidders for their compliance. Bidders shall include in their bid any and all fees, including filing fees, required to comply with applicable labor laws.

1.09 PAYMENT AND PERFORMANCE BONDS

- A. Upon award of the Contract, the successful bidder will be required to provide Owner with satisfactory separate payment and performance bonds. Cost of bond premiums must be included in the bidder's proposal.

1.10 FORM OF PROPOSAL

- A. Proposals must be formatted in accordance with the following:
 - 1. Bidder must utilize the Form of Proposal, examples of which are included in the Contract Documents; all numbers must be clearly and legibly stated both in writing and in figures; and signatures must be in longhand.
 - 2. Bids must not contain any recapitulation of the Work to be done.
 - 3. Bidders must include prices for all Alternate Bid items if they are included in the Form of Proposal.
 - a. Bidders shall bid upon all Alternates indicated in the Form of Proposal. When bidding on alternates for which there is no charge, bidder shall write the words "No Charge" or some similar designation in the space provided on the Form of Proposal. If a bidder fails to bid an alternate, or notes "no bid," it will be construed as meaning that there will be no change in the Contract Sum and that the alternate is included in the Contract Sum.
 - 4. To comply with the Governors "Stay Home, Stay Healthy" mandate bidders must submit their bids in electronic or fax format and the requirement to submit a sealed bid is waived. No other method of bid will be accepted.
 - a. Electronic Bids: Bidders may submit their bid via email to contracts@wsu.edu prior to the bid submission deadline. The emailed bid must include all documents that would have normally been submitted in the sealed envelope, including but not limited to the Form of Proposal and bid bond, in either PDF or Image format.
 - b. Faxed Bids: Bidders may submit their bid via Fax to 509-335-9304 prior to the bid submission deadline. The faxed bid must include all documents that would have normally been submitted in the sealed envelope, including but not limited to the Form of Proposal and bid bond.

- c. The 3 lowest bidders shall mail their original bid and accompanying original bid security shall be mailed and post marked within 72 hours of the bid open, all other bidders may retain their bids. Mail to:

Facilities Services
P.O. Box 641150
100 McCluskey Services Building
Washington State University
Pullman, WA 99164-1150
- 5. Bids will be received in the following form on the dates and at the times indicated in the Advertisement for Bids.
- 6. Proposal:
 - a. Completed proposal indicating the following:
 - 1) Base Bid and Alternate Bid (if any) amounts;
 - 2) Acknowledgment of Addenda received;
 - 3) Signature, Corporate Identification, and Contractor License number; and
 - 4) Bid Security to be attached to Part A proposal form.
- 7. An official clock, at the office location designated for receipt of bids, will be designated by Owner for determining the timely receipt of each bid.
- B. Proposals received and determined untimely by Owner, may be considered as non-responsive and will be returned to bidder unopened.
- C. Bids will be received until the respective times indicated in the Advertisement for Bids. They must be received prior to the respective times stated; i.e., where bids for Part A are required until 2:00 p.m., all bids received by 1:59:59 p.m. are timely; all bids received on or after 2:00:00 p.m. are untimely.
- D. Bidders are solely responsible for delivery of their proposals before the specified time set for receipt of bids.

1.11 BID ALTERNATES, ALLOWANCES AND UNIT PRICES

- A. Bid Alternates, Allowances, and Unit Prices adjust the Project scope by adding, deleting, or modifying specific parts of the Work as stated hereinafter.
- B. An Alternate is an amount proposed by bidders and stated on the Bid Form for certain construction activities defined in the bidding documents that may be added to or deducted from the Base Bid amount and/or the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. Each bidder shall submit, on the Form of Proposal, an amount for each Bid Alternate stating the difference in cost from the Base Bid amount for adding, deleting, or modifying specific materials and/or construction.
 2. The difference in cost shall include all deletions, additions, and adjustments to all trades as may be necessary by each modification.
 3. Only Alternates authorized by these specifications or pursuant to addenda will be considered.
- C. An Allowance is an amount established in the Contract Documents for inclusion in the Contract Sum to cover the cost of prescribed items not specified in detail sufficient to estimate at time of bid.
1. Each bidder shall include in the Base Bid amount the amount for each Allowance as identified in the bidding documents.
- D. A Unit Price is an amount as a price per unit of measurement for materials or services added or deleted from the Base Bid amount.
1. Each bidder shall submit on the Bid Proposal Form, an amount for each Unit Price stating the difference per unit or measurement for materials or services added or deleted from the Base Bid amount.
 2. The Unit Price stated shall be used as the amount for either adding or deleting the item per unit of measurement from the Work.
 3. The Unit Price amounts submitted on the Form of Proposal shall be used as the cost per unit of measurement for the entire duration of the Contract.

1.12 BID GUARANTEE

- A. Bidder shall furnish a bid guarantee in the form of a cashier's check or bid bond made payable to the Board of Regents of Washington State University for an amount equal to at least 5% of the total Base Bid amount, as evidence of good faith and as a guarantee that, if awarded the Contract, the bidder will execute the Contract and provide payment and performance bonds as required.
- B. Should the successful bidder fail to enter into a Contract and furnish satisfactory bonds within 10 Days after its proposal has been accepted, the bid security shall be forfeited as liquidated damages.
- C. Owner reserves the right to hold the bid guarantee of the 3 lowest bidders until the successful bidder has entered into a contract and furnished required bonds.

1.13 MWBE PARTICIPATION

- A. Washington State University is committed to the enhancement of opportunities for minority and women owned and controlled businesses in public contracting. The use or solicitation of minority and women's business enterprise firms is expressly encouraged.

1.14 MODIFICATION OF PROPOSALS

- A. Modifications to proposals already submitted will be permitted only if requested in writing over the signature of the bidder and provided such requests are received prior to the time set for receipt of bids.
- B. The original Form of Proposal will remain unopened until bid opening. Modifications in the form of facsimile transmissions will not be accepted.
- C. Withdrawal of proposals will be permitted only if requested in writing over the signature of the bidder and provided such requests are received prior to the time set for receipt of bids.
- D. Withdrawal requests in the form of facsimile transmissions will not be accepted.
- E. After the scheduled closing time for the receipt of Form of Proposals, no bidder will be permitted to withdraw a proposal unless said award is delayed for a period exceeding 60 Days.

1.15 ALTERATIONS PROHIBITED

- A. Except as otherwise provided herein, Forms of Proposal which are incomplete, or which are conditioned in any way, or which contain items not called for in the Proposal Form, or which are not in conformity to the law, may be rejected.
- B. The Form of Proposal invites bids on specific Drawings and Specifications. Only the amounts and information asked for on the Form of Proposal furnished will be considered.

1.16 BID PROTEST PROCEDURES

- A. A bidder protesting for any reason the bidding documents, a bidding procedure, the University's objection to a bidder or a person or entity proposed by the bidder, including but not limited to, a finding of non-responsibility, the award of the Contract or any other aspect arising from, or relating in any way to, the bidding, shall file a written protest with the University within two (2) business days of the event giving rise to the protest. (Intermediate Saturdays, Sundays, and legal holidays are not counted as business days.) The written protest shall include the name of the protesting bidder, the title of the bid under which the protest is submitted, a detailed description of the specific factual and legal grounds for the protest, copies of all supporting documents, evidence that the apparent low bidder has been given notice of the protest, and the specific relief requested. The written protest shall be sent by email to contracts@wsu.edu.
- B. Upon receipt of the written protest, the University will consider the protest. The University may, within three (3) business days of the University's receipt of the protest, provide any other affected bidder(s) the opportunity to respond in writing to the protest. If the protest is not resolved by mutual agreement of the protesting bidder and the University, the Assistant Vice President for Facilities Services, Capital of the University, or her or his designee, will review the issues

and promptly furnish a final and binding written decision to the protesting bidder, and any other affected bidder(s), within six (6) business days of the University's receipt of the protest. (If more than one (1) protest is received, the University's decision will be provided within six (6) business days of the University's receipt of the last protest.) If no reply is received from the University during the six (6) business-day period, the protest will be deemed rejected.

- C. Failure to comply with these protest procedures will render a protest waived.
- D. Timely and proper compliance with, and exhaustion of, these protest procedures shall be a condition precedent to any otherwise permissible judicial consideration of a protest.

1.17 LOW RESPONSIBLE BIDDER

- A. It is the intent of Owner to award the Contract to the low responsible bidder. Before award, the bidder must meet the following bidder responsibility criteria to be considered a responsible bidder. The bidder may be required by Owner to submit documentation demonstrating compliance with the criteria. Bidder must:
 - 1. Have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of bid submittal;
 - 2. Have a current Washington Unified Business Identifier (UBI) number;
 - 3. If applicable:
 - a. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - b. Have a Washington Employment Security Department number, as required in Title 50 RCW;
 - c. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - 4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).
 - 5. Not have been found out of compliance by the Washington State Apprenticeship and Training Council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the first date of advertising for this project.
 - 6. Not have been determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries, or through a civil judgment entered by a court of limited or general jurisdiction, to have willfully violated, any provision of chapter 49.46, 49.48, or 49.52 RCW, as defined in RCW 49.48.82.

- B. In addition to the bidder responsibility criteria above, bidder must also meet the following supplemental bidder responsibility criteria applicable to the Project:
1. The ability, capacity, and skill of bidder to perform the service required;
 2. The experience and efficiency of bidder;
 3. Whether bidder can perform the Contract within the time specified;
 4. The satisfactory completion of previous contracts or services;
 5. Such other information having a bearing on the decision to accept a bid proposal.
- C. Installer Qualifications:
1. Acceptable installers shall be regularly engaged in the following: designing, engineering, installing, and servicing elevators of the type and character herein specified, and have a history of successful production acceptable to the University. As part of the bid evaluation process, the apparent low bidder and the apparent second low bidder, must submit the name of the elevator company and or subcontractors they elect to use to actually perform the elevator work as specified, within five business days of the bid opening, and the elevator company must submit the following items:
 - a. Evidence that the elevator company has been, as a company regularly engaged in designing, engineering, installing and servicing the type of elevators reflected in the modernization program and specifications for this project.
 2. Acceptable installers shall have a staffed service office located in 50 mile area of the installation site.
 3. Evidence the elevator company has full time service mechanics and a supervisor on the servicing the Pullman Washington general area. The contractor has been in business with a record of revenue producing comparable projects continually for a minimum of five years prior to this project's bid date.
 4. Evidence the selected elevator company can respond to service calls within sixty (60) minutes or less when the call is for passenger entrapment or major elevator safety problems on a seven day per week 24-hour per day basis.
 5. The service call respondent will be a licensed elevator journeyman or equivalent employee of the installer. Installation, service employees, supervisor qualifications, and resumes shall be submitted to the University representative upon contract award for approval and updated when any personnel changes are made before they start work on site. Service and construction personnel to apply for, and receive access badges by facility before working on site.

6. Utilize an adequate number of skilled persons thoroughly trained and experienced in the necessary crafts to meet the construction schedule.
- D. Within 48 hours of receipt of request, apparent low bidder will provide such information about its team as Owner determines to be reasonably necessary to evaluate the responsibility of the bidder. Failure to reply with requested information will render a bidder non-responsible at Owner's option. At minimum, a bidder shall provide:
 1. A financial statement;
 2. List of projects currently under construction, including current contract amount and status of each;
 3. Names and resumes of proposed Project Manager, Project Engineer, and Superintendent;
 4. Name of bonding company/agent; and
 5. References including project and owner name, a project contact, and project contact telephone number.
- E. As evidence that bidder meets the bidder responsibility criteria, the apparent low bidder must submit documentation as may be required above to the Owner within 48 hours of the bid submittal deadline. Owner reserves the right to request such documentation from other bidders also.
- F. Owner will review Contractor's past Contract Performance to assist in evaluating the contractor's qualifications and proven ability to successfully perform future contracts only when past performance has been previously documented via the Contract Performance Program.
- G. If Owner determines bidder does not meet the bidder responsibility criteria above and is therefore not a responsible bidder, Owner shall notify bidder in writing with the reasons for its determination. If bidder disagrees with this determination, it may appeal the determination within 24 hours of receipt of Owner's determination by presenting additional information to Owner. Owner will consider the additional information before issuing its final determination. If the final determination affirms that bidder is not responsible, Owner will not execute a Contract with any other bidder until 2 business days after the bidder determined to be not responsible has received the final determination.

1.18 CONTRACT AWARD

- A. Owner intends but is not required to enter into a contract with the successful bidder, for all Work called for in the Contract Documents.
- B. The determination of the successful bidder will be made on the basis of the sum of the Base Bid together with Owner-selected Alternates.
- C. The responsibility of bidder and its subcontractors will be considered in making the award. Owner reserves the right to reject any or all bids and to waive

informalities advantageous to Owner and/or the protection of the public interest.

- D. Reinstatement of Bid Alternate not initially selected shall be in accordance with provisions of the Bid Proposal Form of Proposal.

1.19 CONTRACT FORMS

- A. Owner's standard form Contract is included with the Contract Documents.

END OF SECTION 00 21 13

Washington State University
Food Science & Human Nutrition Elevator Modernization
Pullman, WA

Refer to Instructions to Bidders for bid submittal procedures.

Bidder's Firm Name: _____ Date: _____

To: Facilities Services, Capital
McCluskey Services Building, P.O. Box 641150
Washington State University
Pullman, Washington 99164-1150

Pursuant to and in compliance with the Advertisement for Bids and the Instructions to Bidders, the Bidder, having carefully examined the Contract Documents entitled "Abelson Elevator Modernization" and having visited the Project site and examined the conditions affecting the Work, hereby proposes and agrees to provide all labor, materials, equipment, services, and incidentals necessary to complete the Work for the following stipulated sums:

A. BASE BID

_____ DOLLARS (\$_____),

B. UNIT PRICES: NOT USED

C. ALTERNATES

The Bidder proposes to modify the Base Bid by deleting from, adding to or otherwise modifying the Work as further described by the Contract Documents for the following stipulated sums:

Alternate No. & Description

Alternate No. 1 – New UL Label Door Panels-SS#4.

_____ DOLLARS (\$_____),

Alternate No. 2 – New Entrance Frame Cladding-SS#4.

_____ DOLLARS (\$_____),

For Alternates, which do not affect the Base Bid, indicate a zero (0) in the space provided for the Alternate.

D. REINSTATEMENT OF BID ALTERNATES

The Bidder agrees that Owner has the right to reinstate any Alternate not incorporated in the original Contract, for the sum originally proposed, provided Owner notifies the Bidder within 60 Days of Notice to Proceed.

E. SALES TAX

The Bidder agrees that the amounts indicated in the proposal do not include Washington State and local sales taxes except as required by the Instructions to Bidders.

F. CONTRACT PROVISIONS

Should the Bidder be notified of the acceptance of this proposal within 60 Days from the date set for the opening thereof or at any time thereafter before this proposal is withdrawn, the bidder agrees to execute a Contract for the Work and to furnish the required bonds.

1. TIME OF COMPLETION

The bidder agrees, if awarded a Contract for the Work, to complete the Work within the Contract Time specified.

2. LIQUIDATED DAMAGES

The bidder agrees that time is of the essence of the Contract and acknowledges that the amount of damages specified is a measure of the damages which the Owner will sustain should the Bidder fail to complete the Work within the Contract Time.

G. BID GUARANTEE

The Bidder agrees that the bid guarantee accompanying the Part A Form of Proposal is left in escrow with Owner, that the amount of the guarantee is the measure of the damages that Owner will sustain by failure of the bidder to execute a Contract for the Work and furnish required bonds, and that if the bidder fails to deliver said documents within 10 Days after receipt of notice of award to the bidder, the bid guarantee shall become the property of Owner.

H. MINORITY AND WOMEN'S BUSINESS ENTERPRISE (MWBE) PARTICIPATION

Owner is committed to the enhancement of opportunities for minority and women owned and controlled firms in public contracting. While neither required, nor a part of bidder responsiveness, the use or solicitation of minority and women business enterprises is expressly encouraged.

J. ADDENDA

The bidder hereby acknowledges receipt of Addendum by number(s):

K. PREVAILING WAGE CERTIFICATION

The bidder has not been determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries, or through a civil judgment entered by a court of limited or general jurisdiction, to have willfully violated, any provision of chapter 49.46, 49.48, or 49.52 RCW, as defined in RCW 49.48.82.

L. DECLARATION

The bidder represents and warrants that he/she possess the authority to sign for and bind bidder.

The Bidder declares under penalty of perjury under the laws of the State of Washington, that all of the foregoing information as recited is true and correct to the best of his/her knowledge.

Bidder's Firm Name: _____

Signed By: _____ Official Title: _____

Print Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone: _____ Fax: _____

State of Washington Contractor's License Number: _____

Federal Tax Identification Number: _____

Email Address: _____

The firm represented by the above signature is a:

Sole Proprietorship	_____	State of Incorporation _____
Partnership	_____	
Corporation	_____	
Other	_____	

END OF SECTION 00 42 13

Food Science & Human Nutrition Elevator Modernization

Agreement between Owner and Contractor (Fixed Contract Sum)

This AGREEMENT is effective as of the date of the first signature on the Agreement so long as all other parties' authorized signatories have also executed the Agreement. This Agreement is made by and between the following parties in connection with the Project identified below.

OWNER: Washington State University
c/o Facilities Services, Capital
P.O. Box 641150
Pullman, WA 99164-1150

CONTRACTOR: (To be determined)

DESIGNER (A/E): JSG Consultants
1177 Branham Lane, Suite 292
San Jose, CA 95118

PROJECT: Food Science & Human Nutrition Elevator Modernization
1945 NE Ferdinand's Lane,
Pullman, WA 99164

In consideration of the mutual covenants and obligations contained herein, Owner and Contractor agree as set forth herein.

Article 1 The Work of the Contract

- 1.1 Contractor to fully execute the Work. Contractor shall fully execute the entire Work in strict accordance with the Contract Documents, and shall provide all material, equipment, tools, and labor necessary to timely complete the Work described in and reasonably inferable from the Contract Documents, except to the extent specifically indicated to be the responsibility of others.
- 1.2 Contractor to further Owner's interests. Contractor accepts the relationship of trust and confidence established by this Agreement and covenants with Owner to cooperate and collaborate with Owner and others involved with the Project and to exercise Contractor's best skill and judgment; to furnish efficient, professional construction administration, management services and supervision with sufficient quantities of fully qualified, competent and experienced personnel; and to perform the Work in an expeditious and economical manner consistent with Owner's interests. The parties will endeavor to promote harmony, cooperation and mutual respect among the Project participants to the fullest extent possible in order to further the success of the Project and to effect prompt and successful completion of the Project within the requirements of the Contract Documents, the Contract Time and the Contract Sum.

Article 2 **Contract Documents**

- 2.1 The Contract Documents. The “Contract Documents” form the “Contract.” The Contract Documents consist of this Agreement (Agreement between Owner and Contractor or the “Agreement”); any attached Exhibits and other documents listed in the Contract Documents; the General Conditions; other documents listed in Article 8 of this Agreement; and written modifications, amendments and Change Orders to the Contract issued after execution of this Agreement.
- 2.2. Contract is complete and integrated agreement. The Contract represents the entire, complete, and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. No oral representations or other agreements have been made by the parties except as specifically established in the Contract.
- 2.3 Contract is between only Owner and Contractor. The Contract Documents shall not be construed to create a contractual relationship of any kind between any Persons other than Owner and Contractor.

Article 3 **Definitions**

- 3.1 Terms, words and phrases to have ordinary meanings. Terms, words and phrases used in the Contract Documents shall have the meanings given them in this Agreement and in the General Conditions or, if not defined, in a manner consistent with construction industry standards. In the event of any inconsistency in such definitions, the definitions in this Agreement shall control.
- 3.2 Construction Documents. The Construction Documents are identified in the General Conditions and other Contract Documents as Drawings and Specifications. The Construction Documents do not include shop drawings or other Submittals.
- 3.3 Contractor. “Contractor” is the Person identified as such in the Agreement and General Conditions. Contractor must be licensed, bonded, and insured as a contractor in the State of Washington, and must legally be permitted to do business. Contractor’s authorized representative, including its Designated Representative, shall be authorized to act on Contractor’s behalf with respect to the Project.
- 3.4 General Conditions modified. Section 4.03E of the General Conditions is hereby modified to clarify that Contractor and Owner may agree on the number of copies of Submittals to be provided to Owner. If no such agreement is reached, Contractor shall submit five copies.

Article 4 **Notice to Proceed and Substantial Completion**

- 4.1 Notice to Proceed. The date of Notice to Proceed will be specified in a written Notice issued by Owner. Owner may issue separate written authorizations to proceed for different portions of the Work.
- 4.2 Contract Time measured from date of commencement. The Contract Time shall be

measured from the Notice to Proceed date to the contractual date of Substantial Completion established in Section 4.3, subject to adjustments as provided in the Contract Documents. Time is of the essence in completion of the Work.

- 4.3 Substantial Completion and Final Completion. Contractor shall achieve Substantial Completion of the Work by Three hundred (300) Days following Notice to Proceed, subject to adjustments as provided in the Contract Documents, and shall achieve Final Completion not later than Thirty (30) Days thereafter. Contractor represents to Owner that the Contract Time is adequate for full performance of the Work. Contractor shall also achieve any interim milestones and phasing requirements set forth in the Contract Documents.
- 4.4 Liquidated damages. Owner will assess, and Contractor will be responsible for, liquidated damages in the amount of Five hundred fifteen dollars, twenty-one cents (\$515.21) per Day for each Day beyond the contractual date for Substantial Completion that Substantial Completion is not timely achieved, and subsequently One hundred sixty dollars and no cents (\$160.00) per Day for each Day beyond the time period established in Section 4.3 that Final Completion of the entire Work is not achieved. Contractor and Owner agree that the liquidated damages amounts are not penalties and are a reasonable estimation of actual damages to Owner, as of this date of Agreement, based on the inherent uncertainty and difficulty in calculating and quantifying damages caused by delays in the construction of university facilities.

Article 5 **Contract Sum**

- 5.1 Contract Sum. For Contractor's performance of the Contract, Owner shall pay to Contractor the Contract Sum of _____ dollars (\$ _____), subject to additions and deductions for changes in the Work as provided in the Contract Documents. The Contract Sum includes by way of example and not limitation all costs of construction; general conditions; all taxes except Washington State sales tax due on the Contract Sum; Contractor's contingency; any approved Allowances; all insurance; overhead; and Contractor's fee.
- 5.2 Alternates. The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by Owner:

Alternate No.	Description	Price (\$0.00)
1	New UL Label Door Panels-SS#4	
2	New Entrance Frame Cladding-SS#4	

- 5.3 Unit Prices. Any Unit Prices are as follows:

Description	Units	Price (\$0.00)
None		

Unit Prices as set forth in the Contract Documents are "all in." They include all material, equipment, labor, delivery, installation, and Subcontractor costs, any

overhead and profit not included in the fee, and any other costs or expenses in connection with, or incidental to, the performance of that portion of the Work to which such Unit Prices apply.

- 5.4 Allowances. Allowances included in the Contract Sum are as follows:

Allowance	Amount	Included Items
None		

Allowances may be included in the Contract Sum due to uncertainty in scope, price and/or quantity at the time this Agreement is executed. Whenever actual costs are more or less than an allowance, the Contract Sum will be appropriately adjusted. Contractor must provide Owner with written notice of its intent to expend an allowance amount (providing Owner with the opportunity to approve or reject the cost) before expending an allowance amount.

- 5.5 Changes in the Work.

- 5.5.1 Owner may, without invalidating the Contract, order changes in the Work consisting of additions, deletions or other revisions. Owner shall issue such changes in writing.
- 5.5.2 Adjustments of the Contract Sum and/or Contract Time on account of changes in the Work may be determined by any of the methods listed in the General Conditions.

Article 6 **Payments**

- 6.1 Applications for Payment.

- 6.1.1 The Contract Documents detail the requirements for Applications for Payment. Based upon Applications for Payment that Contractor submits to Owner, Owner shall make progress payments to Contractor on account of the Contract Sum.

- 6.2 Progress Payments.

- 6.2.1 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows and in accordance with Section 01 29 00, Applications for Payment:
- .1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the Contract Sum allocated to that portion in the Schedule of Values. Pending final determination of the cost to Owner of changes in the Work, amounts not in dispute may be included as provided in the General Conditions unless Owner requires that actual cost records be provided;
 - .2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by Owner, suitably stored and insured off the site at a location agreed upon in writing);
 - .3 Subtract the aggregate sum of previous payments made by Owner;

- .4 Subtract amounts, if any, for which Owner has withheld payment; and
- .5 Subtract the statutory retainage of five percent (5%) of the above amount as a fund for the protection and payment of the claims of any Person arising out of the Work and the State of Washington with respect to taxes.

6.3 Final Payment.

- 6.3.1 Final payment, constituting the entire unpaid balance of the Contract Sum, less retainage, shall be made by Owner to Contractor no later than 30 Days after Contractor has fully performed the Contract and Final Completion has occurred (except for Contractor's responsibility to correct non-conforming Work discovered after final payment or to satisfy other requirements, if any, that extend beyond final payment), and Contractor has submitted a final Application for Payment.
- 6.3.2 Owner shall release retainage to Contractor in accordance with Chapter 60.28 RCW and the Contract Documents.

Article 7
Miscellaneous Provisions

7.1 Designated Representatives.

- 7.1.1 Owner's Designated Representative, designated below, shall be authorized to act on Owner's behalf with respect to the Project:

Kevin Poitra
Project Manager
Facilities Services, Capital

Jason Harper
Construction Manager
Facilities Services, Capital

- 7.1.2 Contractor's Designated Representative, identified below, shall be authorized to act on Contractor's behalf with respect to the Project:

- 7.1.3 Neither Owner's nor Contractor's Designated Representatives shall be changed without 10 Days' written notice to the other party.

- 7.2 Interest. Payments due and unpaid under the Contract Documents shall bear interest as specified by RCW 39.76, not to exceed the Bank of America prime plus two percent (2%) per annum.

- 7.3 Quality control and assurance and Owner's right to inspect the Work: Contractor shall develop and submit an overall Quality Control and Assurance Plan to ensure that the Work is inspected by qualified members of Contractor's staff or third parties. The Quality Control and Assurance Plan must be acceptable to Owner. Owner expressly reserves the right to inspect any and all portions of the Work at any time during the Project. Contractor shall provide access to the Work as needed by Owner or its representatives, including the use of scaffolding, platforms, or lifts. All corrections or observations noted by Owner shall be logged by Contractor for correction, tracking and documentation to the satisfaction of Owner.

- 7.4 Contractor to actively manage and supervise Work. Contractor shall review and inspect the Work of Subcontractors on a regular basis for defects and deficiencies in their Work and for conformance with the Construction Documents and other Contract Documents, and shall stop the Work of Subcontractors, if necessary. Contractor shall provide notification at regularly scheduled progress meetings of any major defects or deficiencies and recommend remedial action.
- 7.5 Use of Third Party Neutral. Owner and Contractor intend to utilize a Third Party Neutral to assist in addressing and resolving disputes that may arise during the Project. The Third Party Neutral will be jointly engaged and will have the roles and responsibilities set forth in a Third Party Neutral Agreement, which shall be established in accordance with Section 00 80 10, Third Party Neutral.

Article 8
Enumeration of the Contract Documents

- 8.1 The Contract Documents. The Contract Documents, except for modifications issued after execution of this Agreement, are enumerated as follows:
- 8.1.1 This executed Agreement, any attached Exhibits and other documents listed in this Agreement.
- 8.1.2 The General Conditions for Washington State Facility Construction with Washington State University Amendments, and any Supplementary Conditions of the Contract.
- 8.1.3 The Addenda, if any, are as follows:

Number	Date	Pages

- 8.1.4 Other documents, if any, forming part of the Contract Documents are as follows:
- See Contract Documents.
Department of Labor and Industries Prevailing Wage Rates.

OWNER:
WASHINGTON STATE UNIVERSITY

CONTRACTOR:
FIRM NAME
WA CONTRACTOR LICENSE NUMBER

(Signature) (Date)

(Printed Name)
Vice President for
Finance and Administration

(Signature) (Date)

(Printed Name)
(Title)

END OF SECTION 00 50 00

Good Faith Survey Update
Food Science and Human Nutrition Building (0816)
Washington State University, Pullman, Washington

September 20, 2013

Prepared by:

Matthew McKibbin
Industrial Hygienist III
WSU Environmental Health and Safety
AHERA Building Inspector #141107 (exp. March 27, 2014)

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	LIMITATIONS OF THE ASSESSMENT	1
2	METHODOLOGY	1
2.1	ASBESTOS BULK SAMPLING	1
3	RESULTS	2
3.1	ASBESTOS-CONTAINING MATERIALS	2
4	CONCLUSIONS AND RECOMMENDATIONS.....	2

FIGURES

Figure 1 – Ground Floor - ACM Locations and EH&S Sample Location Map

Figure 2 – 1st Floor - ACM Locations and EH&S Sample Location Map

Figure 3 – 2nd Floor - ACM Locations and EH&S Sample Location Map

Figure 4 – 3rd Floor - ACM Locations and EH&S Sample Location Map

Figure 5 – Penthouse/Roof/Exterior - ACM Locations and EH&S Sample Location Map

TABLES

Table 1 – Homogeneous Material Locations

Table 2 – Summary of Sampling and Analytical Results

APPENDICES

Appendix A – EH&S Chain of Custody Forms and Laboratory Analytical Results

Appendix B – Limited Hazardous Materials Inspection Report dated May 2012 by PBS Engineering and Environmental

1 INTRODUCTION

Asbestos sampling was conducted at the Food Science and Human Nutrition Building by PBS Engineering and Environmental (PBS) in a Limited Hazardous Materials Inspection Report dated May 2012. Washington State University (WSU) Environmental Health and Safety (EH&S) conducted additional sampling to satisfy good faith survey requirements for the entire building in August and September of 2013. Results of the previous survey and EH&S sampling are compiled below in this survey update. Additional regulated materials including polychlorinated biphenyl caulk, lead-containing coatings and radon were addressed as part of PBS' survey which is provided in Appendix B.

1.1 LIMITATIONS OF THE ASSESSMENT

The conclusions within this report are professional opinions based solely upon visual site observations and interpretations of analytical data as described in this report. The survey excluded areas of the building which were inaccessible and would have caused damage to the building if sampled. Specifically technology closets were not evaluated for asbestos. Locations where inspectors would have been exposed to chemical or physical hazards were not tested (inside fume hoods with active experiments, HVAC systems in operations, etc). Typical construction techniques can render portions of the structure inaccessible. As a result, additional asbestos-containing materials (ACM) may be present in inaccessible areas (e.g., wall cavities, within energized systems). Suspect regulated materials within inaccessible areas should be presumed to contain asbestos until characterized.

The opinions presented herein apply to the site conditions existing at the time of the investigation, and interpretation of current regulations pertaining to asbestos. Opinions and recommendations provided herein may not apply to future conditions that may exist at the site. Regulatory requirements in effect at the time of the work should be verified prior to any work that impacts regulated materials. This report represents the findings of this survey only, and is not intended to establish scope or contractual terms to regulated material abatement.

2 METHODOLOGY

This good faith survey was conducted by Matthew McKibbin of EH&S, AHERA Building Inspector #141107 (exp. March 27, 2014) in August and September of 2013. Our asbestos survey was performed in accordance with good faith survey requirements outlined in WAC 296-62-07721. The previous Limited Hazardous Materials Inspection Report dated May 2012 by PBS Engineering and Environmental was used in conjunction with this survey to meet good faith survey requirements.

In order to identify suspect ACM, EH&S conducted a walk-through survey of accessible portions of the Food Science/Human Nutrition Building. However, not all concealed areas or sub-surface suspect materials may have been surveyed (see Limiting Conditions in Section 1.1). Approximate quantities of suspect materials were estimated by field measurements.

2.1 Asbestos Bulk Sampling

Suspect ACM was grouped into homogeneous sampling areas (HSA) and categorized according to 40 CFR 763, as thermal systems insulation (TSI), surfacing material, or miscellaneous material. Sampling previously conducted by PBS was used to supplement homogeneous areas identified in this survey. The sampling plan included, at a minimum, the collection and analysis of samples as follows:

Thermal System Insulation

- In a distributive manner, a minimum of three samples of each HSA that was not presumed to contain asbestos.
- At least one bulk sample from each homogeneous area of patched TSI if the patch was less than 6 square feet.

Surfacing Material

- In a distributive manner, a minimum of three samples collected from each homogeneous area that was 1,000 square feet or less.
- A minimum of five samples collected from each homogeneous area that was greater than 1,000 square feet but less than or equal to 5,000 square feet.
- A minimum of seven samples collected from each homogeneous area that was greater than 5,000 square feet.

Miscellaneous Material

- In a distributive manner as deemed sufficient by the Inspector. At least one sample was collected of each suspect miscellaneous material not presumed to contain asbestos.

Non-Suspect Materials

- Fiberglass, wood, metal, or other generally recognized non-ACM were not sampled.

Asbestos bulk samples and chain-of-custody forms were delivered to Environmental Hazards Services, L.L.C (EHS) in Richmond, Virginia for analysis. Each sample was analyzed using PLM/dispersion staining in accordance with EPA Method 600/R-93/116. The detection limit for this type of analysis is approximately one percent (by volume). Materials containing more than one percent asbestos are considered to be ACM.

3 RESULTS

The following section details the results of asbestos sampling conducted by PBS and WSU EH&S. EH&S sample locations are provided on Figures 1 through 5. Asbestos survey sample numbers, material descriptions, sample locations and analytical results are provided in Table 2. Copies of laboratory analysis reports and chain-of-custody documents from EH&S sampling are provided in Appendix A. Sample locations for PBS' survey are provided with the full survey document in Appendix B. Quantities are estimated for order of magnitude only.

3.1 ASBESTOS-CONTAINING MATERIALS

The following ACM was identified in PBS' survey and EH&S' sampling:

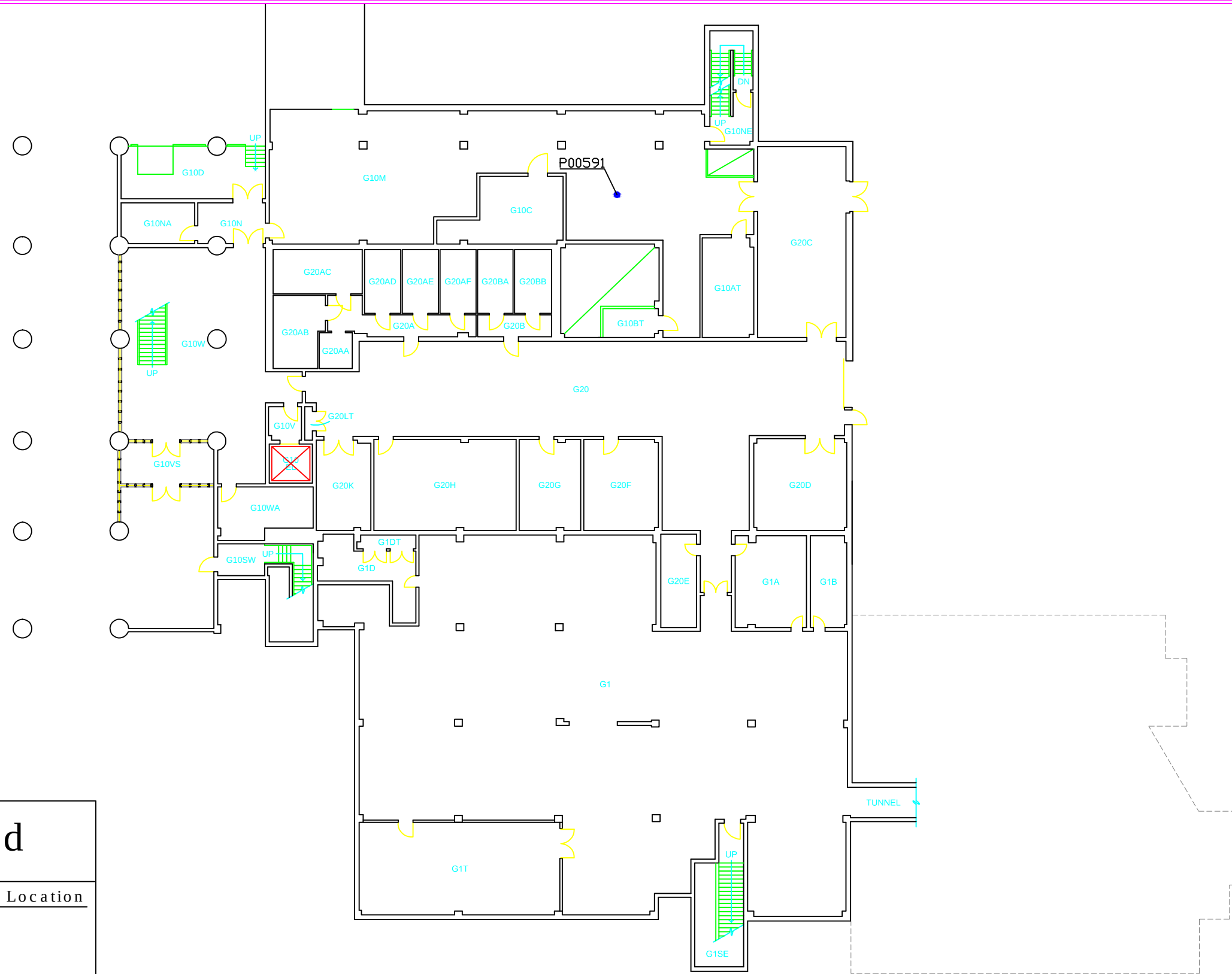
Material	Location(s) of ACM	Approximate Quantity
Black laboratory countertop	G20E	1 EA

4 CONCLUSIONS AND RECOMMENDATIONS

Laboratory analysis revealed that one black laboratory countertop contains regulated quantities of asbestos in the prior survey (see Results Section 3.1). Conclusions of specific materials are underlined below. Contractors should use caution during construction even after asbestos abatement activities, as concealed ACM that has not previously been analyzed for asbestos may be encountered. Inaccessible concealed spaces (e.g., wall and ceiling spaces enclosed by wallboard, internal components of energized systems etc. have not been surveyed for ACM, and should be presumed to contain asbestos until destructive sampling is performed in those areas.

A copy of this report must be provided to any entity bidding on work. A copy of this report must also be on site during any construction activities at the site. ACM identified should be removed and disposed prior to disturbance in accordance with WAC 296-62-077. Asbestos abatement must be performed by a licensed asbestos abatement contractor.

FIGURES



Legend

Asbestos Bulk Sample Location

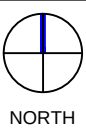
P00###

Ground Floor

GROSS SQUARE FEET
22,627
BLDG. TOTAL: 117,362

Washington State University
Environmental Health & Safety

Food Science/Health Nutrition
Figure 1 - Ground Floor Plan - Sample Location Map



BLDG. NO.
816
FIGURE NO.
Figure 1

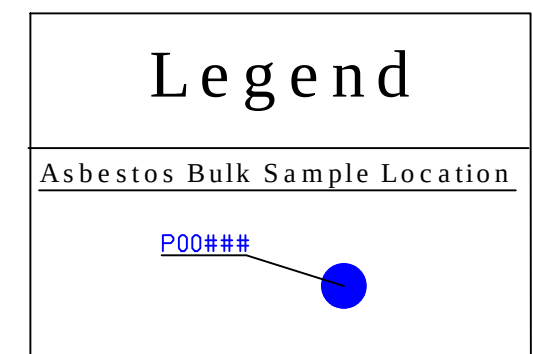


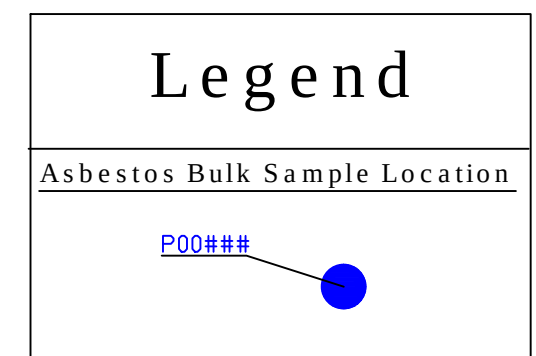
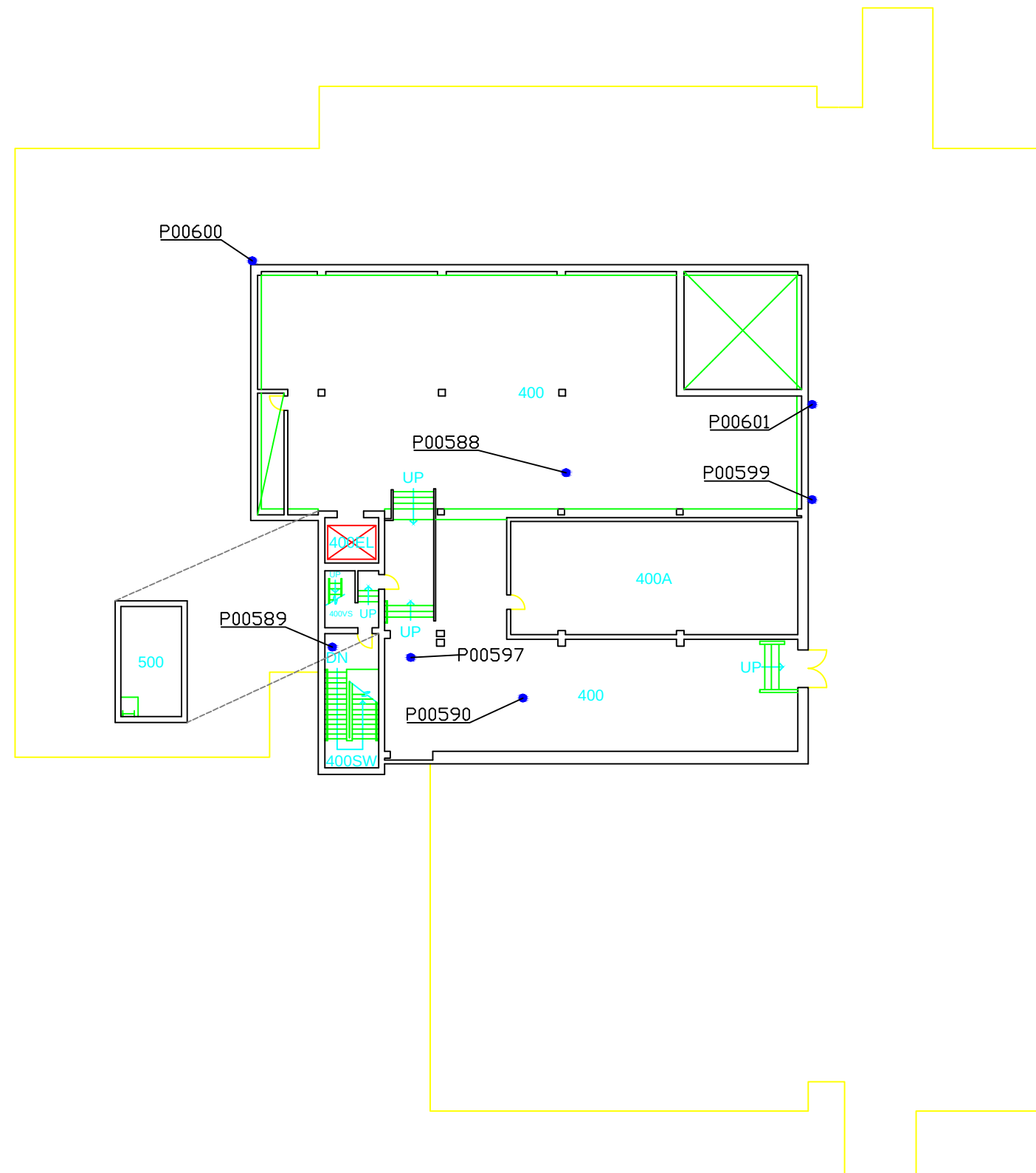
Legend

Asbestos Bulk Sample Location

P00###

1st Floor





Mechanical Penthouse Floor

TABLES

TABLE 1 – Homogeneous Sampling Areas

HSA	PBS and EH&S Sample #'s	Material	Location(s)
1	A-01 through A-03	Gray floor sealant	B10A, B10AA
2	B-01 through B-04	4" Tan vinyl cove base with off-white mastic	Throughout FSHN
3	C-01 through C-07	Gray rubbery duct seam sealant	Damper in basement, G10M, G1 and throughout all building ductwork
4	D-01 through D-05; K01	Flange gaskets	Damper basement piping flanges, G1
5	E-01 through E-04; P00593 through P00595; AA-01 through AA-04	Gypsum wallboard with joint compound system	Throughout FSHN
6	BB-01 through BB-03	Green and white gypsum wallboard system	Throughout FSHN
7	F-01 and F-02	Concrete masonry block system with mortar	G10M and G20
8	G-01 and G-02	4" White vinyl cove base with gold mastic	G20A, G20B, G20AA, G20AV, G20AC, G20AD, G20AE, G20AF, G20BA, G20BB
9	H-01 through H-03; P00602 and P00603	Black sink undercoat	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323
10	I-01	Black laboratory countertop	G20E
11	J-01 through J-07 and P00653	Gray and white mottled 12" vinyl floor tile with yellow or black mastic	Dominate 12" floor tile throughout FSHN
12	L-01, L-04, L-05; P00596	2'x4' White etched with pinhole pattern suspended ceiling tile	Throughout FSHN
13	O-02 through O-04	4" Beige vinyl cove base with off-white mastic	Throughout FSHN
14	U-04; P00635, P00636	Dark gray sheet vinyl flooring with yellow mastic	T101, T100A, 253, 291, 289, 204, 212, 215, 218, 220, 229, 229A, 231, 235, 240, 244, 248, 250, 252, 258, 259, 264, 360, 303, 303AA, 305, 317, 319, 340, 242, 246, 350, 352, 353, and 355
15	V-03 through V-05	Black laboratory countertop	160, 253, 212, 258, 263, 277, 279A, 264, 212, 229, 229A, 259, 210, 223, 225, 359, 302D, 302H, 317, 319, 340, 354, 302, 305, 352, 350, 353, 342, 346, 355
16	W-01 through W-04	Tan carpet mastic	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101
17	X-04	Ceramic floor and wall tile with grout	147, 151, 247, 251

HSA	PBS and EH&S Sample #'s	Material	Location(s)
18	Y-01 through Y-03	Beige sheet vinyl flooring with yellow mastic	103, 119, 119A, 140, 148, 155, 160, 167, 302A, 302H, 323
19	Z-01 and Z-02	White sink undercoating	119, 150, 303, 345, 373
20	CC-01 through CC-07	Pebblecrete exterior fascia	Throughout exterior of FSHN
21	DD-01 through DD-07	Beige synthetic stucco walls	Interior and exterior portions of NE and SE stairwells
22	EE-01, EE-02, FF-01, GG-01; P00600, P00601	Roofing (silver coat atop tar, felt layers, perlite, foam and vapor barrier)	Roof and parapets
23	HH-01, HH-02, P00598	White 12" ceiling tile with brown glue dollop	T101
24	KK-01	Blue on/off-white 12" vinyl floor tile with gold mastic	S100 Hallway
25	LL-01 through LL-03	Gray sink undercoating	Room 166B
26	MM-01 through MM-03	Tan vinyl stair tread	T100
27	NN-01	Roof penetration sealant	Roof penetrations and repairs
28	P00588	White gasket putty	400 Mechanical penthouse and G level HVAC ducts
29	P00589 through P00591	Green soft duct mastic	400 Mechanical penthouse and G level HVAC ducts
30	P00592	12" Gray/white mottled vinyl floor tile with black mastic	148A
31	P00597	Residual red poured flooring	400
32	P00599	White fiberglass backsplash with brown mastic	400 (exterior air intake area)

TABLE 2 - Summary of Sampling and Analytical Results

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
5544-2010 A01	Food Science/Human Nutrition	816	B10A	Floor coating	Gray floor sealant	Misc	100	SF	Sample 1 of 3	NAD	No	B10A, B10AA
5544-2010 A02	Food Science/Human Nutrition	816	B10A	Floor coating	Gray floor sealant	Misc	100	SF	Sample 2 of 3	NAD	No	B10A, B10AA
5544-2010 A03	Food Science/Human Nutrition	816	B10AA	Floor coating	Gray floor sealant	Misc	100	SF	Sample 3 of 3	NAD	No	B10A, B10AA
5544-2010 B01	Food Science/Human Nutrition	816	B10A	4" Vinyl cove base	Tan covebase with off-white mastic	Misc	3,000	SF	Sample 1 of 4	NAD	No	Throughout FSHN
5544-2010 B02	Food Science/Human Nutrition	816	B10M	4" Vinyl cove base	Tan covebase with off-white mastic	Misc	3,000	SF	Sample 2 of 4	NAD	No	Throughout FSHN
5544-2010 B03	Food Science/Human Nutrition	816	B10H	4" Vinyl cove base	Tan covebase with off-white mastic	Misc	3,000	SF	Sample 3 of 4	NAD	No	Throughout FSHN
5544-2010 B04	Food Science/Human Nutrition	816	B10W	4" Vinyl cove base	Tan covebase with off-white mastic	Misc	3,000	SF	Sample 4 of 4	NAD	No	Throughout FSHN
5544-2010 C01	Food Science/Human Nutrition	816	South Damper wall	Duct seam sealant	Gray rubbery duct seam sealant	Misc	4,000	LF	Sample 1 of 7	NAD	No	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C02	Food Science/Human Nutrition	816	North Damper wall	Duct seam sealant	Gray rubbery duct seam sealant	Misc	4,000	LF	Sample 2 of 7	NAD	No	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C03	Food Science/Human Nutrition	816	NW Damper wall	Duct seam sealant	Gray rubbery duct seam sealant	Misc	4,000	LF	Sample 3 of 7	NAD	No	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C04	Food Science/Human Nutrition	816	GM10 RF2 Ducting	Duct seam sealant	Gray rubbery duct seam sealant	Misc	4,000	LF	Sample 4 of 7	NAD	No	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C05	Food Science/Human Nutrition	816	GM10 RF2 Ducting	Duct seam sealant	Gray rubbery duct seam sealant	Misc	4,000	LF	Sample 5 of 7	NAD	No	Damper in basement (damper joints), G10M, G1, throughout all building ductwork

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
5544-2010 C06	Food Science/Human Nutrition	816	GM10 RF2 Ducting	Duct seam sealant	Gray rubbery duct seam sealant	Misc	4,000	LF	Sample 6 of 7	NAD	No	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C07	Food Science/Human Nutrition	816	G1	Duct seam sealant	Gray rubbery duct seam sealant	Misc	4,000	LF	Sample 7 of 7	NAD	No	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 D01	Food Science/Human Nutrition	816	CHW Pump #4	Flange gasket	Gasket	Misc	200	EA	Sample 1 of 6	NAD	No	Damper basement piping flanges, G1
5544-2010 D02	Food Science/Human Nutrition	816	CHW Pump #3	Flange gasket	Gasket	Misc	200	EA	Sample 2 of 6	NAD	No	Damper basement piping flanges, G1
5544-2010 D03	Food Science/Human Nutrition	816	CHW Pump #1	Flange gasket	Gasket	Misc	200	EA	Sample 3 of 6	NAD	No	Damper basement piping flanges, G1
5544-2010 D04	Food Science/Human Nutrition	816	CHW Pump #1	Flange gasket	Gasket	Misc	200	EA	Sample 4 of 6	NAD	No	Damper basement piping flanges, G1
5544-2010 D05	Food Science/Human Nutrition	816	CHW Pump #4	Flange gasket	Gasket	Misc	200	EA	Sample 5 of 6	NAD	No	Damper basement piping flanges, G1
5544-2010 K01	Food Science/Human Nutrition	816	G10	Flange gasket	Gasket	Misc	200	EA	Sample 6 of 6	NAD	No	G10
5544-2010 E01	Food Science/Human Nutrition	816	B10AA	Wallboard system	White gypsum wallboard system	Misc	220,000	SF	Sample 1 of 11	NAD	No	Throughout FSHN
5544-2010 E02	Food Science/Human Nutrition	816	B10A	Wallboard system	White Gypsum wallboard system	Misc	220,000	SF	Sample 2 of 11	NAD	No	Throughout FSHN
5544-2010 E03	Food Science/Human Nutrition	816	G10M	Wallboard system	White Gypsum wallboard system	Misc	220,000	SF	Sample 3 of 11	NAD	No	Throughout FSHN
5544-2010 E04	Food Science/Human Nutrition	816	520E	Wallboard system	White Gypsum wallboard system	Misc	220,000	SF	Sample 4 of 11	NAD	No	Throughout FSHN
P00593	Food Science/Human Nutrition	816	155	Wallboard system	Gypsum wallboard with joint compound	Misc	220,000	SF	Sample 5 of 11	NAD	No	Throughout FSHN
P00594	Food Science/Human Nutrition	816	354W	Wallboard system	Gypsum wallboard with joint compound	Misc	220,000	SF	Sample 6 of 11	NAD	No	Throughout FSHN

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P00595	Food Science/Human Nutrition	816	249	Wallboard system	Gypsum wallboard with joint compound	Misc	220,000	SF	Sample 7 of 11	NAD	No	Throughout FSHN
5544-2010 AA01	Food Science/Human Nutrition	816	119A	Wallboard system	Gypsum wall board system	Misc	220,000	SF	Sample 8 of 11	NAD	No	Throughout FSHN
5544-2010 AA02	Food Science/Human Nutrition	816	123	Wallboard system	Gypsum wall board system	Misc	220,000	SF	Sample 9 of 11	NAD	No	Throughout FSHN
5544-2010 AA03	Food Science/Human Nutrition	816	167	Wallboard system	Gypsum wall board system	Misc	220,000	SF	Sample 10 of 11	NAD	No	Throughout FSHN
5544-2010 AA04	Food Science/Human Nutrition	816	253	Wallboard system	Gypsum wall board system	Misc	220,000	SF	Sample 11 of 11	NAD	No	Throughout FSHN
5544-2010 BB01	Food Science/Human Nutrition	816	278	Wallboard system	Green and white gypsum wallboard system	Misc	1,000	SF	Sample 1 of 3	NAD	No	Air shaft 278, 374
5544-2010 BB02	Food Science/Human Nutrition	816	374	Wallboard system	Green and white gypsum wallboard system	Misc	1,000	SF	Sample 2 of 3	NAD	No	Air shaft 278, 374
5544-2010 BB03	Food Science/Human Nutrition	816	374	Wallboard system	Green and white gypsum wallboard system	Misc	1,000	SF	Sample 3 of 3	NAD	No	Air shaft 278, 374
5544-2010 F01	Food Science/Human Nutrition	816	G10M	Concrete masonry	Off-white cement masonry block and mortar	Misc	15,000	SF	Sample 1 of 2	NAD	No	G10M, G20
5544-2010 F02	Food Science/Human Nutrition	816	G20	Concrete masonry	Off-white cement masonry block and mortar	Misc	15,000	SF	Sample 2 of 2	NAD	No	G10M, G20
5544-2010 G01	Food Science/Human Nutrition	816	G20A	4" Vinyl cove base	White covebase with gold mastic	Misc	500	SF	Sample 1 of 2	NAD	No	G20A, G20B, G20AA, G20AV, G20AC, G20AD, G20AE, G20AF, G20BA, G20BB
5544-2010 G02	Food Science/Human Nutrition	816	G20B	4" Vinyl cove base	White covebase with gold mastic	Misc	500	SF	Sample 2 of 2	NAD	No	G20A, G20B, G20AA, G20AV, G20AC, G20AD, G20AE, G20AF, G20BA, G20BB
5544-2010 H01	Food Science/Human Nutrition	816	G20F	Sink Undercoating	Black sink undercoating	Misc	40	EA	Sample 1 of 5	NAD	No	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
5544-2010 H02	Food Science/Human Nutrition	816	G20K	Sink Undercoating	Black sink undercoating	Misc	40	EA	Sample 2 of 5	NAD	No	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323
5544-2010 H03	Food Science/Human Nutrition	816	160	Sink Undercoating	Black sink undercoating	Misc	40	EA	Sample 3 of 5	NAD	No	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323
P00602	Food Science/Human Nutrition	816	291	Sink Undercoating	Black sink undercoating (thick asphaltic)	Misc	40	EA	Sample 4 of 5	NAD	No	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323
P00603	Food Science/Human Nutrition	816	252	Sink Undercoating	Black sink undercoat (thin brittle)	Misc	40	EA	Sample 5 of 5	NAD	No	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323
5544-2010 I01	Food Science/Human Nutrition	816	G20G	Laboratory countertop	Black laboratory countertop	Misc	30	SF	Sample 1 of 1	23% CHR	Yes	G20E
5544-2010 J01	Food Science/Human Nutrition	816	G20E	12" Vinyl floor tile	Gray and white mottled 12" vinyl floor tile with yellow mastic	Misc	35,000	SF	Sample 1 of 8	NAD	No	Dominate 12" floor tile throughout FSHN
5544-2010 J02	Food Science/Human Nutrition	815	200N	12" Vinyl floor tile	Gray and white mottled 12" vinyl floor tile with yellow mastic	Misc	35,000	SF	Sample 2 of 8	NAD	No	Dominate 12" floor tile throughout FSHN
5544-2010 J03	Food Science/Human Nutrition	816	100	12" Vinyl floor tile	Gray and white mottled 12" vinyl floor tile with yellow mastic	Misc	35,000	SF	Sample 3 of 8	NAD	No	Dominate 12" floor tile throughout FSHN
5544-2010 J04	Food Science/Human Nutrition	816	200	12" Vinyl floor tile	Gray and white mottled 12" vinyl floor tile with yellow mastic	Misc	35,000	SF	Sample 4 of 8	NAD	No	Dominate 12" floor tile throughout FSHN

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
5544-2010 J05	Food Science/Human Nutrition	816	354E	12" Vinyl floor tile	Gray and white mottled 12" vinyl floor tile with yellow mastic	Misc	35,000	SF	Sample 5 of 8	NAD	No	Dominate 12" floor tile throughout FSHN
5544-2010 J06	Food Science/Human Nutrition	816	358J	12" Vinyl floor tile	Gray and white mottled 12" vinyl floor tile with yellow mastic	Misc	35,000	SF	Sample 6 of 8	NAD	No	Dominate 12" floor tile throughout FSHN
5544-2010 J07	Food Science/Human Nutrition	816	302D	12" Vinyl floor tile	Gray and white mottled 12" vinyl floor tile with yellow mastic	Misc	35,000	SF	Sample 7 of 8	NAD	No	Dominate 12" floor tile throughout FSHN
P00653	Food Science/Human Nutrition	816	164	12" Vinyl floor tile	Gray and white mottled 12" vinyl floor tile with yellow mastic	Misc	35,000	SF	Sample 8 of 8	NAD	No	Dominate 12" floor tile throughout FSHN
5544-2010 L01	Food Science/Human Nutrition	816	G10WA	2'x4' Suspended ceiling tile	2' x 4' White etched with pinhole pattern suspended ceiling tile	Misc	90,000	SF	Sample 1 of 4	NAD	No	Throughout FSHN
5544-2010 L04	Food Science/Human Nutrition	816	119	2'x4' Suspended ceiling tile	2' x 4' White etched with pinhole pattern suspended ceiling tile	Misc	90,000	SF	Sample 2 of 4	NAD	No	Throughout FSHN
5544-2010 L05	Food Science/Human Nutrition	816	253	2'x4' Suspended ceiling tile	2' x 4' White etched with pinhole pattern suspended ceiling tile	Misc	90,000	SF	Sample 3 of 4	NAD	No	Throughout FSHN
P00596	Food Science/Human Nutrition	816	155	2'x4' Suspended ceiling tile	2' x 4' White etched with pinhole pattern suspended ceiling tile	Misc	90,000	SF	Sample 4 of 4	NAD	No	Throughout FSHN
5544-2010 O02	Food Science/Human Nutrition	816	100A	4" Vinyl cove base	Beige cove base with off white mastic	Misc	2,000	SF	Sample 2 of 5	NAD	No	Throughout FSHN
5544-2010 O03	Food Science/Human Nutrition	816	200N	4" Vinyl cove base	Beige cove base with off white mastic	Misc	2,000	SF	Sample 3 of 5	NAD	No	Throughout FSHN

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
5544-2010 O04	Food Science/Human Nutrition	816	253	4" Vinyl cove base	Beige cove base with off white mastic	Misc	2,000	SF	Sample 4 of 5	NAD	No	Throughout FSHN
5544-2010 U04	Food Science/Human Nutrition	815	T101	Sheet vinyl flooring	Dark gray sheet vinyl flooring/yellow mastic	Misc	15,000	SF	Sample 1 of 3	NAD	No	T101, T100A, 253, 291, 289, 204, 212, 215, 218, 220, 229, 229A, 231, 235, 240, 244, 248, 250, 252, 258, 259, 264, 360, 303, 303AA, 305, 317, 319, 340, 242, 246, 350, 352, 353, and 355
P00635	Food Science/Human Nutrition	815	229	Sheet vinyl flooring	Dark gray sheet vinyl flooring/yellow mastic	Misc	15,000	SF	Sample 2 of 3	NAD	No	T101, T100A, 253, 291, 289, 204, 212, 215, 218, 220, 229, 229A, 231, 235, 240, 244, 248, 250, 252, 258, 259, 264, 360, 303, 303AA, 305, 317, 319, 340, 242, 246, 350, 352, 353, and 355
P00636	Food Science/Human Nutrition	815	303	Sheet vinyl flooring	Dark gray sheet vinyl flooring/yellow mastic	Misc	15,000	SF	Sample 3 of 3	NAD	No	T101, T100A, 253, 291, 289, 204, 212, 215, 218, 220, 229, 229A, 231, 235, 240, 244, 248, 250, 252, 258, 259, 264, 360, 303, 303AA, 305, 317, 319, 340, 242, 246, 350, 352, 353, and 355
5544-2010 V03	Food Science/Human Nutrition	816	160	Other	Black lab countertop	Misc	80	EA	Sample 1 of 3	NAD	No	160, 253, 212, 258, 263, 277, 279A, 264, 212, 229, 229A, 259, 210, 223, 225, 359, 302D, 302H, 317, 319, 340, 354, 302, 305, 352, 350, 353, 342, 346, 355
5544-2010 V04	Food Science/Human Nutrition	816	253	Countertop	Black lab countertop	Misc	80	EA	Sample 2 of 3	NAD	No	160, 253, 212, 258, 263, 277, 279A, 264, 212, 229, 229A, 259, 210, 223, 225, 359, 302D, 302H, 317, 319, 340, 354, 302, 305, 352, 350, 353, 342, 346, 355
5544-2010 V05	Food Science/Human Nutrition	816	258	Countertop	Black lab countertop	Misc	80	EA	Sample 3 of 3	NAD	No	160, 253, 212, 258, 263, 277, 279A, 264, 212, 229, 229A, 259, 210, 223, 225, 359, 302D, 302H, 317, 319, 340, 354, 302, 305, 352, 350, 353, 342, 346, 355

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
5544-2010 W01	Food Science/Human Nutrition	816	202	Carpet mastic	Tan carpet mastic	Misc	6,000	SF	Sample 1 of 4	NAD	No	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101
5544-2010 W02	Food Science/Human Nutrition	816	216	Carpet mastic	Tan carpet mastic	Misc	6,000	SF	Sample 2 of 4	NAD	No	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101
5544-2010 W03	Food Science/Human Nutrition	816	164	Carpet mastic	Tan carpet mastic	Misc	6,000	SF	Sample 3 of 4	NAD	No	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101
5544-2010 W04	Food Science/Human Nutrition	816	101	Carpet mastic	Tan carpet mastic	Misc	6,000	SF	Sample 4 of 4	NAD	No	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101
5544-2010 X04	Food Science/Human Nutrition	816	147	Ceramic tile	Ceramic floor and wall tile/grout	Misc	300	SF	Sample 1 of 1	NAD	No	147, 151, 247, 251
5544-2010 Y01	Food Science/Human Nutrition	816	103	Sheet vinyl flooring	Beige sheet vinyl flooring/yellow mastic	Misc	2,500	SF	Sample 1 of 3	NAD	No	103, 119, 119A, 140, 148, 155, 160, 167, 302A, 302H, 323
5544-2010 Y02	Food Science/Human Nutrition	816	148	Sheet vinyl flooring	Beige sheet vinyl flooring/yellow mastic	Misc	2,500	SF	Sample 2 of 3	NAD	No	103, 119, 119A, 140, 148, 155, 160, 167, 302A, 302H, 323
5544-2010 Y03	Food Science/Human Nutrition	816	155	Sheet vinyl flooring	Beige sheet vinyl flooring/yellow mastic	Misc	2,500	SF	Sample 3 of 3	NAD	No	103, 119, 119A, 140, 148, 155, 160, 167, 302A, 302H, 323
5544-2010 Z01	Food Science/Human Nutrition	816	119	Sink undercoating	White sink undercoating	Misc	7	EA	Sample 1 of 2	NAD	No	119, 150, 345, 303, 373

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
5544-2010 Z02	Food Science/Human Nutrition	816	150	Sink undercoating	White sink undercoating	Misc	7	EA	Sample 2 of 2	NAD	No	119, 150, 345, 303, 373
5544-2010 CC01	Food Science/Human Nutrition	816	252 Exterior	Exterior fascia	Pebblecrete exterior	Misc	70,000	SF	Sample 1 of 7	NAD	No	Exterior of FSHN
5544-2010 CC02	Food Science/Human Nutrition	816	252 Exterior	Exterior fascia	Pebblecrete exterior	Misc	70,000	SF	Sample 2 of 7	NAD	No	Exterior of FSHN
5544-2010 CC03	Food Science/Human Nutrition	816	252 Exterior	Exterior fascia	Pebblecrete exterior	Misc	70,000	SF	Sample 3 of 7	NAD	No	Exterior of FSHN
5544-2010 CC04	Food Science/Human Nutrition	816	252 Exterior	Exterior fascia	Pebblecrete exterior	Misc	70,000	SF	Sample 4 of 7	NAD	No	Exterior of FSHN
5544-2010 CC05	Food Science/Human Nutrition	816	252 Exterior	Exterior fascia	Pebblecrete exterior	Misc	70,000	SF	Sample 5 of 7	NAD	No	Exterior of FSHN
5544-2010 CC06	Food Science/Human Nutrition	816	252 Exterior	Exterior fascia	Pebblecrete exterior	Misc	70,000	SF	Sample 6 of 7	NAD	No	Exterior of FSHN
5544-2010 CC07	Food Science/Human Nutrition	816	252 Exterior	Exterior fascia	Pebblecrete exterior	Misc	70,000	SF	Sample 7 of 7	NAD	No	Exterior of FSHN
5544-2010 DD01	Food Science/Human Nutrition	816	SE stairwell level 1	Stucco	Beige synthetic stucco walls	Surf	5,000	SF	Sample 1 of 7	NAD	No	Interior and exterior portions of NE and SE stairwells
5544-2010 DD02	Food Science/Human Nutrition	816	SE stairwell level 2	Stucco	Beige synthetic stucco walls	Surf	5,000	SF	Sample 2 of 7	NAD	No	Interior and exterior portions of NE and SE stairwells
5544-2010 DD03	Food Science/Human Nutrition	816	SE stairwell level 3	Stucco	Beige synthetic stucco walls	Surf	5,000	SF	Sample 3 of 7	NAD	No	Interior and exterior portions of NE and SE stairwells
5544-2010 DD04	Food Science/Human Nutrition	816	400	Stucco	Beige synthetic stucco walls	Surf	5,000	SF	Sample 4 of 7	NAD	No	Interior and exterior portions of NE and SE stairwells
5544-2010 DD05	Food Science/Human Nutrition	816	400	Stucco	Beige synthetic stucco walls	Surf	5,000	SF	Sample 5 of 7	NAD	No	Interior and exterior portions of NE and SE stairwells
5544-2010 DD06	Food Science/Human Nutrition	816	400	Stucco	Beige synthetic stucco walls	Surf	5,000	SF	Sample 6 of 7	NAD	No	Interior and exterior portions of NE and SE stairwells

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
5544-2010 DD07	Food Science/Human Nutrition	816	400	Stucco	Beige synthetic stucco walls	Surf	5,000	SF	Sample 7 of 7	NAD	No	Interior and exterior portions of NE and SE stairwells
5544-2010 EE01	Food Science/Human Nutrition	816	Roof above 352	Roofing	Silver-coat paint atop asphaltic coating	Misc	28,000	SF	Sample 1 of 2	NAD	No	Interior walls of roof parapets
5544-2010 EE02	Food Science/Human Nutrition	816	Roof above 324	Roofing	Silver-coat paint atop asphaltic coating	Misc	28,000	SF	Sample 2 of 2	NAD	No	Interior walls of roof parapets
5544-2010 FF01	Food Science/Human Nutrition	816	Above 300	Roof core	Silver coat, asphaltic roofing material, perlite, asphaltic paper, perlite, brown fibrous felt paper, asphaltic felt paper, asphaltic paper, brown foam board.	Misc	28,000	SF	Sample 1 of 2	NAD	No	Throughout FSHN roofing system
5544-2010 GG01	Food Science/Human Nutrition	816	Above 400	Roof core	Silver coat, asphaltic roofing material, beige fibrous material, brown foam board, silver metallic paper	Misc	28,000	SF	Sample 2 of 2	NAD	No	Throughout FSHN roofing system
P00600	Food Science/Human Nutrition	816	Roof	Roofing	Roof flashing felts with silver paint	Misc	5,000	SF	Sample 1 of 1	NAD	No	Throughout FSHN roofing system
P00601	Food Science/Human Nutrition	816	Roof	Roofing	Roofing felt (original)	Misc	200	SF	Sample 1 of 1	NAD	No	Roof
5544-2010 HH01	Food Science/Human Nutrition	816	T101	12" Ceiling tile w/mastic	White 12x12 inch ceiling tile with brown glue dollop	Misc	300	SF	Sample 1 of 3	NAD	No	T101
5544-2010 HH02	Food Science/Human Nutrition	816	T101	12" Ceiling tile w/mastic	White 12x12 inch ceiling tile with brown glue dollop	Misc	300	SF	Sample 2 of 3	NAD	No	T101

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P00598	Food Science/Human Nutrition	816	T101	12" Ceiling tile w/mastic	White 12x12 inch ceiling tile with brown glue dollop	Misc	300	SF	Sample 3 of 3	NAD	No	T101
5544-2010KK01	Food Science/Human Nutrition	816	S 100 Hallway	12" Vinyl floor tile	Blue on off-white 12"x12" Vinyl floor tile/gold mastic	Misc	50	SF	Sample 1 of 1	NAD	No	South 100 Hallway
5544-2010LL01	Food Science/Human Nutrition	816	Room 166B	Sink undercoating	Gray sink undercoating	Misc	2	EA	Sample 1 of 3	NAD	No	Room 166B
5544-2010LL02	Food Science/Human Nutrition	816	Room 166B	Sink undercoating	Gray sink undercoating	Misc	2	EA	Sample 2 of 3	NAD	No	Room 166B
5544-2010LL03	Food Science/Human Nutrition	816	Room 166B	Sink undercoating	Gray sink undercoating	Misc	2	EA	Sample 3 of 3	NAD	No	Room 166B
5544-2010MM01	Food Science/Human Nutrition	816	T100	Stair tread	Tan vinyl stair tread	Misc	100	SF	Sample 1 of 3	NAD	No	T100
5544-2010MM02	Food Science/Human Nutrition	816	T100	Stair tread	Tan vinyl stair tread	Misc	100	SF	Sample 2 of 3	NAD	No	T100
5544-2010MM03	Food Science/Human Nutrition	816	T100	Stair tread	Tan vinyl stair tread	Misc	100	SF	Sample 3 of 3	NAD	No	T100
5544-2010NN01	Food Science/Human Nutrition	816	Roof	Roof sealant	Roof penetration sealant	Misc	50	SF	Sample 1 of 1	NAD	No	Roof
P00588	Food Science/Human Nutrition	816	400	Gasket putty	White gasket putty	Misc	400	LF	Sample 1 of 1	NAD	No	400 Mechanical penthouse and G Level HVAC ducts
P00589	Food Science/Human Nutrition	816	400SW	Duct mastic	Green soft duct mastic	Misc	1,200	LF	Sample 1 of 3	NAD	No	401 Mechanical penthouse and G Level HVAC ducts
P00590	Food Science/Human Nutrition	816	400	Duct mastic	Green soft duct mastic	Misc	1,200	LF	Sample 2 of 3	NAD	No	402 Mechanical penthouse and G Level HVAC ducts
P00591	Food Science/Human Nutrition	816	G10M	Duct mastic	Green soft duct mastic	Misc	1,200	LF	Sample 3 of 3	NAD	No	403 Mechanical penthouse and G Level HVAC ducts

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P00592	Food Science/Human Nutrition	816	148A	12" Vinyl floor tile	12" Gray/white mottled vinyl floor tile with black mastic	Misc	80	SF	Sample 1 of 1	NAD	No	148A
P00597	Food Science/Human Nutrition	816	400	Poured flooring	Red residual poured flooring	Misc	100	SF	Sample 1 of 1	NAD	No	400
P00599	Food Science/Human Nutrition	816	400	Exterior mastic	White fiberglass backsplash with brown mastic	Misc	300	SF	Sample 1 of 1	NAD	No	400 (exterior air intake area)

Notes:

CHR = Chrysotile Asbestos

SF = Square Foot

EA = Each

LF = Linear Feet

Surf. = Surfacing Material

Misc. = Miscellaneous Material

NAD = No Asbestos Detected

APPENDIX A

Chain-of-Custody and Laboratory Analytical Results for EH&S Sampling



Environmental Hazards Services, L.L.C.

7469 Whitepine Rd

Richmond, VA 23237

Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 13-08-02874

Client: Washington State University - Pullman
P.O. BOX 641172
Pullman, WA 99164

Received Date: 08/21/2013

Analyzed Date: 08/22/2013

Reported Date: 08/23/2013

Project/Test Address: FSHN Full Building; Pullman, WA

Client Number:

49-3308

Fax Number:

509-335-4442

Laboratory Results

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-08-02874-001	P00588		Light Gray Rubbery;Homogeneous	NAD	100% Non-Fibrous
13-08-02874-002	P00589		Gray Brittle; Homogeneous	NAD	100% Non-Fibrous
13-08-02874-003	P00590		Gray Brittle; Homogeneous	NAD	100% Non-Fibrous
13-08-02874-004	P00591		Tan Brittle; Homogeneous	NAD	100% Non-Fibrous
13-08-02874-005A	P00592	Tile	White Vinyl; Homogeneous	NAD	100% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308

Report Number: 13-08-02874

Project/Test Address: FSHN Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-08-02874-005B	P00592	Mastic	Black Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-08-02874-006	P00593		White Granular; Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 2% Fibrous Glass 78% Non-Fibrous
13-08-02874-007	P00594		White Granular; Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 2% Fibrous Glass 78% Non-Fibrous
13-08-02874-008	P00595		White Granular; Chalky; Fibrous; Inhomogeneous	NAD	20% Cellulose 2% Fibrous Glass 78% Non-Fibrous
13-08-02874-009	P00596		Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
13-08-02874-010	P00597		Black Granular; Red Paint-Like; Inhomogeneous	NAD	100% Non-Fibrous
13-08-02874-011	P00598		Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
No brown mastic present.					

Environmental Hazards Services, L.L.C

Client Number: 49-3308

Report Number: 13-08-02874

Project/Test Address: FSHN Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-08-02874-012A	P00599	Mastic	Brown Adhesive; Inhomogeneous	NAD	100% Non-Fibrous
13-08-02874-012B	P00599	Tar	Black Tar-Like; Homogeneous	NAD	100% Non-Fibrous
13-08-02874-012C	P00599	Silver Paint	Silver Paint-Like; Homogeneous	NAD	2% Polyethylene 98% Non-Fibrous
13-08-02874-013A	P00600	Roof Core	Black Tar-Like; Fibrous; Inhomogeneous	NAD	25% Synthetic 75% Non-Fibrous
13-08-02874-013B	P00600	Silver Paint	Silver Paint-Like; Homogeneous	NAD	100% Non-Fibrous
13-08-02874-014A	P00601	Roof Core	Black Tar-Like; Fibrous; Inhomogeneous	NAD	25% Synthetic 75% Non-Fibrous
13-08-02874-014B	P00601	Silver Paint	Silver Paint-Like; Homogeneous	NAD	3% Wollastonite 97% Non-Fibrous
13-08-02874-015	P00602		Black Tar-Like; Homogeneous	NAD	100% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308

Report Number: 13-08-02874

Project/Test Address: FSHN Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-08-02874-016	P00603		Black Tar-Like; Homogeneous	NAD	100% Non-Fibrous

QC Sample: 39-M1-1999-2

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Araceli Enzler

Reviewed By Authorized Signatory:



Howard Varner
General Manager

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND: NAD = no asbestos detected



McKibbin

Asbestos Chain-of-Custody

Environmental Hazards Services, LLC
www.leadlab.com 7469 Whitepine Rd
(800)347-4010 Richmond, VA
(804)275-4907 (fax) 23237



13-08-02874
Due Date:
08/26/2013
(Monday)
AE M

Company Name: Washington State University Health and Safety Address: P.O. Box 641172
Phone: (509) 335-5604 Fax: () WSLU List City/State/Zip: Pullman, WA 99164
Project Name / Testing Address: ES&H Fall Building City/State (Required): Pullman, WA
Collected by: Matthew McKibbin Purchase Order Number: Acct. Number: 49-3308 D

Turn Around Times : *If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.*
1 - Day 2 - Day X 3 - Day Same Day (Must Call Ahead) Weekend (Must Call Ahead)

No.	Client Sample ID	Date Collected	ASBESTOS						AIR				COMMENTS	
			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM Chatfield (Bulk)	TEMAHERA (Air)	Time On	Time Off	Flow Rate (L/min)		Total Time (minutes)
1	P00588	8-19-13	X											
2	P00589		X											
3	P00590		X											
4	P00591		X											
5	P00592		X											
6	P00593		X											
7	P00594		X											
8	P00595		X											
9	P00596		X											
10	P00597	✓												
Released by: Matt McKibbin			Signature: [Signature]											
Received by: ES&H			Signature: [Signature]											
			Date/Time: 8-20-13/1200											
			Date/Time: 8/21/13											



EHS Laboratories™

Environmental Hazards Services, LLC

www.leadlab.com 7469 Whitepine Rd
(800)347-4070 Richmond, VA
(804)275-4907 (fax) 23237

Asbestos Chain-of-Custody

2874
~ For Lab Use Only ~

Company Name: Washington State University Health and Safety Address: P.O. Box 641172 City/State/Zip: Pullman, WA 99164

Phone: (509) 335-5604 Fax: () WSU List Acct. Number: 49-3308 D

Project Name / Testing Address: FSHN - Fall Building City/State (Required): Pullman, WA

Collected by: Matthew McKibbin Purchase Order Number:

Turn Around Times : If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.

1 - Day 2 - Day ☒ 3 - Day Same Day (Must Call Ahead) Weekend (Must Call Ahead)

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			COMMENTS			
			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM Chatfield (Bulk)	TEMA HERA (Air)	Time On	Time Off		Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)
1	P005948	8-19-13	X												
2	P005949		X												
3	P00600		X												
4	P00601		X												
5	P00602		X												
6	P00603		X												
7															
8															
9															
10															

Released by: Matthew McKibbin Signature: [Signature] Date/Time: 8-20-13/1200
Received by: [Signature] Signature: [Signature] Date/Time: 8/21/13



Environmental Hazards Services, L.L.C.

7469 Whitepine Rd

Richmond, VA 23237

Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 13-09-02410

Client: Washington State University - Pullman
P.O. BOX 641172
Pullman, WA 99164

Received Date: 09/19/2013

Analyzed Date: 09/19/2013

Reported Date: 09/20/2013

Project/Test Address: Food Science; Human Nutrition; Pullman, WA

Client Number:

49-3308

Fax Number:

509-335-4442

Laboratory Results

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-09-02410-001	P00635		Gray Vinyl; Homogeneous	NAD	100% Non-Fibrous
13-09-02410-002A	P00653	Tile	Gray Vinyl; Homogeneous	NAD	100% Non-Fibrous
13-09-02410-002B	P00653	Mastic	Black Tar-Like; Homogeneous	NAD	6% Cellulose 94% Non-Fibrous
13-09-02410-003	P00636		Gray Vinyl; Homogeneous	NAD	100% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308

Report Number: 13-09-02410

Project/Test Address: Food Science; Human Nutrition; Pullman,
WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials

QC Sample: 39-M1-1999-2

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Christian H. Schaible

Reviewed By Authorized Signatory:



Tasha Eaddy
QA/QC Clerk

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND: NAD = no asbestos detected



Environmental Hazards Services, LLC

www.leadlab.com 7469 Whitepine Rd
(800)347-4010 Richmond, VA
(804)275-4907 (fax) 23237

Asbestos Chain-of-Custody

13-09-02410



Due Date:
09/20/2013
(Friday)

AE M

CHS

Company Name: Washington State University Health and Safety Address: P.O. Box 641172 City/State/Zip: Pullman, WA 99164

Phone: (509) 335-5604 Fax: () E-mail: WSU List Acct. Number: 49-3308 D

Project Name / Testing Address: Food Science / Human Nutrition City/State (Required): Pullman, WA

Collected by: Matthew McKibbin Purchase Order Number:

Turn Around Times: *If no TAT is specified, sample(s) will be processed and charged as 3-day TAT.*
☒ 1 - Day ☐ 2 - Day ☐ 3 - Day ☐ Same Day (Must Call Ahead) ☐ Weekend (Must Call Ahead)

No.	Client Sample ID	Date Collected	ASBESTOS						AIR			COMMENTS			
			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM Chatfield (Bulk)	TEMA HERA (Air)	Time On	Time Off		Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)
1	P00634	9-16-13	X												
2	P00635		X												
3	P00636	9-16-13	X												
4															
5															
6															
7															
8															
9															
10															

Released by: *Matt McKibbin* Signature: *Matt McKibbin* Date/Time: 9-17-13 / 1:30
Received by: *STONE* Signature: *STONE* Date/Time: 9/19/13

APPENDIX B

Limited Hazardous Materials Inspection Report dated May 2012 by PBS Engineering and Environmental



Engineering +
Environmental

Limited Hazardous Materials Inspection Report

**Food Science/Human Nutrition Building
Pullman, Washington**

Prepared for:

**Washington State University
Capital Planning and Development
110 Commons Building
PO Box 643611
Pullman, Washington 99164-3611**

May 2012
Project No. 61987.029
WSU Project No. 5544-2010

320 N Johnson Street, Suite 700, Kennewick, WA 99336
509.735.2698 Main
509.735.1867 Fax
www.pbsehv.com

Table of Contents

EXECUTIVE SUMMARY	1
1.0 HAZARDOUS MATERIALS INSPECTION	2
1.1 Introduction	2
1.2 Asbestos Inspection.....	2
1.3 Survey Process.....	2
1.4 Homogeneous Sampling Areas	2
1.5 Laboratory Results.....	2
1.6 Asbestos Recommendations	5
2.0 LEAD SAMPLING	6
2.1 XRF Sampling.....	6
2.2 XRF Sampling Results.....	6
2.3 Bulk Paint-Chip Sampling.....	8
2.4 Laboratory Results.....	8
2.5 Recommendations.....	9
3.0 RADON TESTING	10
3.1 Survey Process.....	10
3.2 Findings	10
4.0 POLYCHLORINATED BIPHENYLS	10
5.0 MERCURY-CONTAINING COMPONENTS	10
6.0 LIMITATIONS.....	10
7.0 CERTIFICATION	11

ATTACHMENTS

Appendix A - PLM Asbestos and Lead Paint Laboratory Results

Appendix B - Radon Laboratory Results

Appendix C – PCB Results

Appendix D - Inspector and Laboratory Certifications

Appendix E - WSU Asbestos Database

Appendix F - Asbestos-Containing Materials Drawings

EXECUTIVE SUMMARY

PBS Engineering + Environmental (PBS) performed a limited hazardous materials inspection of the Food Science/Human Nutrition Building. The inspection included an asbestos-containing materials inspection, lead paint inspection, radon sampling, mercury-containing thermostat switch/thermometer inspection and a polychlorinated biphenyl's (PCB) inspection of window caulking.

The asbestos-containing materials inspection revealed that the black laboratory countertop in Room G20G contains asbestos. No other asbestos-containing materials were located during the inspection of this facility.

The lead paint inspection revealed several areas of lead paint are present throughout the building.

Radon testing was performed in the lowest level of the building. All results were well below the EPA action level of 4.0 picocuries/liter of air.

The window putty testing revealed no PCB's are present in this material.

No mercury-containing thermometers or switches were observed during the inspection.

1.0 HAZARDOUS MATERIALS INSPECTION

1.1 Introduction

Between the dates of December 19 through the 22, 2010, PBS Engineering + Environmental (PBS) performed a Hazardous Materials Inspection of the Food Science/Human Nutrition building located on the Washington State University Campus. The inspection included an asbestos-containing materials inspection, lead paint inspection, radon sampling, mercury-containing thermostat switch/thermometer inspection and a polychlorinated biphenyl's (PCB) inspection of window caulking. The following report describes the inspection and provides analytical results and recommendations.

1.2 Asbestos Inspection

PBS Engineering + Environmental (PBS) performed the inspection in relation to anticipated renovation and/or demolition activities at the above mentioned sites. It is the intent of this investigation to provide The Washington State University (WSU), with information to meet the Washington State Department of Labor and Industries requirement that a "good faith" inspection is performed prior to renovation or demolition activities.

Sampling was limited to accessible areas. Inaccessible areas are defined as those requiring selective demolition, fall protection or confined-space entry protocols to gain access.

The following report summarizes inspection activities, laboratory results and provides recommendations as necessary.

1.3 Survey Process

Accessible areas were inspected by AHERA Certified Building Inspectors David Ross, Greg Lovell and Averie Powell. Building inspector certificates are enclosed in this report.

Asbestos samples were relinquished to NVL Laboratories, Inc., (NVLAP #102063). For quality control purposes, ten percent of the samples were split in half, and sent to NVL Laboratories, Inc., and Seattle Asbestos Test, LLC, (NVLAP #200876-0). All samples were shipped under chain-of-custody protocols and analyzed according to EPA Method 600R-93/116 using Polarized Light Microscopy (PLM), which has a reliable limit of quantification of 1% asbestos by volume.

1.4 Homogenous Sampling Areas

Materials similar in general appearance were classified into groups called Homogenous Sampling Areas (HSAs). An HSA is any specific type of surfacing material, thermal system insulation, or miscellaneous material that is uniform in color, texture and general appearance, and which appears to have been installed during the same time frame. The primary purpose of the HSA designation is for establishing a sampling strategy and interpreting laboratory results. Table 1 lists the sampled materials, material type, HSAs and describes material locations.

1.5 Laboratory Results

An asbestos-containing material (ACM) is defined by state and federal regulations as any building material containing greater than 1% asbestos. Laboratory analysis revealed that 1

of the sampled materials contains asbestos. For further information on sample results, refer to Table 2 and/or the attached laboratory analysis report.

Table 1**Homogenous Sampling Areas**

HSA	Type of Material	Material Description	Material Location
A	Misc.	Gray floor sealant	Floor seams, and cracks in B10, B10A and B10AA
B	Misc.	Tan covebase/off-white mastic	B10A, B10AA, GM10, H10AT, G10C, G20, G20D, G20H, G28, G1A, G20E, G1, G1D, G1A, G1B, G10N, G10W and G10WA.
C*	Misc.	Gray sealant	Throughout building; air-conditioning ductwork seams, and related components
D	TSI	Flange gasket	Piping flanges in; B10, B10A and B10AA
E	Misc.	Gypsum wallboard/joint compound	Interior wall of B10, B10A, piping shute walls running through all floors, GM10, G20E, G1A, G1, G1D, and G1T
F*	Misc.	CMU	Walls of G10, and G20
G	Misc.	2" white covebase/beige mastic	G20, G20B, G20AB, G20AC, G20AD, G20AE, G20AF, G20BA, G20BA, and G20BB
H*	Misc.	Black sink undercoating	G20F, G20K, 160231, 235, 240, 244, 168A, 283, 289, 291, 204, 215, 219, 218, 220, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355 and 323.
I	Misc.	Black laboratory countertop	G20G
J	Misc.	Gray and off-white 12"x12" Vinyl floor tile/gold mastic	G20E, 100, 100S, and 100SL hallways, 118, 116, 114, 112, 108, 110, 102, 120, 122, 123, 157, 166, 166B, 157C, 168A, 200, and 200S hallways, 279, 287, 202, 206, 208, 214, 200LT, 216, 222, 224, 226, 228, 230, 232, 234, 236, 238, 255, 245, 249, 287, 260, 261, 262, 263, 268, 270, 272, 274, 276, 277, 279, 354E, 359, 364, 362, 36A, 366, 368, 370, 372, 300, and 300S hallways, 375, 379, 302C, 302D, 302P, 303A, 308, 310, 312, 316, 314, 318, 320, 322, 324, 344, 348, 349, 358, 359, 358A, 358B, 358C, 358D, 358J, 358E, 358H, 358F, T101A and T101AA.
K	TSI	Flange gasket	G1D

HSA	Type of Material	Material Description	Material Location
L*	Misc.	2'x4' pinhole/etched drop-in ceiling tile	T101A, T101AA, 100, 100S, and 100SL hallways, 119A, 118, 116, 114, 112, 110, 108, 106, 103, 155, 104, 157, 160, 150, 148, 146, 140, 123, 122, 120, 168A, 106L, 106K, 106J, 106H, 106G, 106F, 102, 104, 104A, 106A, 200, and 200S hallways, 302J, 302E, 302H, 302G, 302GA, 302C, 302EA, 300, and 300S hallways, 305, 308, 309, 310, 312, 314, 316, 318, 320, 322, 324, 317, 319, 321, 323, 343T, 303AB, 303AA, 349A, 349, 300V, 379, 303AB, 377, 375, 340, 342, 346, 348, 350, 352, 358G, 358F, 358H, 358E, 358D, 358C, 358, 358A, 358B, 355, 353, 359, 354W, 354E, 376, 378, 374, 372, 370, 368, 366, 364, 362, 360, and 360A.
M	Misc.	Blue and off-white 12"x12" Vinyl floor tile/gold mastic	100S, 100C, and 100W hallway, and 104
N*	Misc.	Gray sink undercoating	166B
O	Misc.	Beige covebase/off-white mastic	Throughout 1 st , 2 nd , 3 rd and 4 th floors.
P	Misc.	Black/white 12"x12" vinyl floor tile/tan mastic	250
S	Misc.	Gray ceramic floor tile/grout, adhesive, and black soft material	111, 111B, 113, 113B, 213, and 219
T	Misc.	Tan stair tread/off-white mastic with red coating	T100 stairwell
U*	Misc.	Gray vinyl sheet flooring/yellow mastic	T101, T100A, 253, 291, 289, 204, 212, 215, 218, 220, 229, 229A, 231, 235, 240, 244, 248, 250, 252, 258, 259, 264, 360, 303, 303AA, 305, 317, 319, 340, 242, 246, 350, 352, 353, and 355
V	Misc.	Black laboratory countertop	212, 253, 258, 263, 277, 279A, 264, 212, 229, 229A, 259, 210, 223, 225, 359, 302, 302D, 302H, 317, 319, 340, 354, 305, 352, 350, 353, 342, 346, and 355
W*	Misc.	Carpet mastic (tan)	Under carpet in; 216, 202, 204, 208, 210, 212, 214, 202, 216, 164, 101, 166A, 168, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302g, 302J, 302K, 302L, 302N, and T101
X*	Misc.	Ceramic floor and wall tile/grout	147, 151, 247, and 251
Y	Misc.	Beige vinyl sheet flooring/yellow mastic	103, 119, 119A, 140, 148, 155, 160, 167, 302A, 302H, and 323
Z	Misc.	White sink undercoating	119, 150, 345, 303AA, and 373
AA	Misc.	Gypsum wallboard/joint compound	Throughout all room walls of 1 st , and 2 nd floors
BB	Misc.	Green white Gypsum wallboard system	378, and 374 on east walls

HSA	Type of Material	Material Description	Material Location
CC*	Surf.	Brown pebbled exterior wall texturing/gray soft binder	Exterior walls of building excluding stairwell housings
DD*	Surf.	Beige interior wall texture	Interior hallway walls near stairwells
EE	Surf.	Silver-coat paint atop asphaltic coating	Throughout rooftop parapet walls
FF*	Misc.	Silver-coat roofing system	Throughout building rooftops excluding room 400 roof
GG	Misc.	Silver-coat roofing system	Room 400 rooftop
HH	Misc.	Glued-on 12"x12" ceiling tile/brown mastic	T101
II	Misc.	Black sealant	Surrounding rooftop penetrations
JJ	Misc.	Beige textured exterior siding	Exterior walls of stairwell housings
KK	Misc.	12" x 12" Blue/Gray and White Vinyl Floor Tile and Associated Mastic	South 100 Hallway
LL	Surf.	Sink Undercoat	Room 166B
MM	Surf.	Stair Tread	Hallway by T100
NN	Misc.	Sealant	North Central Roof

Misc. = Miscellaneous

TSI = Thermal System Insulation

Surf. = Surfacing

CMU = Cement Masonry Unit

Note: HSA identifiers with * indicate materials sent for quality control analysis. All quality control samples tested negative for asbestos at NVL Laboratories, Inc., and Seattle Asbestos Test, LLC Laboratories.

Table 2

Asbestos-containing Materials				
Sample Number	Material Description	Material Location	Asbestos Percent and Type	Approximate Quantity
61987.029-101	Black laboratory countertop	G20G	23% Chrysotile	30 sf.

sf. = square feet

1.6 Asbestos Recommendations

- Identified ACMs that may be impacted during renovation activities shall be removed or impacted in accordance with applicable local, state and federal asbestos regulations. Asbestos removal or repair work shall be performed by trained workers knowledgeable in the hazards of asbestos, and properly trained in the use of personal protective equipment and engineering controls.

- Impact to ACMs is administered by two primary regulatory agencies: (1) the Washington Department of Ecology, under the EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP); and (2) the Washington Department of Labor and Industries (L&I) under the Division of Occupational Safety & Health (DOSH). NESHAP regulates environmental air emissions and asbestos disposal, whereas DOSH regulates worker exposure and work practices.
- The removal of asbestos-containing miscellaneous materials is regulated by DOSH as a Class II activity. Class II activities require that removal and disposal be conducted in accordance with WAC 296-62-077. Workers must have a minimum of eight hours training regarding the hazards and proper removal methods specific to the material being abated, as specified in WAC 296-62-722(4)(a); or must be Washington State Certified Asbestos Workers. Additionally, a Washington State Certified Asbestos Supervisor must be present during abatement activities.
- If additional suspect ACMs are encountered during renovation, demolition and/or construction activities, the material shall be treated as asbestos-containing until polarized light microscopy analysis is conducted to characterize the material.
- Maintain a copy of this report on-site at all times during construction activities.

2.0 LEAD SAMPLING

The purpose of the lead sampling was to determine if lead is present in paint that may be impacted during renovation or demolition activities, and to provide an awareness to building occupants of the presence of lead-containing paint. The presence of lead in paint was determined through two methods, x-ray fluorescence spectroscopy and bulk sampling.

2.1 XRF Sampling

A handheld INNOV-X Systems Inc. X-Ray Fluorescence Analyzer (XRF), Serial No. 6576, operating in lead paint mode was used to perform lead paint testing of various interior and exterior building materials and substrates throughout the subject buildings.

All calibration readings were within the tolerance for this instrument. No substrate correction is required with the INNOV-X Systems XRF per the instrument's performance characteristic sheet.

2.2 XRF Sampling Results

PBS endeavored to sample all colors of paint within the facility during this investigation in order to meet Lead in Construction requirements. XRF results are reported in mg/cm². Table 3 lists the sampled components, provides the sample location and XRF results. For further details, see the attached laboratory analysis report, corresponding sample data sheet and/or the floor plan drawings.

Table 3

XRF Sampling Results						
Sample Number (s)	Color	Substrate	Component	Sample Location	Results (mg/cm ²)	XRF Error
8x	Gray	Metal	Maintenance box	B10	0	0

Sample Number (s)	Color	Substrate	Component	Sample Location	Results (mg/cm ²)	XRF Error
9x	White	Metal	hunter box	B10	0	0
10x	Gray	Metal	power box	B10	0.01	0.01
11x	Gray	Metal	ACP fan box	B10	0.03	0.04
12x	White	Metal	nut on med vac	B10	0.52	0.18
13x	Red	Metal	alarm case	B10	0	0.01
14x	Gray	Metal	door	B10	0	0
15x	Gray	Metal	door frame	B10	0	0
16x	Cream	Metal	support column	B10A	0.01	0.01
17x	Orange	Metal	ladder	B10	0.4	0.11
18x	Orange	Metal	support bracket	B10	0.54	0.11
19x	White	Concrete	support column	B10	0	0
20x	Red	Metal	stair rail	B10	0.3	0.09
21x	Gray	Concrete	floor	B10	0	0
22x	Gray	Concrete	wall	B10	0	0
23x	Orange	Metal	safety rail	G10M	0.24	0.07
24x	Gray	Metal	pace container	G10M	0	0.01
25x	Gray	Metal	door	G20C	0	0
26x	Gray	Metal	door frame	G20C	0	0
27x	Blue	Metal	locker door	G20C	0.06	0.22
28x	Gray	CMU	wall	G20	0	0
29x	Blue	Metal	power supply case	G20	0	0
30x	Blue	Metal	cabinet	G10M	0	0
31x	Green	Metal	High voltage box	G10M	0	0
32x	White Blue	Concrete	Wall	G20	0	0
33x	Gray	Concrete	Wall	G20D	0	0
34x	Blue	Concrete	floor	G20	0	0
35x	Gray	Metal	cabinet	G20F	0	0.01
36x	White	CMU	Wall	G20	0	0
37x	Gray	Metal	Wall	G20A	0.09	0.19
38x	Gray	Gypsum	Wall	G20E	0	0
39x	Gray	Concrete	floor	G1	0	0
40x	Gray	Metal	Square D company panels	G1A	0	0
41x	Gray	Wood	door	G1	0	0
42x	Brown	Metal	Support for ducts	G1	0	0
43x	Green	Metal	Pump 13	G1	0	0
44x	Bright Blue	Metal	Panel to Plumb #2	G1	0	0
45x	Red	Metal	door frame	G10W	0.03	0.01

Sample Number (s)	Color	Substrate	Component	Sample Location	Results (mg/cm ²)	XRF Error
46x	Bright Blue	Metal	door	G10W	0.02	0.03
48x	Red	Metal	Stairway support	G10W	0.22	0.07
7i	Off-white	Gypsum	Wall	119	0	0
8i	White	Gypsum	Wall	119	0	0
9i	Blue	Wood	Door	108	0	0
10i	Beige	Gypsum	Wall	100	0	0
11i	Dark beige	Gypsum	Wall	300	0	0
12i	Blue	Gypsum	Wall	100	0	0
13i	Dark blue	Plastic	Wall	103	0.07	0.05
14i	Light gray	Wood	Door	103	0.07	0.1
15i	Gray	Metal	Door	103	0.01	0.03
16i	Gray	Metal	Door frame	103	0	0
18i	Purple	Gypsum	Wall	140	0	0
19i	Gray	Concrete	Floor	100NE	0	0
20i	Blue	Gypsum	Wall	100SN	0	0
21i	Red	Metal	Stall doors	147	0.23	0.08
22i	Red	Metal	Stall doors	147	0.11	0.05
23i	Dark blue	Gypsum	Wall	200	0	0
24i	Black	Metal	Wall	200	0	0
30i	Red	Wood	Floor	400	0	0
31i	Yellow	Metal	Ladder	400	0	0
32i	Gray	Metal	Snyder general	400	0	0
33i	Orange	Metal	Casing	400	0.38	0.1
3s	Beige	Metal	Wall	400	0	0
4s	Brown	Metal	Support	400	0	0.1
5s	Black	Concrete	Wall	400	0	0

2.3 Bulk Paint-Chip Sampling

For quality control purposes, representative bulk paint chip samples were collected in conjunction with XRF samples as referenced below. Using hand held tools, a total of eight (8) samples were collected and relinquished to NVL Laboratories, Inc. of Seattle, Washington, where they were analyzed for lead concentration by Flame Atomic Absorption Spectrophotometry. Sample locations were chosen at random and compared to XRF results for QAQC purposes.

2.4 Laboratory Results

Flame Atomic Absorption Spectrophotometry (FAAS) results are reported in milligrams per kilogram (mg/kg) whereas, XRF results are reported in mg/cm². The two methods of analysis show differing units of measurement and therefore the quantity of lead in each

sample will vary between methods. The results of XRF and laboratory analysis can be compared on a positive or negative scale.

The FAAS samples greater than the reporting limit are considered positive for lead. Samples with the lower than symbol (<) were analyzed to less than the reporting limit and are not considered lead-containing.

XRF sampling detected lead in quality control sample# 61987.029-08L however, Flame Atomic Absorption Spectrophotometry analysis indicated that this sample was negative. Although analysis results are typically comparable, Flame Atomic Absorption Spectrophotometry is definitively more accurate than XRF sampling. Therefore, quality control sample# 61987.029-08L is deemed negative.

Table 4 lists the sampled components, provides the sample location and laboratory results. For further details, see the attached laboratory analysis report, corresponding sample data sheet and/or the floor plan drawings.

Table 4
QAQC Bulk Paint Sample Results

Sample Number	XRF Sample Number	Color	Substrate	Component	Sample Location	Results (mg/kg)
61987.029-01L	19x	White	Concrete	Interior pillar	B10	<100.0
61987.029-02L	32x	White	Concrete	Interior wall	G20	<140.0
61987.029-03L	42x	Brown/rust	Metal	Support for ducts	G20W	<470.0
61987.029-04L	48x	Red	Metal	Stairway railing	G10W	13000.0
61987.029-05L	12i	Blue	Gypsum	Interior wall	100 Hallway	<110.0
61987.029-06L	7i	Off-white	Gypsum	Interior wall	146	<88.0
61987.029-07L	16i	Gray	Metal	Door frame	234	<290.0
61987.029-08L	15i	L-gray	Metal	Door face	400	<190.0

Mg/kg = Milligrams per kilogram

2.5 Recommendations

- The presence of lead-containing paint and lead-containing materials requires contractors to perform construction and maintenance work in compliance with state lead regulations (WAC 296-155-176, Lead in Construction). Until an exposure assessment is complete, initial monitoring and interim worker protection will be required for workers impacting lead-containing paint. Requirements include respiratory protection, protective clothing, decontamination procedures, and exposure monitoring until an initial exposure assessment (through personal air monitoring) demonstrates that lead exposure to workers does not exceed the action level of 30 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and/or permissible exposure limit (PEL) of 50 $\mu\text{g}/\text{m}^3$ of air.
- Prior to impacting lead-containing materials, a qualified paint removal contractor may remove lead-containing paint from surfaces to be impacted.

- The State of Washington requires employers and employees to follow the regulations codified in Standard for Lead in Construction, WAC 296-155-176 and the Federal Lead in Construction standards codified in 29 CFR 1926.62.
- The presence of lead in painted coatings requires that waste disposal comply with WAC 173-303, Dangerous Waste Regulations. Characterization or sampling of representative waste, by means of a Toxicity Characteristic Leaching Procedure (TCLP) for leachable lead, is required to determine disposal requirements. The lead TCLP sample must include the representative materials in their representative proportions that will be included in the waste stream. Materials failing the TCLP test (greater than five milligrams of lead per liter of waste) must be disposed of as hazardous waste.

3.0 RADON

3.1 Survey Process

Five radon tests were placed throughout the basement/lower level of the Food Science/Human Nutrition building by PBS Industrial Hygienist Averie Powell on December 19, 2010. Exterior doors and windows were closed other than normal entry and exit during the test. Each test was placed in a room with no noted air flow, low humidity, away from heat sources, and at least 20 inches above the floor. Each sample was analyzed by First Alert/Alpha Energy Laboratories on December 27, 2010.

3.2 Findings

The Exterior US Environmental Protection Agency (EPA) recommends further action if the radon level is above 4.0 picocuries per liter of air (pCi/L). Laboratory analysis revealed that the radon tests results were well below the limit. For test results, see Table 5 and/or the attached laboratory analysis report.

Table 5

Radon Test Kit ID	Building	Sample Location	Date of Testing	Duration (Total Hours)	Results (pCi/L)
N75789	FS/HN	B10	December 19-21, 2010	52	0.5
N75607	FS/HN	B10	December 19-21, 2010	52	<0.5
N64687	FS/HN	B10	December 19-21, 2010	52	<0.5
N75610	FS/HN	B10AA	December 19-21, 2010	52	<0.5
N75633	FS/HN	G1	December 19-21, 2010	49.5	<0.5

4.0 POLYCHLORINATED BIPHENYLS

Window putty was submitted for analysis of polychlorinated biphenyls. The sample was submitted to Friedman & Bruya, Inc. of Seattle Washington, under chain of custody protocols. The sample will be analyzed under EPA Method 8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography. Laboratory analysis **detected no PCB's** in the window caulking of Food Science/Human Nutrition.

5.0 MERCURY-CONTAINING COMPONENTS

PBS detected no mercury-containing thermometers or thermostat switches.

6.0 LIMITATIONS

The findings and conclusions of this report are limited to the areas inspected, samples collected and analytical results obtained during the inspection, as well as professional judgment concerning the significance of the data gathered during the course of the investigation. Only accessible suspect materials were sampled during this survey. Additional sampling may be required if concealed suspect materials are discovered during construction, renovation, and/or demolition activities.

7.0 CERTIFICATION

PBS Environmental has conducted a physical inspection of the building, compiled this report consistent with the survey scope, and certifies that the information is correct and accurate within the standards of professional quality and contractual obligations.

PBS appreciates the opportunity to provide these inspection services for WSU, if you have any questions or require additional information, please do not hesitate to contact me at (509) 735-2698.

Sincerely,



Steve Devine
Senior Project Manager

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017040.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095070 Client Sample #: 61987.029-A-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Gray/light gray brittle material

Non-Fibrous Materials:
Fine particles, Binder/Filler

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Lab ID: 30095071 Client Sample #: 61987.029-A-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Gray/light gray brittle material

Non-Fibrous Materials:
Fine particles, Binder/Filler

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Lab ID: 30095072 Client Sample #: 61987.029-A-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Gray brittle material

Non-Fibrous Materials:
Fine particles, Binder/Filler

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Lab ID: 30095073 Client Sample #: 61987.029-B-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3 Description: Tan rubbery material

Non-Fibrous Materials:
Rubber/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Layer 2 of 3 Description: Off-white soft mastic

Non-Fibrous Materials:
Mastic/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Layer 3 of 3 Description: Trace thin white fibrous material

Non-Fibrous Materials:
Fine particles

Other Fibrous Materials:%
Cellulose 20%

Asbestos Type: %
None Detected ND

Sampled by: Client

Analyzed by: Alla Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017040.00

Client Project #: 61987.029
Date Received: 12/30/2010
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095074 Client Sample #: 61987.029-B-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Pale gray rubbery material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Rubber/Binder

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white soft mastic

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095075 Client Sample #: 61987.029-B-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Tan rubbery material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Rubber/Binder

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white soft mastic

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095076 Client Sample #: 61987.029-B-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Tan rubbery material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Rubber/Binder

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white soft mastic

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095077 Client Sample #: 61987.029-C-01

Location: Food Science & Food Quality Buildings- WSU

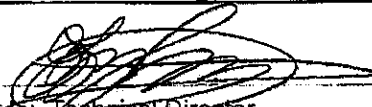
Sampled by: Client

Analyzed by: Alla Pryszazhnyuk

Date: 01/03/2011

Reviewed by: Nick Ly

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017040.00
Client Project #: 61987.029
Date Received: 12/30/2010
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Gray soft material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler	None Detected ND	None Detected ND

Lab ID: 30095078 Client Sample #: 61987.029-C-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Gray soft material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler	None Detected ND	None Detected ND

Lab ID: 30095079 Client Sample #: 61987.029-C-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Gray soft material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler	None Detected ND	None Detected ND

Lab ID: 30095080 Client Sample #: 61987.029-C-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: White soft material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Calcareous binder	None Detected ND	None Detected ND

Layer 2 of 2	Description: Tan soft material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Fine particles, Binder/Filler	None Detected ND	None Detected ND

Lab ID: 30095081 Client Sample #: 61987.029-C-05

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: White soft material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Calcareous binder	None Detected ND	None Detected ND

Sampled by: Client

Analyzed by: Alla Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017040.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095082 Client Sample #: 61987.029-C-06

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Light green brittle mastic

Non-Fibrous Materials:

Mastic/Binder

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095083 Client Sample #: 61987.029-D-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Green compressed fibrous material

Non-Fibrous Materials:

Binder/Filler

Other Fibrous Materials: %

Cellulose 65%

Asbestos Type: %

None Detected ND

Lab ID: 30095084 Client Sample #: 61987.029-D-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Green compressed fibrous material

Non-Fibrous Materials:

Binder/Filler, Rust

Other Fibrous Materials: %

Cellulose 63%

Asbestos Type: %

None Detected ND

Lab ID: 30095085 Client Sample #: 61987.029-D-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Green compressed fibrous material

Non-Fibrous Materials:

Binder/Filler, Rust

Other Fibrous Materials: %

Cellulose 60%

Asbestos Type: %

None Detected ND

Lab ID: 30095086 Client Sample #: 61987.029-D-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Green compressed fibrous material

Non-Fibrous Materials:

Binder/Filler, Rust

Other Fibrous Materials: %

Cellulose 62%

Asbestos Type: %

None Detected ND

Sampled by: Client

Analyzed by: Alla Pryshazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017040.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095087 Client Sample #: 61987.029-D-05

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Green compressed fibrous material

Non-Fibrous Materials:

Binder/Filler, Rust

Other Fibrous Materials: %

Cellulose 65%

Asbestos Type: %

None Detected ND

Lab ID: 30095088 Client Sample #: 61987.029-E-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3 Description: Off-white compacted powdery material

Non-Fibrous Materials:

Calcareous binder

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 3 Description: Off-white compacted powdery material with paper

Non-Fibrous Materials:

Calcareous particles

Other Fibrous Materials: %

Cellulose 25%

Asbestos Type: %

None Detected ND

Layer 3 of 3 Description: Off-white chalky material with paper

Non-Fibrous Materials:

Gypsum/Binder

Other Fibrous Materials: %

Cellulose 18%

Glass fibers 2%

Asbestos Type: %

None Detected ND

Lab ID: 30095089 Client Sample #: 61987.029-E-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Off-white chalky material with paper and paint

Non-Fibrous Materials:

Gypsum/Binder, Paint

Other Fibrous Materials: %

Cellulose 19%

Glass fibers 1%

Asbestos Type: %

None Detected ND

Lab ID: 30095090 Client Sample #: 61987.029-E-03

Location: Food Science & Food Quality Buildings- WSU

Sampled by: Client

Analyzed by: Alla Pryszazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017040.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Layer 1 of 2	Description: Off-white compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Calcereous binder, Paint	None Detected ND	None Detected ND	
Layer 2 of 2	Description: Off-white chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Gypsum/Binder	Cellulose 23%	None Detected ND	

Lab ID: 30095091 Client Sample #: 61987.029-E-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Calcereous particles, Paint	None Detected ND	None Detected ND	
Layer 2 of 2	Description: Off-white chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Gypsum/Binder	Cellulose 19%	None Detected ND	
		Glass fibers 2%		

Lab ID: 30095092 Client Sample #: 61987.029-F-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Gray brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Fine particles, Binder/Filler, Mineral grains, Paint	None Detected ND	None Detected ND	

Lab ID: 30095093 Client Sample #: 61987.029-F-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Gray brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Fine particles, Binder/Filler, Mineral grains, Paint	None Detected ND	None Detected ND	

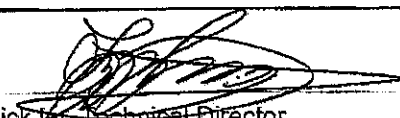
Sampled by: Client

Analyzed by: Alla Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017040.00
Client Project #: 61987.029
Date Received: 12/30/2010
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095094 Client Sample #: 61987.029-G-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Tan rubbery material

Non-Fibrous Materials:
Rubber/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Layer 2 of 2 Description: Beige soft mastic

Non-Fibrous Materials:
Mastic/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Lab ID: 30095095 Client Sample #: 61987.029-G-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Tan rubbery material

Non-Fibrous Materials:
Rubber/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Layer 2 of 2 Description: Beige soft mastic

Non-Fibrous Materials:
Mastic/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Lab ID: 30095096 Client Sample #: 61987.029-H-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Black asphaltic material

Non-Fibrous Materials:
Asphalt/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Lab ID: 30095097 Client Sample #: 61987.029-H-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Black asphaltic material

Non-Fibrous Materials:
Asphalt/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

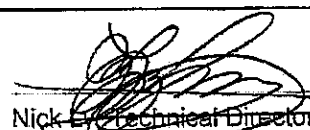
Sampled by: Client

Analyzed by: Alla Prysazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017040.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095098 Client Sample #: 61987.029-H-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Black asphaltic material

Non-Fibrous Materials:
Calcareous particles, Asphalt/Binder

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
None Detected ND

Lab ID: 30095099 Client Sample #: 61987.029-I-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Black brittle material

Non-Fibrous Materials:
Binder/Filler

Other Fibrous Materials:%
None Detected ND

Asbestos Type: %
Chrysotile 25%

Sampled by: Client

Analyzed by: Alla Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095100 Client Sample #: 61987.029-J-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3 Description: Light gray tile

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Calcareous particles, Vinyl/Binder

None Detected ND

None Detected ND

Layer 2 of 3 Description: Gold soft mastic

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Layer 3 of 3 Description: Gray cementitious material with paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Cement/Binder, Paint

None Detected ND

None Detected ND

Lab ID: 30095101 Client Sample #: 61987.029-J-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3 Description: Light gray and gray tile

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Calcareous particles, Vinyl/Binder

None Detected ND

None Detected ND

Layer 2 of 3 Description: Gold soft mastic

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Layer 3 of 3 Description: Gray cementitious material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Cement/Binder

None Detected ND

None Detected ND

Lab ID: 30095102 Client Sample #: 61987.029-J-03

Location: Food Science & Food Quality Buildings- WSU

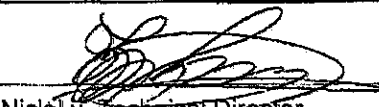
Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Date: 01/05/2011

Reviewed by: Nick Ly

Date: 01/05/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3	Description: Light gray and gray tile			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Calcareous particles, Vinyl/Binder	None Detected ND		None Detected ND
Layer 2 of 3	Description: Gold soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Mastic/Binder	None Detected ND		None Detected ND
Layer 3 of 3	Description: Trace gray cementitious material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Fine particles, Cement/Binder	None Detected ND		None Detected ND

Lab ID: 30095103 Client Sample #: 61987.029-J-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Light gray tile			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Calcareous particles, Vinyl/Binder	None Detected ND		None Detected ND
Layer 2 of 2	Description: Gold soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Mastic/Binder	None Detected ND		None Detected ND

Lab ID: 30095104 Client Sample #: 61987.029-J-05

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Light gray tile			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Calcareous particles, Vinyl/Binder	None Detected ND		None Detected ND
Layer 2 of 2	Description: Gold soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Mastic/Binder	None Detected ND		None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Date: 01/05/2011

Reviewed by: Nick Ly

Date: 01/05/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095105 Client Sample #: 61987.029-J-06

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Light gray tile

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Calcareous particles, Vinyl/Binder

None Detected ND

None Detected ND

Layer 2 of 2 Description: Gold soft mastic

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095106 Client Sample #: 61987.029-J-07

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Gray tile

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Calcareous particles, Vinyl/Binder

None Detected ND

None Detected ND

Layer 2 of 2 Description: Gold soft mastic

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095107 Client Sample #: 61987.029-K-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Tan hard compressed fibrous material with paint and adhesive

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Adhesive/Binder, Paint

Cellulose 96%

None Detected ND

Lab ID: 30095108 Client Sample #: 61987.029-L-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Light gray compressed fibrous material with paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Perlite, Glass beads

Cellulose 55%

None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Date: 01/05/2011

Reviewed by: Nick Ly

Date: 01/05/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Paint

Glass fibers 18%

Lab ID: 30095109 Client Sample #: 61987.029-L-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Light gray compressed fibrous material with paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Perlite, Glass beads

Cellulose 52%

None Detected ND

Paint

Glass fibers 20%

Lab ID: 30095110 Client Sample #: 61987.029-L-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Light gray compressed fibrous material with paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Perlite, Glass beads

Cellulose 57%

None Detected ND

Paint

Glass fibers 16%

Lab ID: 30095111 Client Sample #: 61987.029-L-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Light gray compressed fibrous material with paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Perlite, Glass beads

Cellulose 52%

None Detected ND

Paint

Glass fibers 23%

Lab ID: 30095112 Client Sample #: 61987.029-L-05

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Light gray compressed fibrous material with paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Perlite, Glass beads

Cellulose 56%

None Detected ND

Paint

Glass fibers 20%

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Date: 01/05/2011

Reviewed by: Nick Ly

Date: 01/05/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Lab ID: 30095113 Client Sample #: 61987.029-M-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3 Description: Off-white tile with blue streaks

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Calcareous particles, Vinyl/Binder

None Detected ND

None Detected ND

Layer 2 of 3 Description: Gold soft mastic

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Layer 3 of 3 Description: Trace gray cementitious material

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Fine particles, Cement/Binder

None Detected ND

None Detected ND

Lab ID: 30095114 Client Sample #: 61987.029-M-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Off-white tile with blue streaks

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Calcareous particles, Vinyl/Binder

None Detected ND

None Detected ND

Layer 2 of 2 Description: Gold soft mastic

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095115 Client Sample #: 61987.029-M-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Off-white tile with blue streaks

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Calcareous particles, Vinyl/Binder

None Detected ND

None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/05/2011

Date: 01/05/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2 Description: Gold soft mastic

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095116 Client Sample #: 61987.029-N-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Gray flaky material

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Calcareous particles, Binder/Filler, Mica

Cellulose 10%

None Detected ND

Lab ID: 30095117 Client Sample #: 61987.029-N-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Gray flaky material

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Calcareous particles, Binder/Filler, Mica

Cellulose 8%

None Detected ND

Lab ID: 30095118 Client Sample #: 61987.029-N-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Gray flaky material

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Calcareous particles, Binder/Filler, Mica

Cellulose 8%

None Detected ND

Lab ID: 30095119 Client Sample #: 61987.029-O-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3 Description: Beige rubbery material

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Calcareous particles, Rubber/Binder

None Detected ND

None Detected ND

Layer 2 of 3 Description: Off-white soft mastic

Non-Fibrous Materials:

Other Fibrous Materials:%

Asbestos Type: %

Calcareous particles, Mastic/Binder

None Detected ND

None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Date: 01/05/2011

Reviewed by: Nick Ly

Date: 01/05/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine
Project Location: Food Science & Food Quality Buildings- WSU

Layer 3 of 3	Description: White skim coat material with paint		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Fine particles, Binder/Filler, Paint	Cellulose <1%	None Detected ND

Lab ID: 30095120 Client Sample #: 61987.029-O-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige rubbery material		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Calcareous particles, Rubber/Binder	None Detected ND	None Detected ND

Layer 2 of 2	Description: Off-white soft mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Calcareous particles, Mastic/Binder	None Detected ND	None Detected ND

Lab ID: 30095121 Client Sample #: 61987.029-O-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige rubbery material		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Calcareous particles, Rubber/Binder	None Detected ND	None Detected ND

Layer 2 of 2	Description: Trace off-white soft mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Calcareous particles, Mastic/Binder	None Detected ND	None Detected ND

Lab ID: 30095122 Client Sample #: 61987.029-O-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige rubbery material		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Calcareous particles, Rubber/Binder	None Detected ND	None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysazhnyuk

Reviewed by: Nick Ly

Date: 01/05/2011

Date: 01/05/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2	Description: Trace off-white soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Mastic/Binder	None Detected ND		None Detected ND

Lab ID: 30095123 Client Sample #: 61987.029-O-05

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3	Description: Beige rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Rubber/Binder	None Detected ND		None Detected ND

Layer 2 of 3	Description: Off-white soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Mastic/Binder	None Detected ND		None Detected ND

Layer 3 of 3	Description: Tan /off-white fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Fine particles, Adhesive/Binder, Paint	Cellulose 97%		None Detected ND

Lab ID: 30095124 Client Sample #: 61987.029-P-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white tile with tan soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Vinyl/Binder, Mastic/Binder	None Detected ND		None Detected ND

Layer 2 of 2	Description: Black tile with tan soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Vinyl/Binder, Mastic/Binder	None Detected ND		None Detected ND

Lab ID: 30095125 Client Sample #: 61987.029-P-02

Location: Food Science & Food Quality Buildings- WSU

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/05/2011

Date: 01/05/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white tile with tan soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Vinyl/Binder, Mastic/Binder	None Detected ND		None Detected ND
Layer 2 of 2	Description: Black tile with tan soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Vinyl/Binder, Mastic/Binder	None Detected ND		None Detected ND

Lab ID: 30095126 Client Sample #: 61987.029-P-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 5	Description: Off-white tile			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Vinyl/Binder	None Detected ND		None Detected ND
Layer 2 of 5	Description: Gold soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Mastic/Binder	None Detected ND		None Detected ND
Layer 3 of 5	Description: Gray tile			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Calcareous particles, Vinyl/Binder	None Detected ND		None Detected ND
Layer 4 of 5	Description: Gold soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Mastic/Binder	None Detected ND		None Detected ND
Layer 5 of 5	Description: Off-white chalky material			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Fine particles, Gypsum/Binder	Cellulose 2%		None Detected ND

Lab ID: 30095127 Client Sample #: 61987.029-Q-01

Location: Food Science & Food Quality Buildings- WSU

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Date: 01/05/2011

Reviewed by: Nick Ly

Date: 01/05/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Layer 1 of 2	Description: Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Calcareous particles, Rubber/Binder	None Detected ND	None Detected ND	
Layer 2 of 2	Description: Off-white soft mastic (on wood)			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Mastic/Binder	None Detected ND	None Detected ND	

Lab ID: 30095128 Client Sample #: 61987.029-Q-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Calcareous particles, Rubber/Binder	None Detected ND	None Detected ND	
Layer 2 of 2	Description: Off-white /gold soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Mastic/Binder	None Detected ND	None Detected ND	

Lab ID: 30095129 Client Sample #: 61987.029-R-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Calcareous particles, Binder/Filler, Paint	None Detected ND	None Detected ND	
Layer 2 of 2	Description: Tan chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %	
	Fine particles, Gypsum/Binder	Cellulose 22%	None Detected ND	
		Glass fibers 2%		

Lab ID: 30095130 Client Sample #: 61987.029-R-02

Location: Food Science & Food Quality Buildings- WSU

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/05/2011

Date: 01/05/2011

Nick Ly Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017041.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 32

Samples Analyzed: 32

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white compacted powdery material with paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: % None Detected ND
		Calcareous particles, Binder/Filler, Paint	None Detected ND	
Layer 2 of 2	Description: Off-white chalky material with paper	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: % None Detected ND
		Fine particles, Gypsum/Binder	Cellulose 18%	
			Glass fibers 3%	

Lab ID: 30095131 **Client Sample #: 61987.029-R-03**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Tan chalky material with paper and paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: % None Detected ND
		Fine particles, Gypsum/Binder, Paint	Cellulose 24%	
			Glass fibers 3%	

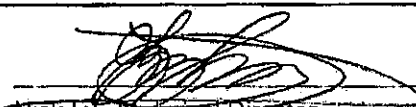
Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/05/2011

Date: 01/05/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095132 Client Sample #: 61987.029-S-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 4 Description: Light gray ceramic tile

Non-Fibrous Materials:

Ceramic/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 4 Description: Beige fibrous material with adhesive

Non-Fibrous Materials:

Fine particles, Adhesive/Binder

Other Fibrous Materials:%

Cellulose 65%

Asbestos Type: %

None Detected ND

Layer 3 of 4 Description: Black soft material

Non-Fibrous Materials:

Synthetic/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Layer 4 of 4 Description: Gray brittle material

Non-Fibrous Materials:

Fine particles, Binder/Filler, Mineral grains

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095133 Client Sample #: 61987.029-S-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 4 Description: Light gray ceramic tile

Non-Fibrous Materials:

Ceramic/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 4 Description: Beige fibrous material with adhesive

Non-Fibrous Materials:

Fine particles, Adhesive/Binder

Other Fibrous Materials:%

Cellulose 67%

Asbestos Type: %

None Detected ND

Layer 3 of 4 Description: Black soft material

Non-Fibrous Materials:

Synthetic/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Sampled by: Client

Analyzed by: Alla Pryszazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 4 of 4 Description: Gray brittle material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Binder/Filler, Mineral grains

None Detected ND

None Detected ND

Lab ID: 30095134 **Client Sample #: 61987.029-T-01**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Gray rubbery material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Rubber/Binder

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white soft mastic with red coating

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095135 **Client Sample #: 61987.029-T-02**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Gray rubbery material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Rubber/Binder

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white soft mastic with red coating

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 30095136 **Client Sample #: 61987.029-U-01**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Gray vinyl

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Vinyl/Binder

None Detected ND

None Detected ND

Sampled by: Client

Analyzed by: Alla Prysazhnyuk

Date: 01/03/2011

Reviewed by: Nick Ly

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2 Description: Yellow soft mastic

Non-Fibrous Materials:

Mastic/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095137 Client Sample #: 61987.029-U-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Gray vinyl

Non-Fibrous Materials:

Vinyl/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 2 Description: Yellow soft mastic

Non-Fibrous Materials:

Mastic/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095138 Client Sample #: 61987.029-U-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3 Description: Gray vinyl

Non-Fibrous Materials:

Vinyl/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 3 Description: Yellow soft mastic

Non-Fibrous Materials:

Mastic/Binder

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Layer 3 of 3 Description: Trace thin gray brittle skim coat material with paint

Non-Fibrous Materials:

Fine particles, Binder/Filler, Paint

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095139 Client Sample #: 61987.029-U-04

Location: Food Science & Food Quality Buildings- WSU

Sampled by: Client

Analyzed by: Alla Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029
Date Received: 12/30/2010
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3	Description: Gray vinyl	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Vinyl/Binder	None Detected ND	
Layer 2 of 3	Description: Yellow soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Mastic/Binder	None Detected ND	
Layer 3 of 3	Description: Gray brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Fine particles, Binder/Filler	None Detected ND	

Lab ID: 30095140 Client Sample #: 61987.029-V-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black hard brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler	None Detected ND	

Lab ID: 30095141 Client Sample #: 61987.029-V-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black hard brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler	None Detected ND	

Lab ID: 30095142 Client Sample #: 61987.029-V-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black hard brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler	None Detected ND	

Lab ID: 30095143 Client Sample #: 61987.029-V-04

Location: Food Science & Food Quality Buildings- WSU

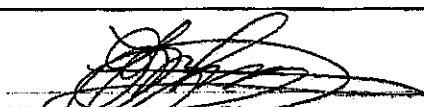
Sampled by: Client

Analyzed by: Alla Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Black hard brittle material

Non-Fibrous Materials:

Binder/Filler

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095144 Client Sample #: 61987.029-V-05

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Black hard brittle material

Non-Fibrous Materials:

Binder/Filler

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095145 Client Sample #: 61987.029-W-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Yellow brittle mastic

Non-Fibrous Materials:

Mastic/Binder

Other Fibrous Materials:%

Cellulose 2%

Asbestos Type: %

None Detected ND

Lab ID: 30095146 Client Sample #: 61987.029-W-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Tan soft mastic with paint

Non-Fibrous Materials:

Fine particles, Mastic/Binder, Paint

Other Fibrous Materials:%

Synthetic fibers 8%

Asbestos Type: %

None Detected ND

Lab ID: 30095147 Client Sample #: 61987.029-W-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Tan soft mastic with paint

Non-Fibrous Materials:

Mastic/Binder, Paint

Other Fibrous Materials:%

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095148 Client Sample #: 61987.029-W-04

Location: Food Science & Food Quality Buildings- WSU

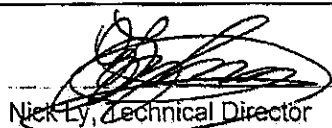
Sampled by: Client

Analyzed by: Alla Prysyzhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Tan soft mastic with paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Mastic/Binder, Paint	None Detected ND	None Detected ND

Lab ID: 30095149 Client Sample #: 61987.029-X-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white ceramic tile	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Ceramic/Binder	None Detected ND	None Detected ND

Layer 2 of 2	Description: Gray brittle material	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Fine particles, Binder/Filler, Mineral grains	None Detected ND	None Detected ND

Lab ID: 30095150 Client Sample #: 61987.029-X-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white ceramic tile	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Ceramic/Binder	None Detected ND	None Detected ND

Layer 2 of 2	Description: Off-white compacted powdery material	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Calcareous particles	None Detected ND	None Detected ND

Lab ID: 30095151 Client Sample #: 61987.029-X-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Off-white ceramic tile	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Ceramic/Binder	None Detected ND	None Detected ND

Lab ID: 30095152 Client Sample #: 61987.029-X-04

Location: Food Science & Food Quality Buildings- WSU

Sampled by: Client

Analyzed by: Alla Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029
Date Received: 12/30/2010
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3	Description: Off-white soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Mastic/Binder	None Detected ND	
Layer 2 of 3	Description: White compacted powdery material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Calcareous binder	None Detected ND	
Layer 3 of 3	Description: Off-white sandy material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Binder/Filler, Sand, Mineral grains	None Detected ND	

Lab ID: 30095153 Client Sample #: 61987.029-Y-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3	Description: Off-white vinyl	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Vinyl/Binder	None Detected ND	
Layer 2 of 3	Description: Yellow soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Mastic/Binder	None Detected ND	
Layer 3 of 3	Description: Gray brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Fine particles, Binder/Filler, Mineral grains	None Detected ND	

Lab ID: 30095154 Client Sample #: 61987.029-Y-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3	Description: Off-white vinyl	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Vinyl/Binder	None Detected ND	

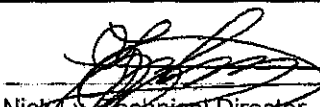
Sampled by: Client

Analyzed by: Alla Prysazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029
Date Received: 12/30/2010
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 3	Description: Yellow soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Mastic/Binder	None Detected ND	
Layer 3 of 3	Description: Gray brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Fine particles, Binder/Filler, Mineral grains	None Detected ND	

Lab ID: 30095155 Client Sample #: 61987.029-Y-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white vinyl	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Vinyl/Binder	None Detected ND	
Layer 2 of 2	Description: Yellow soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Mastic/Binder	None Detected ND	

Lab ID: 30095156 Client Sample #: 61987.029-Z-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: White flaky material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Calcareous particles, Binder/Filler	Cellulose 8%	

Lab ID: 30095157 Client Sample #: 61987.029-Z-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: White flaky material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Calcareous particles, Binder/Filler	Cellulose 5%	

Lab ID: 30095158 Client Sample #: 61987.029-AA-01

Location: Food Science & Food Quality Buildings- WSU

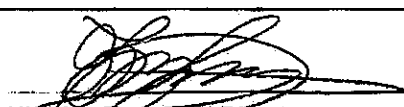
Sampled by: Client

Analyzed by: Alla Prysyzhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017042.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Layer 1 of 3	Description: Off-white layered compacted powdery material with paint	Non-Fibrous Materials: Calcareous particles, Paint	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
Layer 2 of 3	Description: Off-white compacted powdery material with paper	Non-Fibrous Materials: Calcareous particles	Other Fibrous Materials:% Cellulose 23%	Asbestos Type: % None Detected ND
Layer 3 of 3	Description: Off-white chalky material with paper	Non-Fibrous Materials: Gypsum/Binder	Other Fibrous Materials:% Cellulose 20% Glass fibers 2%	Asbestos Type: % None Detected ND

Lab ID: 30095159 Client Sample #: 61987.029-AA-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: White chalky material with paper and paint	Non-Fibrous Materials: Gypsum/Binder, Paint	Other Fibrous Materials:% Cellulose 19% Glass fibers 3%	Asbestos Type: % None Detected ND

Lab ID: 30095160 Client Sample #: 61987.029-AA-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Off-white compacted powdery material	Non-Fibrous Materials: Calcareous binder	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
Layer 2 of 2	Description: White chalky material with paper	Non-Fibrous Materials: Gypsum/Binder	Other Fibrous Materials:% Cellulose 20% Glass fibers 2%	Asbestos Type: % None Detected ND

Sampled by: Client

Analyzed by: Alla Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/03/2011

Date: 01/03/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017042.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095161

Client Sample #: 61987.029-AA-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Trace thin off-white compacted powdery material with paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Calcareous particles, Paint

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white chalky material with paper

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Gypsum/Binder

Cellulose 19%

None Detected ND

Glass fibers 2%

Sampled by: Client

Analyzed by: Alla Prysazhnyuk

Date: 01/03/2011

Reviewed by: Nick Ly

Date: 01/03/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Lab ID: 30095162 Client Sample #: 61987.029-BB-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Off-white compacted powdery material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Calcareous particles, Binder/Filler

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white chalky material with paper

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Gypsum/Binder

Cellulose 17%

None Detected ND

Glass fibers 2%

Lab ID: 30095163 Client Sample #: 61987.029-BB-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Off-white compacted powdery material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Calcareous particles, Binder/Filler

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white chalky material with paper

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Gypsum/Binder

Cellulose 20%

None Detected ND

Glass fibers 1%

Lab ID: 30095164 Client Sample #: 61987.029-BB-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Off-white chalky material with paper

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Gypsum/Binder

Cellulose 18%

None Detected ND

Glass fibers 2%

Lab ID: 30095165 Client Sample #: 61987.029-CC-01

Location: Food Science & Food Quality Buildings- WSU

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Brown hard brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Lab ID: 30095166 Client Sample #: 61987.029-CC-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Brown hard brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Lab ID: 30095167 Client Sample #: 61987.029-CC-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Brown hard brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Layer 2 of 2	Description: Trace gray soft material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler	None Detected ND	None Detected ND

Lab ID: 30095168 Client Sample #: 61987.029-CC-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Brown hard brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Lab ID: 30095169 Client Sample #: 61987.029-CC-05

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Brown hard brittle material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
		Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

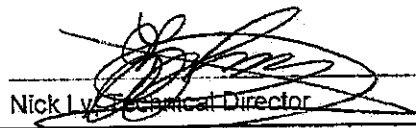
Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Lab ID: 30095170 Client Sample #: 61987.029-CC-06

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Brown hard brittle material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Binder/Filler, Mineral grains, Granules

None Detected ND

None Detected ND

Layer 2 of 2 Description: Trace gray soft material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Binder/Filler

None Detected ND

None Detected ND

Lab ID: 30095171 Client Sample #: 61987.029-CC-07

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Brown hard brittle material

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Binder/Filler, Mineral grains, Granules

None Detected ND

None Detected ND

Lab ID: 30095172 Client Sample #: 61987.029-DD-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Beige textured paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mineral grains, Paint

None Detected ND

None Detected ND

Layer 2 of 2 Description: Off-white fibrous material with paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Fine particles, Adhesive/Binder, Paint

Cellulose 80%

None Detected ND

Lab ID: 30095173 Client Sample #: 61987.029-DD-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Beige textured paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Mineral grains, Paint

None Detected ND

None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2	Description: Off-white/tan fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Fine particles, Adhesive/Binder, Paint	Cellulose 95%		None Detected ND

Lab ID: 30095174 **Client Sample #: 61987.029-DD-03**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Mineral grains, Paint	None Detected ND		None Detected ND

Layer 2 of 2	Description: Off-white fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Fine particles, Adhesive/Binder, Paint	Cellulose 90%		None Detected ND

Lab ID: 30095175 **Client Sample #: 61987.029-DD-04**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Mineral grains, Paint	None Detected ND		None Detected ND

Layer 2 of 2	Description: Gray cementitious material with white fibrous mesh and mastic			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 12%		None Detected ND

Lab ID: 30095176 **Client Sample #: 61987.029-DD-05**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint			
	Non-Fibrous Materials:	Other Fibrous Materials: %		Asbestos Type: %
	Mineral grains, Paint	None Detected ND		None Detected ND

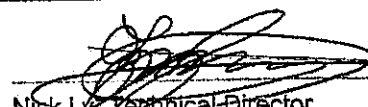
Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.534.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Layer 2 of 2	Description: Gray cementitious material		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Fine particles, Cement/Binder	Glass fibers 4%	None Detected ND

Lab ID: 30095177 **Client Sample #: 61987.029-DD-06**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Mineral grains, Paint	None Detected ND	None Detected ND

Layer 2 of 2	Description: Gray cementitious material with white fibrous mesh and mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 14%	None Detected ND

Lab ID: 30095178 **Client Sample #: 61987.029-DD-07**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Mineral grains, Paint	None Detected ND	None Detected ND

Layer 2 of 2	Description: Gray cementitious material with white fibrous mesh and mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 10%	None Detected ND

Lab ID: 30095179 **Client Sample #: 61987.029-EE-01**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Silver paint		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Metallic paint	Cellulose 3%	None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2	Description: Layered black asphaltic fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Asphalt/Binder	Synthetic fibers 25%	None Detected ND
		Glass fibers 18%	

Lab ID: 30095180 Client Sample #: 61987.029-EE-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3	Description: Silver paint		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Metallic paint	Wollastonite <1%	None Detected ND
		Cellulose 2%	

Layer 2 of 3	Description: Layered black asphaltic fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Asphalt/Binder, Mineral grains	Synthetic fibers 25%	None Detected ND
		Glass fibers 22%	

Layer 3 of 3	Description: Black tar (on wood)		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Asphalt/Binder	None Detected ND	None Detected ND

Lab ID: 30095181 Client Sample #: 61987.029-FF-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 7	Description: Silver paint		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Metallic paint	None Detected ND	None Detected ND

Layer 2 of 7	Description: Layered black asphaltic fibrous material		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Asphalt/Binder, Mineral grains	Synthetic fibers 20%	None Detected ND
		Glass fibers 18%	

Sampled by: Client

Analyzed by: Nadezhda Prysazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 3 of 7	Description: Gray compressed fibrous material	Non-Fibrous Materials: Fine particles, Perlite	Other Fibrous Materials:% Cellulose 70%	Asbestos Type: % None Detected ND
Layer 4 of 7	Description: Black asphaltic fibrous material	Non-Fibrous Materials: Asphalt/Binder	Other Fibrous Materials:% Glass fibers 40%	Asbestos Type: % None Detected ND
Layer 5 of 7	Description: Brown foamy material	Non-Fibrous Materials: Synthetic/Binder	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
Layer 6 of 7	Description: Off-white fibrous material	Non-Fibrous Materials: Fine particles	Other Fibrous Materials:% Glass fibers 98%	Asbestos Type: % None Detected ND
Layer 7 of 7	Description: Black asphaltic fibrous material	Non-Fibrous Materials: Asphalt/Binder	Other Fibrous Materials:% Glass fibers 27%	Asbestos Type: % None Detected ND

Lab ID: 30095182 Client Sample #: 61987.029-GG-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 5	Description: Silver paint	Non-Fibrous Materials: Metallic paint	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
Layer 2 of 5	Description: Layered black asphaltic fibrous material	Non-Fibrous Materials: Asphalt/Binder	Other Fibrous Materials:% Synthetic fibers 22% Glass fibers 19%	Asbestos Type: % None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 3 of 5	Description: Gray compressed fibrous material	Non-Fibrous Materials: Fine particles, Perlite	Other Fibrous Materials:% Cellulose 70%	Asbestos Type: % None Detected ND
Layer 4 of 5	Description: Brown foamy material	Non-Fibrous Materials: Synthetic/Binder	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
Layer 5 of 5	Description: Tan fibrous material with mastic and foil	Non-Fibrous Materials: Fine particles, Mastic/Binder, Metal foil	Other Fibrous Materials:% Cellulose 40% Glass fibers 6%	Asbestos Type: % None Detected ND

Lab ID: 30095183 Client Sample #: 61987.029-HH-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Light gray compressed fibrous material with paint	Non-Fibrous Materials: Fine particles, Glass beads, Paint	Other Fibrous Materials:% Glass fibers 60% Cellulose 8%	Asbestos Type: % None Detected ND
Layer 2 of 2	Description: Brown brittle mastic	Non-Fibrous Materials: Mastic/Binder	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND

Lab ID: 30095184 Client Sample #: 61987.029-HH-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Light gray compressed fibrous material with paint	Non-Fibrous Materials: Fine particles, Glass beads, Paint	Other Fibrous Materials:% Glass fibers 55% Cellulose 10%	Asbestos Type: % None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

NVLAP

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2	Description: Brown brittle mastic	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Mastic/Binder	None Detected ND	None Detected ND

Lab ID: 30095185 Client Sample #: 61987.029-II-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black asphaltic material with trace silver paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Asphalt/Binder	Cellulose 8%	None Detected ND

Lab ID: 30095186 Client Sample #: 61987.029-II-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black asphaltic material	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Asphalt/Binder	Cellulose 10%	None Detected ND

Lab ID: 30095187 Client Sample #: 61987.029-II-03

Location: Food Science & Food Quality Buildings- WSU

Comments: Unable to analyze silver paint as a separate layer

Layer 1 of 2	Description: Black asphaltic material	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Asphalt/Binder	Cellulose 7%	None Detected ND

Layer 2 of 2	Description: Black thin asphaltic material with silver paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Asphalt/Binder, Metallic paint	None Detected ND	None Detected ND

Lab ID: 30095188 Client Sample #: 61987.029-II-04

Location: Food Science & Food Quality Buildings- WSU

Sampled by: Client**Analyzed by: Nadezhda Prysyzhnyuk****Reviewed by: Nick Ly****Date: 01/06/2011****Date: 01/06/2011**

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black asphaltic material	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Asphalt/Binder	Cellulose 12%	None Detected ND

Lab ID: 30095189 **Client Sample #: 61987.029-JJ-01**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Mineral grains, Paint	None Detected ND	None Detected ND

Layer 2 of 2	Description: Gray cementitious material with white fibrous mesh and mastic	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 10%	None Detected ND

Lab ID: 30095190 **Client Sample #: 61987.029-JJ-02**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Mineral grains, Paint	None Detected ND	None Detected ND

Layer 2 of 2	Description: Gray cementitious material	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Fine particles, Cement/Binder	Glass fibers 4%	None Detected ND

Lab ID: 30095191 **Client Sample #: 61987.029-JJ-03**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Mineral grains, Paint	None Detected ND	None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Layer 2 of 2 Description: Gray cementitious material with white fibrous mesh and mastic
Non-Fibrous Materials: Other Fibrous Materials: %
Fine particles, Cement/Binder, Mastic/Binder Glass fibers 13%

Asbestos Type: %
None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Lab ID: 30095162 **Client Sample #: 61987.029-BB-01**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Off-white compacted powdery material

Non-Fibrous Materials:

Calcareous particles, Binder/Filler

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 2 Description: Off-white chalky material with paper

Non-Fibrous Materials:

Fine particles, Gypsum/Binder

Other Fibrous Materials: %

Cellulose 17%

Glass fibers 2%

Asbestos Type: %

None Detected ND

Lab ID: 30095163 **Client Sample #: 61987.029-BB-02**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Off-white compacted powdery material

Non-Fibrous Materials:

Calcareous particles, Binder/Filler

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 2 Description: Off-white chalky material with paper

Non-Fibrous Materials:

Fine particles, Gypsum/Binder

Other Fibrous Materials: %

Cellulose 20%

Glass fibers 1%

Asbestos Type: %

None Detected ND

Lab ID: 30095164 **Client Sample #: 61987.029-BB-03**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Off-white chalky material with paper

Non-Fibrous Materials:

Fine particles, Gypsum/Binder

Other Fibrous Materials: %

Cellulose 18%

Glass fibers 2%

Asbestos Type: %

None Detected ND

Lab ID: 30095165 **Client Sample #: 61987.029-CC-01**

Location: Food Science & Food Quality Buildings- WSU

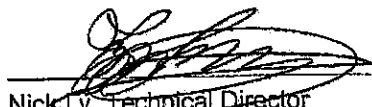
Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Brown hard brittle material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Lab ID: 30095166 **Client Sample #: 61987.029-CC-02**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Brown hard brittle material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Lab ID: 30095167 **Client Sample #: 61987.029-CC-03**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Brown hard brittle material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Layer 2 of 2	Description: Trace gray soft material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler	None Detected ND	None Detected ND

Lab ID: 30095168 **Client Sample #: 61987.029-CC-04**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Brown hard brittle material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Lab ID: 30095169 **Client Sample #: 61987.029-CC-05**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Brown hard brittle material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
	Binder/Filler, Mineral grains, Granules	None Detected ND	None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Date: 01/06/2011

Reviewed by: Nick Ly

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Lab ID: 30095170 Client Sample #: 61987.029-CC-06

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Brown hard brittle material

Non-Fibrous Materials:

Binder/Filler, Mineral grains, Granules

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 2 Description: Trace gray soft material

Non-Fibrous Materials:

Binder/Filler

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095171 Client Sample #: 61987.029-CC-07

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1 Description: Brown hard brittle material

Non-Fibrous Materials:

Binder/Filler, Mineral grains, Granules

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Lab ID: 30095172 Client Sample #: 61987.029-DD-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Beige textured paint

Non-Fibrous Materials:

Mineral grains, Paint

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Layer 2 of 2 Description: Off-white fibrous material with paint

Non-Fibrous Materials:

Fine particles, Adhesive/Binder, Paint

Other Fibrous Materials: %

Cellulose 80%

Asbestos Type: %

None Detected ND

Lab ID: 30095173 Client Sample #: 61987.029-DD-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Beige textured paint

Non-Fibrous Materials:

Mineral grains, Paint

Other Fibrous Materials: %

None Detected ND

Asbestos Type: %

None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011

Nick Ly Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029
Date Received: 12/30/2010
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2 Description: Off-white/tan fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials: %
Fine particles, Adhesive/Binder, Paint	Cellulose 95%

Asbestos Type: %
None Detected ND

Lab ID: 30095174 Client Sample #: 61987.029-DD-03

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Beige textured paint

Non-Fibrous Materials:	Other Fibrous Materials: %
Mineral grains, Paint	None Detected ND

Asbestos Type: %
None Detected ND

Layer 2 of 2 Description: Off-white fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials: %
Fine particles, Adhesive/Binder, Paint	Cellulose 90%

Asbestos Type: %
None Detected ND

Lab ID: 30095175 Client Sample #: 61987.029-DD-04

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Beige textured paint

Non-Fibrous Materials:	Other Fibrous Materials: %
Mineral grains, Paint	None Detected ND

Asbestos Type: %
None Detected ND

Layer 2 of 2 Description: Gray cementitious material with white fibrous mesh and mastic

Non-Fibrous Materials:	Other Fibrous Materials: %
Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 12%

Asbestos Type: %
None Detected ND

Lab ID: 30095176 Client Sample #: 61987.029-DD-05

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2 Description: Beige textured paint

Non-Fibrous Materials:	Other Fibrous Materials: %
Mineral grains, Paint	None Detected ND

Asbestos Type: %
None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2	Description: Gray cementitious material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Fine particles, Cement/Binder	Glass fibers 4%		None Detected ND

Lab ID: 30095177 **Client Sample #: 61987.029-DD-06**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Mineral grains, Paint	None Detected ND		None Detected ND

Layer 2 of 2	Description: Gray cementitious material with white fibrous mesh and mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 14%		None Detected ND

Lab ID: 30095178 **Client Sample #: 61987.029-DD-07**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Mineral grains, Paint	None Detected ND		None Detected ND

Layer 2 of 2	Description: Gray cementitious material with white fibrous mesh and mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 10%		None Detected ND

Lab ID: 30095179 **Client Sample #: 61987.029-EE-01**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Silver paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Metallic paint	Cellulose 3%		None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2	Description: Layered black asphaltic fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Asphalt/Binder	Synthetic fibers 25%		None Detected ND
		Glass fibers 18%		

Lab ID: 30095180 Client Sample #: 61987.029-EE-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 3	Description: Silver paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Metallic paint	Wollastonite <1%		None Detected ND
		Cellulose 2%		

Layer 2 of 3	Description: Layered black asphaltic fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Asphalt/Binder, Mineral grains	Synthetic fibers 25%		None Detected ND
		Glass fibers 22%		

Layer 3 of 3	Description: Black tar (on wood)			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Asphalt/Binder	None Detected ND		None Detected ND

Lab ID: 30095181 Client Sample #: 61987.029-FF-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 7	Description: Silver paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Metallic paint	None Detected ND		None Detected ND

Layer 2 of 7	Description: Layered black asphaltic fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Asphalt/Binder, Mineral grains	Synthetic fibers 20%		None Detected ND
		Glass fibers 18%		

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 3 of 7	Description: Gray compressed fibrous material	Non-Fibrous Materials: Fine particles, Perlite	Other Fibrous Materials:% Cellulose 70%	Asbestos Type: % None Detected ND
Layer 4 of 7	Description: Black asphaltic fibrous material	Non-Fibrous Materials: Asphalt/Binder	Other Fibrous Materials:% Glass fibers 40%	Asbestos Type: % None Detected ND
Layer 5 of 7	Description: Brown foamy material	Non-Fibrous Materials: Synthetic/Binder	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
Layer 6 of 7	Description: Off-white fibrous material	Non-Fibrous Materials: Fine particles	Other Fibrous Materials:% Glass fibers 98%	Asbestos Type: % None Detected ND
Layer 7 of 7	Description: Black asphaltic fibrous material	Non-Fibrous Materials: Asphalt/Binder	Other Fibrous Materials:% Glass fibers 27%	Asbestos Type: % None Detected ND

Lab ID: 30095182 Client Sample #: 61987.029-GG-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 5	Description: Silver paint	Non-Fibrous Materials: Metallic paint	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
Layer 2 of 5	Description: Layered black asphaltic fibrous material	Non-Fibrous Materials: Asphalt/Binder	Other Fibrous Materials:% Synthetic fibers 22% Glass fibers 19%	Asbestos Type: % None Detected ND

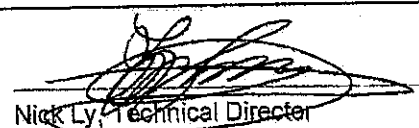
Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com



For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 3 of 5	Description: Gray compressed fibrous material	Non-Fibrous Materials: Fine particles, Perlite	Other Fibrous Materials:% Cellulose 70%	Asbestos Type: % None Detected ND
Layer 4 of 5	Description: Brown foamy material	Non-Fibrous Materials: Synthetic/Binder	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND
Layer 5 of 5	Description: Tan fibrous material with mastic and foil	Non-Fibrous Materials: Fine particles, Mastic/Binder, Metal foil	Other Fibrous Materials:% Cellulose 40% Glass fibers 6%	Asbestos Type: % None Detected ND

Lab ID: 30095183 Client Sample #: 61987.029-HH-01

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Light gray compressed fibrous material with paint	Non-Fibrous Materials: Fine particles, Glass beads, Paint	Other Fibrous Materials:% Glass fibers 60% Cellulose 8%	Asbestos Type: % None Detected ND
Layer 2 of 2	Description: Brown brittle mastic	Non-Fibrous Materials: Mastic/Binder	Other Fibrous Materials:% None Detected ND	Asbestos Type: % None Detected ND

Lab ID: 30095184 Client Sample #: 61987.029-HH-02

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Light gray compressed fibrous material with paint	Non-Fibrous Materials: Fine particles, Glass beads, Paint	Other Fibrous Materials:% Glass fibers 55% Cellulose 10%	Asbestos Type: % None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029
Date Received: 12/30/2010
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2	Description: Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Mastic/Binder	None Detected ND		None Detected ND

Lab ID: 30095185 **Client Sample #: 61987.029-II-01**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black asphaltic material with trace silver paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Asphalt/Binder	Cellulose 8%		None Detected ND

Lab ID: 30095186 **Client Sample #: 61987.029-II-02**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black asphaltic material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Asphalt/Binder	Cellulose 10%		None Detected ND

Lab ID: 30095187 **Client Sample #: 61987.029-II-03**

Location: Food Science & Food Quality Buildings- WSU

Comments: Unable to analyze silver paint as a separate layer

Layer 1 of 2	Description: Black asphaltic material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Asphalt/Binder	Cellulose 7%		None Detected ND

Layer 2 of 2 **Description:** Black thin asphaltic material with silver paint

	Non-Fibrous Materials:	Other Fibrous Materials:%		Asbestos Type: %
	Asphalt/Binder, Metallic paint	None Detected ND		None Detected ND

Lab ID: 30095188 **Client Sample #: 61987.029-II-04**

Location: Food Science & Food Quality Buildings- WSU

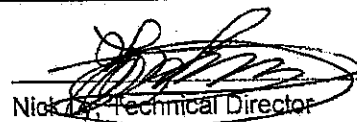
Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 1	Description: Black asphaltic material	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Asphalt/Binder	Cellulose 12%	None Detected ND

Lab ID: 30095189 **Client Sample #: 61987.029-JJ-01**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Mineral grains, Paint	None Detected ND	None Detected ND

Layer 2 of 2	Description: Gray cementitious material with white fibrous mesh and mastic	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 10%	None Detected ND

Lab ID: 30095190 **Client Sample #: 61987.029-JJ-02**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Mineral grains, Paint	None Detected ND	None Detected ND

Layer 2 of 2	Description: Gray cementitious material	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Fine particles, Cement/Binder	Glass fibers 4%	None Detected ND

Lab ID: 30095191 **Client Sample #: 61987.029-JJ-03**

Location: Food Science & Food Quality Buildings- WSU

Layer 1 of 2	Description: Beige textured paint	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
		Mineral grains, Paint	None Detected ND	None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

NVLAP

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017043.00

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 30

Samples Analyzed: 30

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: Food Science & Food Quality Buildings- WSU

Layer 2 of 2	Description: Gray cementitious material with white fibrous mesh and mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	Asbestos Type: %
	Fine particles, Cement/Binder, Mastic/Binder	Glass fibers 13%	None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prisyazhnyuk

Reviewed by: Nick Ly

Date: 01/06/2011

Date: 01/06/2011

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/R-93/116 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

February 7, 2012

Steve Devine
PBS Environmental (Kennewick)
320 N. Johnson St., Suite 700
Kennewick, WA 99336



RE: Bulk Asbestos Fiber Analysis, NVL Batch # 1201351.00

Dear Mr. Devine,

Enclosed please find test results for the bulk samples submitted to our laboratory for analysis. Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with U.S. EPA/600/M4-82-020 Test Method.

For samples containing more than one separable layer of materials, the report will include findings for each layer (labeled Layer 1 and Layer 2, etc. for each individual layer). The asbestos concentration in the sample is determined by visual estimation.

For those samples with asbestos concentrations between 1 and 10 percent based on visual estimation, the EPA recommends a procedure known as point counting (NESHAPS, 40 CFR Part 61). Point counting is a statistically more accurate means of quantification for samples with low concentrations of asbestos. If you would like us to further refine the concentration estimates of asbestos in these samples using point counting, please let me know.

This report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client are discarded after two weeks.

Thank you for using our laboratory services. Please do not hesitate to call if there is anything further we can assist you with.

Sincerely,

A handwritten signature in black ink, appearing to read "Nick Ly", written over a horizontal line.

Nick Ly, Technical Director

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 1201351.00

Client Project #: 61987.029

Date Received: 02/02/2012

Samples Received: 8

Samples Analyzed: 8

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: WSU Food Service Building

Lab ID: 12006562 Client Sample #: 61987.29-LL01

Location: WSU Food Service Building

Layer 1 of 1 Description: Gray flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
Fine particles, Binder/Filler, Mica	Cellulose 14%	None Detected ND

Lab ID: 12006563 Client Sample #: 61987.29-LL02

Location: WSU Food Service Building

Layer 1 of 1 Description: Gray flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
Fine particles, Binder/Filler, Mica	Cellulose 12%	None Detected ND

Lab ID: 12006564 Client Sample #: 61987.29-LL03

Location: WSU Food Service Building

Layer 1 of 1 Description: Gray flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
Fine particles, Binder/Filler, Mica	Cellulose 15%	None Detected ND

Lab ID: 12006565 Client Sample #: 61987.29-KK01

Location: WSU Food Service Building

Layer 1 of 2 Description: Gray and off-white/gray tile

Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
Calcareous particles, Vinyl/Binder	None Detected ND	None Detected ND

Layer 2 of 2 Description: Yellow soft mastic with trace paint

Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: %
Mastic/Binder, Paint	None Detected ND	None Detected ND

Lab ID: 12006566 Client Sample #: 61987.29-MM01

Location: WSU Food Service Building

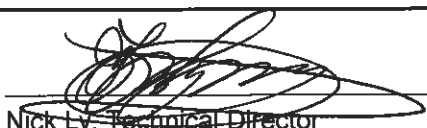
Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 02/07/2012

Date: 02/07/2012


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/M4 -82-020 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 1201351.00

Client Project #: 61987.029

Date Received: 02/02/2012

Samples Received: 8

Samples Analyzed: 8

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: WSU Food Service Building

Layer 1 of 3	Description: Light gray rubbery material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Rubber/Binder	None Detected ND	
Layer 2 of 3	Description: Tan soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Mastic/Binder	None Detected ND	
Layer 3 of 3	Description: White soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Calcareous particles, Mastic/Binder	None Detected ND	

Lab ID: 12006567 **Client Sample #: 61987.29-MM02**

Location: WSU Food Service Building

Layer 1 of 3	Description: Light gray rubbery material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Rubber/Binder	None Detected ND	
Layer 2 of 3	Description: Tan soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Mastic/Binder	None Detected ND	
Layer 3 of 3	Description: White soft mastic	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Calcareous particles, Mastic/Binder, Gravel	None Detected ND	

Lab ID: 12006568 **Client Sample #: 61987.29-MM03**

Location: WSU Food Service Building

Layer 1 of 2	Description: Light gray rubbery material	Non-Fibrous Materials:	Other Fibrous Materials:%	Asbestos Type: % None Detected ND
		Rubber/Binder	None Detected ND	

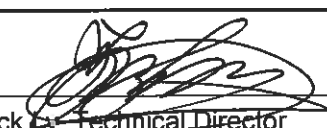
Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Reviewed by: Nick Ly

Date: 02/07/2012

Date: 02/07/2012


Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/M4 -82-020 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

NVL Laboratories, Inc.



4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

For the scope of accreditation under NVLAP Lab Code 102063-0

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: PBS Environmental (Kennewick)

Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 1201351.00

Client Project #: 61987.029

Date Received: 02/02/2012

Samples Received: 8

Samples Analyzed: 8

Method: EPA/600R-93/116

Attention: Mr. Steve Devine

Project Location: WSU Food Service Building

Layer 2 of 2 Description: White soft mastic (on trace wood)

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Calcareous particles, Mastic/Binder

None Detected ND

None Detected ND

Lab ID: 12006569 **Client Sample #: 61987.29-NN01**

Location: WSU Food Service Building

Comments: Unable to analyze silver paint as a separate layer

Layer 1 of 1 Description: Black asphaltic material with trace silver paint

Non-Fibrous Materials:

Other Fibrous Materials: %

Asbestos Type: %

Asphalt/Binder, Metallic paint

Cellulose 7%

None Detected ND

Sampled by: Client

Analyzed by: Nadezhda Prysyazhnyuk

Date: 02/07/2012

Reviewed by: Nick Ly

Date: 02/07/2012

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using EPA 600/M4-82-020 Method with the following measurement uncertainties for the reported % Asbestos (1%=0-3%, 5%=1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%). This report relates only to the items tested. If sample was not collected by NVL personnel, then the accuracy of the results is limited by the methodology and acuity of the sample collector. This report shall not be reproduced except in full, without written approval of NVL Laboratories, Inc. It shall not be used to claim product endorsement by NVLAP or any other agency of the US Government.

BATCH ID
1201351.00

NVL Laboratories, Inc.

4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Pager: 206.344.1878
Fax: 206.634.1936 1.888.NVL.LABS (685.5227)

**CHAIN of CUSTODY
SAMPLE LOG**



Client PBS Engineering and Environmental

Street 320 North Johnson St

Kennewick, WA 99336

Project Manager Steve Devine

Project Location WSU

Food Service Building

NVL Batch Number _____

Client Job Number 61987.029

Total Samples 8

Turn Around Time ☐ 1-Hr ☐ 24-Hrs ☐ 4 Days
☐ 2-Hrs ☐ 2 Days ☒ 5 Days
☐ 4-Hrs ☐ 3 Days ☐ 6 to 10 Days

Please call for TAT less than 24 Hrs

Email address greg_lovell@pbsenv.com

Phone: 509-735-2698

Fax: 509-735-1867

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other _____
☒ Asbestos Bulk	☒ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM Bulk	
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration		
METALS	Inst/Det Limit	Matrix	RCRA Metals	☐ All 8	Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Arsenic (As)	☐ Mercury (Hg)	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Barium (Ba)	☐ Selenium (Se)	☐ Copper (Cu)
	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Cadmium (Cd)	☐ Silver (Ag)	☐ Nickel (Ni)
		☐ Soil	☐ Chromium (Cr)		☐ Zinc (Zn)
		☐ Paint Chips in %	☐ Lead (Pb)		
☐ Other Types of Analysis	☐ Fiberglass	☐ Nuisance Dust	☐ Other (Specify) _____		
	☐ Silica	☐ Respirable Dust			

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample area, Sample Volume, etc)	A/R
1		LL01		
2		LL02		
3		LL03		
4		UK01		
5		MM01		
6		MM02		
7		MM03		
8		NN01		
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Greg Lovell	<i>[Signature]</i>	PBS	2-1-12	8:50am
Relinquished by	Greg Lovell	<i>[Signature]</i>	PBS	2-1-12	8:50am
Received by	Eyes Rashid	<i>[Signature]</i>	NVL	2/2/12	1310 OPS
Analyzed by	Nadia	<i>[Signature]</i>	NVL	2/7/12	11:10PM
Results Called by	<i>[Signature]</i>	<i>[Signature]</i>			
Results Faxed by	<i>[Signature]</i>	<i>[Signature]</i>	NVL	2/9/12	12:40x

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.



ASBESTOS BULK SAMPLE FIELD FORM

Client: WSU Date: 1-31-12
Building: Food Service Job #: 61987.029

Sample #	HSA #	SAMPLE LOCATION/MATERIAL DESCRIPTION	COND	FRIABLE Y/N
LLO1	1	Sink Undercoat by drain	G	F
LLO2	1	Sink Undercoat by drain	G	F
LLO3	1	Sink Undercoat north	G	F
MM01	2	South 101 Hallway exit	G	N
MM01	3	Top Stair Case	G	N
MM02	3	Top Stair Case	G	N
MM03	3	Bottom Stair Case	G	N
MM04	4	Food Service roof N Central	F	N

Condition: Good, Fair, Poor HSA: Homogenous Sampling Area

HSA 1 Material Grey cementitious Undercoat & top metal sink
Location Room 166B

HSA 2 Material Blue/Gray & White 12x12 VST w/ yellow & black mastic
atop concrete
Location South 100 Hallway

HSA 3 Material Gray/Tan stair Tread & clear/white mastic on concrete
& wood
Location Staircase Room T-100

HSA 4 Material Black Sealant
Location Food Service Roof

HSA Material
Location

SEATTLE ASBESTOS TEST, LLC

NVLAP Accredited - Bellevue:200876; Lynnwood:200768

Lynnwood Laboratory: 19711 Scriber Lake Rd, Suite D, Lynnwood, WA 98036; Tel: 425.673.9850, Fax:425.673.9810

Bellevue Laboratory: 12727 Northup Way, Suite I, Bellevue, WA 98005; Tel: 425.861.1111, Fax: 425.861.1118

Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT**

PLM by Method EPA/600/R-93/116

Attn.: Mr. Steve Devine
 Client: PBS, Tri-Cities
 Address: 320 N. Johnson St. Suite 700
 Kennewick, WA 99336

Client Job #: 61987.029
 Laboratory Batch #: 201023910
 Date Received: 12/30/2010
 Samples Received: 12
 Date Analyzed: 12/30/2010
 Samples Analyzed: 12

Project: Food Science and Quality Building

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
1	61987-029-C-03	1	Gray soft/elastic material		None detected	Binder, Filler	3	Cellulose
2	61987-029-F-01	1	Gray/white sandy/brittle material with paint		None detected	Sands, Filler, Paint	2	Cellulose
3	61987-029-H-02	1	Black asphaltic material		None detected	Asphalt/binder	4	Cellulose
4	61987-029-L-05	1	Gray fibrous material with paint		None detected	Paint, Filler, Perlite, Glass beads	67	Cellulose
5	61987-029-N-01	1	Gray soft material		None detected	Filler, Fine particles	5	Cellulose
6	61987-029-Q-01	1	Black rubbery material		None detected	Rubber/binder	3	Cellulose
		2	Gold mastic with debris		None detected	Mastic/binder, Wood debris	6	Cellulose
7	61987-029-U-01	1	Gray sheet vinyl		None detected	Vinyl/binder		None detected
		2	Yellow mastic		None detected	Mastic/binder	6	Cellulose
8	61987-029-W-03	1	Gold mastic with paint		None detected	Mastic/binder, Paint	7	Cellulose, Synthetic fibers
9	61987-029-X-04	1	White brittle material		None detected	Filler, Binder	2	Cellulose
		2	White sandy/brittle material with paint		None detected	Sands, Filler, Paint	3	Cellulose
10	61987-029-CC-01	1	Brown hard/brittle material		None detected	Filler, Binder		None detected
		2	Black/brown sandy brittle material		None detected	Filler, Binder, Sand	3	Cellulose
11	61987-029-DD-03	1	Beige sandy/brittle material with paint		None detected	Filler, Binder, Paint	2	Cellulose
		2	Gray sandy/brittle material		None detected	Sands, Filler	3	Cellulose
12	61987-029-FF-01	1	Silver paint		None detected	Paint, Filler	2	Cellulose
		2	Black asphaltic material		None detected	Asphalt/binder	27	Cellulose, Glass fibers
		3	Gray fibrous material		None detected	Filler, Perlite	66	Cellulose

Analyzed by: Lori Tseng/Weilong Tai

Report reviewed by: Steve (Fanyao) Zhang, President

SEATTLE ASBESTOS TEST, LLC

NVLAP Accredited - Bellevue:200876; Lynnwood:200768

Lynnwood Laboratory: 19711 Scriber Lake Rd, Suite D, Lynnwood, WA 98036; Tel: 425.673.9850, Fax:425.673.9810

Bellevue Laboratory: 12727 Northup Way, Suite 1, Bellevue, WA 98005; Tel: 425.861.1111, Fax: 425.861.1118

Website: <http://www.seattleasbestostest.com>, E-mail: admin@seattleasbestostest.com**ANALYTICAL LABORATORY REPORT**

PLM by Method EPA/600/R-93/116

Attn.: Mr. Steve Devine
 Client: PBS, Tri-Cities
 Address: 320 N. Johnson St. Suite 700
 Kennewick, WA 99336

Client Job #: 61987.029
 Laboratory Batch #: 201023910
 Date Received: 12/30/2010
 Samples Received: 12
 Date Analyzed: 12/30/2010
 Samples Analyzed: 12

Project: Food Science and Quality Building

Lab ID	Client Sample ID	Layer	Description	%	Asbestos Fibers	Non-Fibrous Components	%	Non-asbestos Fibers
		4	Black asphaltic fibrous material		None detected	Asphalt/binder, Binder/filler	25	Glass fibers
		5	Red foamy material		None detected	Synthetic foam		None detected

Analyzed by: Lori Tseng/Weilong Tai


 Report reviewed by: Steve (Fanyao) Zhang, President



Engineering +
Environmental

201023910

HSA: Building: Food Science / Food Quality Date: 12-19-10 Project No: 61987.029
Material: Inspector/s:

Sample #	Location	Material	Quantity
C-03	Gray	Rubbery sealant	
F-01	Cement, masonry block (CMU)	mortar	
H-02	Black sink	undercoating	
L-05	2'x4'	Pinhole etched OBJECT	
N-01	Gray Sink	undercoating	
Q-01	Black	4' concrete/gold mastic	
U-01	Gray vinyl sheet	Flooring (Deck)	
W-03	Carpet	Mastic (gold)	
X-04	Ceramic wall	/Floor tile	
CC-01	Exterior	Pebble sample	
DD-03	Testered wall	beige	
FF-01	Silvercoat	Roofing	

201023910

SEATTLE ASBESTOS TEST, LLC

WE TREAT CLIENTS BETTER!

CHAIN OF CUSTODYTYPE OF ANALYSIS: BULK ASBESTOS TEST ☒ POINT COUNT (400) _____ POINT COUNT (600) _____ POINT COUNT (1000) _____

PBS, Tri-Cities

320 N. Johnson St. Suite 700, Kennewick, WA 99336

Phone: (509) 735-2698

Fax: (509) 735-1867

Email: greg-lovell
danielson@pbsenv.comProject Location: Food Science & Food Quality Building Project Manager: **Steve Devine**WSU Turn Around Time 5 day Number of Samples 12 Client Job # 61987.029Sample Condition: Good ☒ Damaged _____ Severe Damage (Spillage) _____

SEQ#	CLIENT SAMPLE #	SAMPLE DESCRIPTION	LAB-ID	A/R
1	61987.029-63			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11		FFOI		
12	" " - 102			
13				
14				
15				
16				
17				
18				
19				
20				

	Print Name	Signature	Company Name	Date	Time
Sampled	GL DR	<i>Greg Lovell</i>	PBS	12-29-10	11:45 am
Relinquished	<i>Greg Lovell</i>	<i>Greg Lovell</i>	PBS	12-29-10	11:45 am
Delivered			SAI	12-30-10	0941
Received	<i>Jessica Lydke</i>	<i>Jessica Lydke</i>	SAI	12/30/10	4:50 pm
Analyzed	<i>Lon Tseng</i>	<i>Lon Tseng</i>	<i>SAI</i>	12/30/10	
Reported	<i>Greg Lovell</i>	<i>Greg Lovell</i>	<i>SAI</i>	12/30/10	

Result reporting method: Phone _____ Fax ☒ Email ☒ Pick-up report _____A Copy of this COC and other information available at your VIP page: www.seattleasbestostest.com/pbsenv777

Seattle Asbestos Test warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted and disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. Seattle Asbestos Test accepts no legal responsibility for the purpose for which the client uses the test results. By signing on this form the clients agree to relieve Seattle Asbestos Test of any liability that may arise from the test results.

1 of 2

NVL Laboratories, Inc.

4708 Aurora Ave. N., Seattle, WA 98103
Tel: 206.547.0100, Fax: 206.634.1936
www.nvllabs.com

Analysis Report

AIHA - IH # 101861
WA - DOE # C1765



Total Lead (Pb)

Client: PBS Environmental (Kennewick)
Address: 320 N. Johnson St., Suite 700
Kennewick, WA 99336

Batch #: 3017027.00

Matrix: Paint Chips

Method: EPA 7000B

Client Project #: 61987.029

Date Received: 12/30/2010

Samples Received: 10

Samples Analyzed: 10

Attention: Ms. Averie Powell

Project Location: Food Science/Human Nutrition

Lab ID	Client Sample #	Sample Weight (g)	RL in mg/Kg	Results in mg/Kg	Results in percent
30094837	61987.029-01L	0.0430	100.0	< 100.0	< 0.0100
30094838	61987.029-02L	0.0636	140.0	< 140.0	< 0.0140
30094839	61987.029-03L	0.0093	470.0	< 470.0	< 0.0470
30094840	61987.029-04L	0.0245	180.0	13000.0	1.3000
30094841	61987.029-05L	0.0406	110.0	< 110.0	< 0.0110
30094842	61987.029-06L	0.0986	88.0	< 88.0	< 0.0088
30094843	61987.029-07L	0.0152	290.0	< 290.0	< 0.0290
30094844	61987.029-08L	0.0235	190.0	< 190.0	< 0.0190
30094845	61987.029-09L	0.0941	93.0	< 93.0	< 0.0093
30094846	61987.029-10L	0.0225	190.0	< 190.0	< 0.0190

Sampled by: Client

Analyzed by: Aaron Brown

Reviewed by: Nick Ly

Date Analyzed: 01/04/2011

Date Issued: 01/04/2011


Nick Ly, Technical Director

mg/ Kg = Milligrams per kilogram

Percent = Milligrams per kilogram / 10000

Note: Method QC results are acceptable unless stated otherwise.

Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

RL = Reporting Limit

'<' = Below the reporting Limit

Bench Run No: 31-0103-01

Page 1 of 1

Lead Paint Sample Data Form

Client: WSU Date: 12/19/10 Inspector: Americ Powell

Location: Food Science/Human Nutrition Job#: 61987.029 Signature: A. Powell

[illegible]

NVL Laboratories, Inc.

4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Pager: 206.344.1878
Fax: 206.334.1936 1.866.NVL.LABS (685.5227)

CHAIN of CUSTODY SAMPLE LOG

BATCH ID
3017027.00

Client PBS Engineering
Street 320 N. Johnson St
STE 700
Bremerton, WA
Project Manager Averie Powell
Project Location Food Science/Human Nutrition

NVL Batch Number _____
Client Job Number 61987.029
Total Samples 10
Turn Around Time ☐ 1-Hr ☐ 24-Hrs ☐ 4 Days
☐ 2-Hrs ☐ 2 Days ☒ 5 Days
☐ 4-Hrs ☐ 3 Days ☐ 6 to 10 Days

Please call for TAT less than 24 Hrs
Email address averie.p@pbsenv.com

Phone: (509) 735-2698 fax: _____

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other																																				
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM Bulk																																					
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration																																						
<table border="1"> <tr> <td>METALS</td> <td>Inst/Det Limit</td> <td>Matrix</td> <td>RCRA Metals</td> <td>☐ All R</td> <td>Other Metals</td> </tr> <tr> <td>☒ Total Metals</td> <td>☒ FAA (ppm)</td> <td>☐ Air Filter</td> <td>☐ Arsenic (As)</td> <td>☐ Mercury (Hg)</td> <td>☐ All 3</td> </tr> <tr> <td>☐ TCLP</td> <td>☐ ICP (ppm)</td> <td>☐ Drinking water</td> <td>☐ Barium (Ba)</td> <td>☐ Selenium (Se)</td> <td>☐ Copper (Cu)</td> </tr> <tr> <td></td> <td>☐ GFAA (ppb)</td> <td>☐ Dust/wipe (Area)</td> <td>☐ Cadmium (Cd)</td> <td>☐ Silver (Ag)</td> <td>☐ Nickel (Ni)</td> </tr> <tr> <td></td> <td></td> <td>☐ Soil</td> <td>☐ Chromium (Cr)</td> <td></td> <td>☐ Zinc (Zn)</td> </tr> <tr> <td></td> <td></td> <td>☒ Paint Chips in %</td> <td>☒ Lead (Pb)</td> <td></td> <td></td> </tr> </table>						METALS	Inst/Det Limit	Matrix	RCRA Metals	☐ All R	Other Metals	☒ Total Metals	☒ FAA (ppm)	☐ Air Filter	☐ Arsenic (As)	☐ Mercury (Hg)	☐ All 3	☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Barium (Ba)	☐ Selenium (Se)	☐ Copper (Cu)		☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Cadmium (Cd)	☐ Silver (Ag)	☐ Nickel (Ni)			☐ Soil	☐ Chromium (Cr)		☐ Zinc (Zn)			☒ Paint Chips in %	☒ Lead (Pb)		
METALS	Inst/Det Limit	Matrix	RCRA Metals	☐ All R	Other Metals																																				
☒ Total Metals	☒ FAA (ppm)	☐ Air Filter	☐ Arsenic (As)	☐ Mercury (Hg)	☐ All 3																																				
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Barium (Ba)	☐ Selenium (Se)	☐ Copper (Cu)																																				
	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Cadmium (Cd)	☐ Silver (Ag)	☐ Nickel (Ni)																																				
		☐ Soil	☐ Chromium (Cr)		☐ Zinc (Zn)																																				
		☒ Paint Chips in %	☒ Lead (Pb)																																						
☐ Other Types of Analysis	☐ Fiberglass	☐ Nuisance Dust	☐ Other (Specify) _____																																						
	☐ Silica	☐ Respirable Dust																																							

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample area, Sample Volume, etc)	A/R
1		<u>61987.029-01A</u>		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Print Below	Sign Below	Company	Date	Time
Sampled by <u>Averie Powell</u>	<u>Averie Powell</u>	<u>PBS</u>	<u>12/29/10</u>	<u>12:00 PM</u>
Relinquished by <u>Averie Powell</u>	<u>Averie Powell</u>	<u>NVL</u>	<u>12/30/10</u>	<u>9:30 AM</u>
Received by <u>Mildorika</u>	<u>Mildorika</u>	<u>NVL</u>	<u>1/4/11</u>	<u>11:05</u>
Analyzed by <u>Aaron Brown</u>	<u>Aaron Brown</u>	<u>NVL</u>	<u>1/6/11</u>	<u>17:05</u>
Results Called by				
Results Faxed by <u>Aaron Brown</u>	<u>Aaron Brown</u>	<u>NVL</u>		

Special Instructions: Unless requested in writing, all samples will be disposed of two (2)-weeks after analysis.



ALPHA ENERGY LABORATORIES

2501 Mayes Road, Suite 100
Carrollton, Texas 75006
Phone 972-242-2479 ext. 52 Fax 972-242-8860

Project:

Client:

320 N Johnson Suite 100
Kennewick, WA 99336
Attn: Averie Powell

Date Received: 12/27/2010
NEHA ID#: 101132 AL
State ID#:

RADON RESULT SUMMARY

<u>Kit ID_1</u>	<u>Test Location</u>	<u>pCi/L</u>	<u>Start Date</u>	<u>End Date</u>	<u>Room Location</u>
N75638		<0.5	12-19-2010	12-21-2010	109 F Q W S O
N75752		<0.5	12-19-2010	12-21-2010	101 B F Q - W S O
N64687		<0.5	12-19-2010	12-21-2010	B10 W S O
N75633		<0.5	12-19-2010	12-21-2010	G 1 W S O
N75789		0.5	12-19-2010	12-21-2010	B 10 W S O
N75607		<0.5	12-19-2010	12-21-2010	B 10 W S O
N75634		<0.5	12-19-2010	12-21-2010	103 G F Q W S O
N75610		<0.5	12-19-2010	12-21-2010	B 10 A A W S O

Laboratory Director

Date 12/28/2010

RADON TEST KIT FIELD FORM

Client WSU

Date 12/19/10

Building Food Science and Human Nutrition Building AND₂ Job # 61987.029

Food Quality Building

	Radon Test Kit Bar Code	Location in Basement	Location in Room	Date/Time Started	Date/Time Stopped	Date/Time Sent
1R	N75789	NE - BID _{FS}	NE	8:35A 12/19/10	12:22 12/21/10	3p 12/22/10
2R	N75607	NW - BID _{FS}	NW	8:36A 12/19/10	12:22 12/21/10	3p 12/22/10
3R	N64687	SW - BID _{FS}	SW	8:41A 12/19/10	12:21 12/21/10	3p 12/22/10
4R	N75610	SE - BIDAA _{FS}	~~SW~~ SW	8:42A 12/19/10	12:20 12/21/10	3p 12/22/10
5R	N75633	S Central - G1 _{FS}	S Central	10:48A 12/19/10	12:11 12/21/10	3p 12/22/10
6R	N75638	S Central - 109 _{FR}	Central	10:50A 12/19/10	12:08 12/21/10	3p 12/22/10
7R	N75634	E - 103 _{FR}	E	10:55A 12/19/10	12:07 12/21/10	3p 12/22/10
8R	N75752	NW - 101B _{FR}	W	11:00 12/19/10	12:06 12/21/10	3p 12/22/10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/11
 Date Received: 01/13/11
 Project: WSU 61987.028, F&BI 101133
 Date Extracted: 01/13/11
 Date Analyzed: 01/19/11

**RESULTS FROM THE ANALYSIS OF SOLID SAMPLES
 FOR PCBs REPORTED AS AROCLORS
 USING EPA METHOD 8082A
 Results Reported as mg/kg (ppm)**

<u>Sample ID</u> Laboratory ID	Aroclor							Surrogate (% Rec.) (Limit 50-150)
	<u>1221</u>	<u>1232</u>	<u>1016</u>	<u>1242</u>	<u>1248</u>	<u>1254</u>	<u>1260</u>	
61987.028 MC dv 101133-01 1/100	<200	<200	<200	<200	<200	4,700	<200	ds
61987.029 FS dv 101133-02	<10	<10	<10	<10	<10	<10	<10	65
61987.028 WE dv 101133-03	<5	<5	<5	<5	<5	<5	<5	ip
61987.030 WAP dv 101133-04	<1	<1	<1	<1	<1	1.7	<1	ip
61987.029 EQ dv 101133-05	<5	<5	<5	<5	<5	<5	<5	56
Method Blank	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 13, 2011 by Friedman & Bruya, Inc. from the PBS Engineering and Environmental WSU 61987.028, F&BI 101133 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>PBS Engineering and Environmental</u>
101133-01	61987.028 MC
101133-02	61987.029 FS
101133-03	61987.028 WE
101133-04	61987.030 WAP
101133-05	61987.029 EQ

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/21/11

Date Received: 01/13/11

Project: WSU 61987.028, F&BI 101133

QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOLID SAMPLES FOR
POLYCHLORINATED BIPHENYLS AS
AROCOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 012130-37 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	<0.1	85	100	68-127	16
Aroclor 1260	mg/kg (ppm)	0.8	<0.1	90	106	63-140	16

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.8	106	60-142
Aroclor 1260	mg/kg (ppm)	0.8	109	63-144

THIS IS TO CERTIFY THAT

DAVID D ROSS

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE
for
ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date:

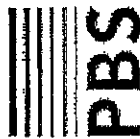
01/22/2010

Course Location:

Kennewick, WA

Certificate:

IR-10-6483A



**Engineering +
Environmental**

Expiration Date: 01/22/2011

ASBESTOS INSPECTOR REFRESHER
Emergency Response Act enacting Title II
of Toxic Substance Control Act (TSCA)

For verification of the authenticity of this

certificate contact:

PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

David Stover

David Stover, Director of Training

THIS IS TO CERTIFY THAT

GREG M LOVELL

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE
for
ASBESTOS INSPECTOR REFRESHER

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 01/22/2010

Course Location: Kennewick, WA

Certificate: IR-10-7809A



**Engineering +
Environmental**

Expiration Date: 01/22/2011

AHERA is the Asbestos Hazard
Emergency Response Act enacting Title II
of Toxic Substance Control Act (TSCA)

For verification of the authenticity of this

certificate contact:

PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

David Stover

David Stover, Director of Training

THIS IS TO CERTIFY THAT

AVERIE POWELL

HAS SUCCESSFULLY COMPLETED THE TRAINING COURSE

for

ASBESTOS INSPECTOR INITIAL COURSE

In accordance with TSCA Title II, Part 763, Subpart E, Appendix C of 40 CFR

Course Date: 10/25/2010 - 10/27/2010

Course Location: Portland, OR

Certificate: IN-10-1435B



**Engineering +
Environmental**

Expiration Date: 10/27/2011

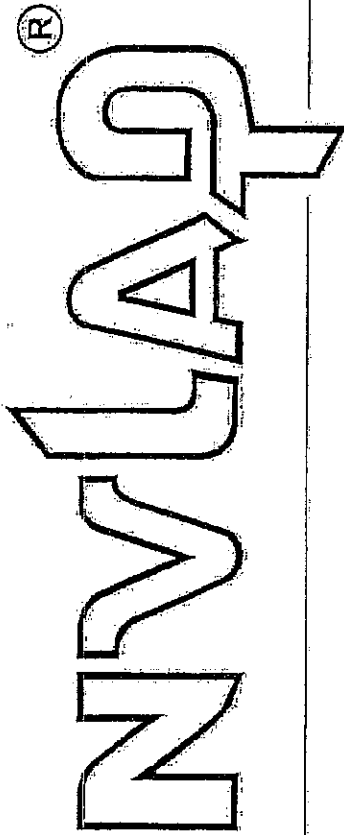
ASBESTOS INSPECTOR INITIAL COURSE
ASBESTOS INSPECTOR INITIAL COURSE
ASBESTOS INSPECTOR INITIAL COURSE

For verification of the authenticity of this
certificate contact:
PBS Environmental
4412 SW Corbett Avenue
Portland, OR 97239
(503) 248-1939

David Stover

David Stover, Director of Training

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 102063-0

NVL Laboratories, Inc.
Seattle, WA

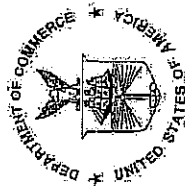
is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2010-10-01 through 2011-09-30

Effective dates



Dolly A. Bruce
For the National Institute of Standards and Technology



Protecting Worker Health

The American Industrial Hygiene Association

acknowledges that

NVL Laboratories, Inc.

4708 Aurora Avenue N., Seattle, WA 98103

Laboratory ID: 101861

has fulfilled the requirements of the AIHA Laboratory Quality Assurance Programs (LQAP), thereby, conforming to the ISO/IEC 17025:2005 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories*. The above named laboratory, along with all premises from which key activities are performed, as listed above, have been accredited by AIHA in the following:

ACCREDITATION PROGRAMS

- ✓ INDUSTRIAL HYGIENE Accreditation Expires: 02/01/2011
- ✓ ENVIRONMENTAL LEAD Accreditation Expires: 02/01/2011
- ✓ ENVIRONMENTAL MICROBIOLOGY Accreditation Expires: 02/01/2011
- ☐ FOOD Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with LQAP requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA website for the most current status of the scope of accreditation.

Pamela A. Kostle

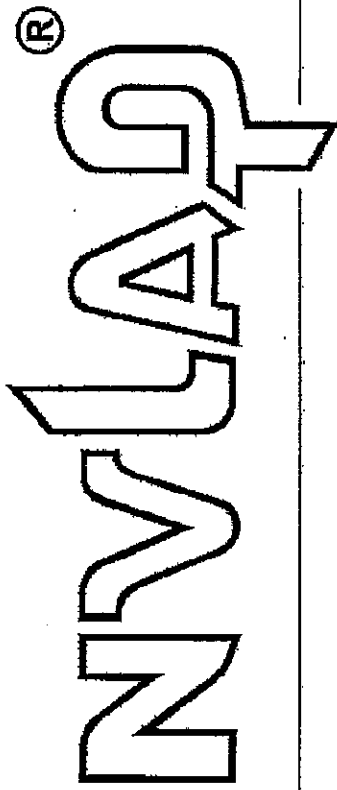
Pamela A. Kostle, CIH
Chairperson, Analytical Accreditation Board

Lindsay E. Booher

Lindsay E. Booher, CIH, CSP
President, AIHA

Date Issued: 02/01/2009

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200876-0

Seattle Asbestos Test Bellevue
Bellevue, WA

Is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

2009-08-04 through 2010-03-31

Effective dates



Dolly A. Bruce
For the National Institute of Standards and Technology

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Location Quantity	Quantity descriptor	Comments	Sample results	ACM ?	Homogenous Material Location
5544-2010 A01	Food Science/Human Nutrition	816	B10A	Other	Gray Floor Sealant	Misc			Sample 1 of 3	ND	N	damper basement floor cracks/joints, B10A, B10AA
5544-2010 A02	Food Science/Human Nutrition	816	B10A	Other	Gray Floor Sealant	Misc			Sample 2 of 3	ND	N	damper basement floor cracks/joints, B10A, B10AA
5544-2010 A03	Food Science/Human Nutrition	816	B10AA	Other	Gray Floor Sealant	Misc			Sample 3 of 3	ND	N	damper basement floor cracks/joints, B10A, B10AA
5544-2010 B01	Food Science/Human Nutrition	816	B10A	cove base w/mastic	Tan covebase with off-white mastic	Misc			Sample 1 of 4	ND	N	B10AA, B10A, GM10, G10AT, G10C, G20D, G20, G28, G20H, G1A, G20E, G1, G1D, G1A, G1B, G10N, G10W, G10WA
5544-2010 B02	Food Science/Human Nutrition	816	B10M	cove base w/mastic	Tan covebase with off-white mastic	Misc			Sample 2 of 4	ND	N	B10AA, B10A, GM10, G10AT, G10C, G20D, G20, G28, G20H, G1A, G20E, G1, G1D, G1A, G1B, G10N, G10W, G10WA
5544-2010 B03	Food Science/Human Nutrition	816	B10H	cove base w/mastic	Tan codebase with off-white mastic	Misc			Sample 3 of 4	ND	N	B10AA, B10A, GM10, G10AT, G10C, G20D, G20, G28, G20H, G1A, G20E, G1, G1D, G1A, G1B, G10N, G10W, G10WA

5544-2010 B04	Food Science/Human Nutrition	816	B10W	cove base w/mastic	Tan covebase with off-white mastic	Misc			Sample 4 of 4	ND	N	B10AA, B10A, GM10, G10AT, G10C, G20D, G20, G28, G20H, G1A, G20E, G1, G1D, G1A, G1B, G10N, G10W, G10WA
5544-2010 C01	Food Science/Human Nutrition	816	South Damper wall	Other	Gray Rubbery Sealant	Misc			Sample 1 of 7	ND	N	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C02	Food Science/Human Nutrition	816	North Damper wall	Other	Gray Rubbery Sealant	Misc			Sample 2 of 7	ND	N	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C03	Food Science/Human Nutrition	816	NW Damper wall	Other	Gray Rubbery Sealant	Misc			Sample 3 of 7	ND	N	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C04	Food Science/Human Nutrition	816	GM10 RF2 Ducting	Other	Gray Rubbery Sealant	Misc			Sample 4 of 7	ND	N	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C05	Food Science/Human Nutrition	816	GM10 RF2 Ducting	Other	Gray Rubbery Sealant	Misc			Sample 5 of 7	ND	N	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 C06	Food Science/Human Nutrition	816	GM10 RF2 Ducting	Other	Gray Rubbery Sealant	Misc			Sample 6 of 7	ND	N	Damper in basement (damper joints), G10M, G1, throughout all building ductwork

5544-2010 C07	Food Science/Human Nutrition	816	G1	Other	Gray Rubbery Sealant	Misc			Sample 7 of 7	ND	N	Damper in basement (damper joints), G10M, G1, throughout all building ductwork
5544-2010 D01	Food Science/Human Nutrition	816	CHW Pump #4	Other	Gasket	TSI			Sample 1 of 5	ND	N	Damper basement piping flanges, G1
5544-2010 D02	Food Science/Human Nutrition	816	CHW Pump #3	Other	Gasket	TSI			Sample 2 of 5	ND	N	Damper basement piping flanges, G1
5544-2010 D03	Food Science/Human Nutrition	816	CHW Pump #1	Other	Gasket	TSI			Sample 3 of 5	ND	N	Damper basement piping flanges, G1
5544-2010 D04	Food Science/Human Nutrition	816	CHW Pump #1	Other	Gasket	TSI			Sample 4 of 5	ND	N	Damper basement piping flanges, G1
5544-2010 D05	Food Science/Human Nutrition	816	CHW Pump #4	Other	Gasket	TSI			Sample 5 of 5	ND	N	Damper basement piping flanges, G1
5544-2010 E01	Food Science/Human Nutrition	816	B10AA	gypsum wallboard w/joint compound	White Gypsum wallboard system	Misc			Sample 1 of 4	ND	N	B10A, B10AA, Electrical piping chutes running through all floors, GM10, G20E, G1A, G1D, G1T, throughout 6th floor
5544-2010 E02	Food Science/Human Nutrition	816	B10A	gypsum wallboard w/joint compound	White Gypsum wallboard system	Misc			Sample 2 of 4	ND	N	B10A, B10AA, Electrical piping chutes running through all floors, GM10, G20E, G1A, G1D, G1T, throughout 6th floor

5544-2010 E03	Food Science/Human Nutrition	816	G10M	gypsum wallboard w/joint compound	White Gypsum wallboard system	Misc			Sample 3 of 4	ND	N	B10A, B10AA, Electrical piping chutes running through all floors, GM10, G20E, G1A, G1D, G1T, throughout 6th floor
5544-2010 E04	Food Science/Human Nutrition	816	520E	gypsum wallboard w/joint compound	White Gypsum wallboard system	Misc			Sample 4 of 4	ND	N	B10A, B10AA, Electrical piping chutes running through all floors, GM10, G20E, G1A, G1D, G1T, throughout 6th floor
5544-2010 F01	Food Science/Human Nutrition	816	G10M	Other	Off-white Cement Masonry Block and Mortar	Misc			Sample 1 of 2	ND	N	G10M, G20
5544-2010 F02	Food Science/Human Nutrition	816	G20	Other	Off-white Cement Masonry Block and Mortar	Misc			Sample 2 of 2	ND	N	G10M, G20
5544-2010 G01	Food Science/Human Nutrition	816	G20A	cove base w/mastic	White covebase with gold mastic	Misc			Sample 1 of 2	ND	N	G20A, G20B, G20AA, G20AV, G20AC, G20AD, G20AE, G20AF, G20BA, G20BB
5544-2010 G02	Food Science/Human Nutrition	816	G20B	cove base w/mastic	White covebase with gold mastic	Misc			Sample 2 of 2	ND	N	G20A, G20B, G20AA, G20AV, G20AC, G20AD, G20AE, G20AF, G20BA, G20BB
5544-2010 H01	Food Science/Human Nutrition	816	G20F	Other	Black Sink Undercoating	Surf			Sample 1 of 3	ND	N	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323

5544-2010 H02	Food Science/Human Nutrition	816	G20K	Other	Black Sink Undercoating	Surf			Sample 2 of 3	ND	N	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323
5544-2010 H03	Food Science/Human Nutrition	816	160	Other	Black Sink Undercoating	Surf			Sample 3 of 3	ND	N	G20F, G20K, 160, 168, 283, 289, 291, 204, 215, 219, 218, 220, 231, 235, 240, 244, 248, 250, 252, 373, 302P, 302H, 317, 319, 340, 342, 346, 355, 323
5544-2010 I01	Food Science/Human Nutrition	816	G20G	Other	Black Lab countertop	Misc	30	SF	Sample 1 of 1	23% Chrysotile	Y	G20E

5544-2010 J01	Food Science/Human Nutrition	816	G20E	vinyl tile 12 w/ mastic	Gray on off white 12x12 inch vinyl floor tile with gold mastic	Misc			Sample 1 of 7	ND	N	G20E, hallways of first floor, 118, 116, 114, 112, 108, 110, 102, 157, 120, 123, 122, 166, 166B, 157C, 168A, hallways of second floor, 279, 287, 202, 206, 208, 214, 200LT, 216, 222, 224, 226, 228, 230, 232, 234, 236, 238, 255, 245, 249, 287, 260, 261, 262, 263, 268, 270, 272, 274, 276, 277, 279, 354E, 359, 364, 362, 360, 366, 368, 370, 372, hallways of the 3rd floor, 375, 379, 302C, 302D, 302P, 303A, 308, 310, 312, 316, 314, 318, 320, 322, 324, 344, 348, 349, 359, 358, 358A, 358B, 358C, 358D, 358E, 358H, 358F, T101A, T101AA
5544-2010 J02	Food Quality	815	200N	vinyl tile 12 w/ mastic	Gray on off white 12x12 inch vinyl floor tile with gold mastic	Misc			Sample 2 of 7	ND	N	200N, 200S, 200SW, 200E

5544-2010 J03	Food Science/Human Nutrition	816	100	vinyl tile 12 w/ mastic	Gray on off white 12x12 inch vinyl floor tile with gold mastic	Misc			Sample 3 of 7	ND	N	G20E, hallways of first floor, 118, 116, 114, 112, 108, 110, 102, 157, 120, 123, 122, 166, 166B, 157C, 168A, hallways of second floor, 279, 287, 202, 206, 208, 214, 200LT, 216, 222, 224, 226, 228, 230, 232, 234, 236, 238, 255, 245, 249, 287, 260, 261, 262, 263, 268, 270, 272, 274, 276, 277, 279, 354E, 359, 364, 362, 360, 366, 368, 370, 372, hallways of the 3rd floor, 375, 379, 302C, 302D, 302P, 303A, 308, 310, 312, 316, 314, 318, 320, 322, 324, 344, 348, 349, 359, 358, 358A, 358B, 358C, 358D, 358E, 358H, 358F, T101A, T101AA

5544-2010 J04	Food Science/Human Nutrition	816	200	vinyl tile 12 w/ mastic	Gray on off white 12x12 inch vinyl floor tile with gold mastic	Misc			Sample 4 of 7	ND	N	G20E, hallways of first floor, 118, 116, 114, 112, 108, 110, 102, 157, 120, 123, 122, 166, 166B, 157C, 168A, hallways of second floor, 279, 287, 202, 206, 208, 214, 200LT, 216, 222, 224, 226, 228, 230, 232, 234, 236, 238, 255, 245, 249, 287, 260, 261, 262, 263, 268, 270, 272, 274, 276, 277, 279, 354E, 359, 364, 362, 360, 366, 368, 370, 372, hallways of the 3rd floor, 375, 379, 302C, 302D, 302P, 303A, 308, 310, 312, 316, 314, 318, 320, 322, 324, 344, 348, 349, 359, 358, 358A, 358B, 358C, 358D, 358E, 358H, 358F, T101A, T101AA

5544-2010 J05	Food Science/Human Nutrition	816	354E	vinyl tile 12 w/ mastic	Gray on off white 12x12 inch vinyl floor tile with gold mastic	Misc				Sample 5 of 7	ND	N	G20E, hallways of first floor, 118, 116, 114, 112, 108, 110, 102, 157, 120, 123, 122, 166, 166B, 157C, 168A, hallways of second floor, 279, 287, 202, 206, 208, 214, 200LT, 216, 222, 224, 226, 228, 230, 232, 234, 236, 238, 255, 245, 249, 287, 260, 261, 262, 263, 268, 270, 272, 274, 276, 277, 279, 354E, 359, 364, 362, 360, 366, 368, 370, 372, hallways of the 3rd floor, 375, 379, 302C, 302D, 302P, 303A, 308, 310, 312, 316, 314, 318, 320, 322, 324, 344, 348, 349, 359, 358, 358A, 358B, 358C, 358D, 358E, 358H, 358F, T101A, T101AA

5544-2010 J06	Food Science/Human Nutrition	816	358J	vinyl tile 12 w/ mastic	Gray on off white 12x12 inch vinyl floor tile with gold mastic	Misc				Sample 6 of 7	ND	N	G20E, hallways of first floor, 118, 116, 114, 112, 108, 110, 102, 157, 120, 123, 122, 166, 166B, 157C, 168A, hallways of second floor, 279, 287, 202, 206, 208, 214, 200LT, 216, 222, 224, 226, 228, 230, 232, 234, 236, 238, 255, 245, 249, 287, 260, 261, 262, 263, 268, 270, 272, 274, 276, 277, 279, 354E, 359, 364, 362, 360, 366, 368, 370, 372, hallways of the 3rd floor, 375, 379, 302C, 302D, 302P, 303A, 308, 310, 312, 316, 314, 318, 320, 322, 324, 344, 348, 349, 359, 358, 358A, 358B, 358C, 358D, 358E, 358H, 358F, T101A, T101AA

5544-2010 J08	Food Science/Human Nutrition	816	302D	vinyl tile 12 w/ mastic	Gray on off white 12x12 inch vinyl floor tile with gold mastic	Misc			Sample 7 of 7	ND	N	G20E, hallways of first floor, 118, 116, 114, 112, 108, 110, 102, 157, 120, 123, 122, 166, 166B, 157C, 168A, hallways of second floor, 279, 287, 202, 206, 208, 214, 200LT, 216, 222, 224, 226, 228, 230, 232, 234, 236, 238, 255, 245, 249, 287, 260, 261, 262, 263, 268, 270, 272, 274, 276, 277, 279, 354E, 359, 364, 362, 360, 366, 368, 370, 372, hallways of the 3rd floor, 375, 379, 302C, 302D, 302P, 303A, 308, 310, 312, 316, 314, 318, 320, 322, 324, 344, 348, 349, 359, 358, 358A, 358B, 358C, 358D, 358E, 358H, 358F, T101A, T101AA
job#-5544-2010 K01	Food Science/Human Nutrition	816	G10	Other	Gasket	TSI			Sample 1 of 1		N	G10

5544-2010 L01	Food Science/Human Nutrition	816	G10WA	2' x 4' ceiling tile	White 2x4 inch Pinhole etched drop in ceiling tile	Misc				Sample 1 of 5	ND	N	T101A, T101AA, 100, 100S, and 100SL hallways, 119A, 118, 116, 114, 112, 110, 108, 106, 103, 155, 104, 157, 160, 150, 148, 146, 140, 123, 122, 120, 168A, 106L, 106K, 106J, 106H, 106G, 106F, 102, 104, 104A, 106A, 200, and 200S hallways, 302J, 302E, 302H, 302G, 302GA, 302C, 302EA, 300, and 300S hallways, 305, 308, 309, 310, 312, 314, 316, 318, 320, 322, 324, 317, 319, 321, 323, 343T, 303AB, 303AA, 349A, 349, 300V, 379, 303AB, 377, 375, 340, 342, 346, 348, 350, 352, 358G, 358F, 358H, 358E, 358D, 358C, 358, 358A, 358B, 355, 353, 359, 354W, 354E, 376, 378, 374, 372, 370, 368, 366, 364, 362,

5544-2010 L04	Food Science/Human Nutrition	816	119	2' x 4' ceiling tile	White 2x4 inch Pinhole etched drop in ceiling tile	Misc				Sample 4 of 5	ND	N	T101A, T101AA, 100, 100S, and 100SL hallways, 119A, 118, 116, 114, 112, 110, 108, 106, 103, 155, 104, 157, 160, 150, 148, 146, 140, 123, 122, 120, 168A, 106L, 106K, 106J, 106H, 106G, 106F, 102, 104, 104A, 106A, 200, and 200S hallways, 302J, 302E, 302H, 302G, 302GA, 302C, 302EA, 300, and 300S hallways, 305, 308, 309, 310, 312, 314, 316, 318, 320, 322, 324, 317, 319, 321, 323, 343T, 303AB, 303AA, 349A, 349, 300V, 379, 303AB, 377, 375, 340, 342, 346, 348, 350, 352, 358G, 358F, 358H, 358E, 358D, 358C, 358, 358A, 358B, 355, 353, 359, 354W, 354E, 376, 378, 374, 372, 370, 368, 366, 364, 362,

5544-2010 L05	Food Science/Human Nutrition	816	253	2' x 4' ceiling tile	White 2x4 inch Pinhole etched drop in ceiling tile	Misc			Sample 5 of 5	ND	N	T101A, T101AA, 100, 100S, and 100SL hallways, 119A, 118, 116, 114, 112, 110, 108, 106, 103, 155, 104, 157, 160, 150, 148, 146, 140, 123, 122, 120, 168A, 106L, 106K, 106J, 106H, 106G, 106F, 102, 104, 104A, 106A, 200, and 200S hallways, 302J, 302E, 302H, 302G, 302GA, 302C, 302EA, 300, and 300S hallways, 305, 308, 309, 310, 312, 314, 316, 318, 320, 322, 324, 317, 319, 321, 323, 343T, 303AB, 303AA, 349A, 349, 300V, 379, 303AB, 377, 375, 340, 342, 346, 348, 350, 352, 358G, 358F, 358H, 358E, 358D, 358C, 358, 358A, 358B, 355, 353, 359, 354W, 354E, 376, 378, 374, 372, 370, 368, 366, 364, 362,
5544-2010 M01	Food Science/Human Nutrition	816	106 in Food Quality	vinyl tile 12 w/ mastic	Blue on off-white 12"x12" Vinyl floor tile/gold mastic	Misc			Sample 1 of 3	ND	N	100S, 100C, and 100W hallway, and 104
5544-2010 O02	Food Science/Human Nutrition	816	100A	cove base w/mastic	Beige covebase with off white mastic	Misc			Sample 2 of 5	ND	N	Throughout 1st, 2nd, 3rd and 4th floors.
5544-2010 O03	Food Science/Human Nutrition	816	200N	cove base w/mastic	Beige covebase with off white mastic	Misc			Sample 3 of 5	ND	N	Throughout 1st, 2nd, 3rd and 4th floors.

5544-2010 O04	Food Science/Human Nutrition	816	253	cove base w/mastic	Beige covebase with off white mastic	Misc			Sample 4 of 5	ND	N	Throughout 1st, 2nd, 3rd and 4th floors.
5544-2010 P03	Food Science/Human Nutrition	816	252	vinyl tile 12 w/ mastic	Black and white 12x12 inch vinyl floor tile with gold mastic	Misc			Sample 3 of 3	ND	N	252
5544-2010 U04	Food Science/Human Nutrition	815	253	Other	Dark gray vinyl sheet flooring/yellow mastic	Misc			Sample 4 of 4	ND	N	T101, T100A, 253, 291, 289, 204, 212, 215, 218, 220, 229, 229A, 231, 235, 240, 244, 248, 250, 252, 258, 259, 264, 360, 303, 303AA, 305, 317, 319, 340, 242, 246, 350, 352, 353, and 355
5544-2010 V03	Food Science/Human Nutrition	816	160	Other	Black lab countertop	Misc			Sample 3 of 5	ND	N	160, 253, 212, 258, 263, 277, 279A, 264, 212, 229, 229A, 259, 210, 223, 225, 359, 302D, 302H, 317, 319, 340, 354, 302, 305, 352, 350, 353, 342, 346, 355
5544-2010 V04	Food Science/Human Nutrition	816	253	Other	Black lab countertop	Misc			Sample 4 of 5	ND	N	160, 253, 212, 258, 263, 277, 279A, 264, 212, 229, 229A, 259, 210, 223, 225, 359, 302D, 302H, 317, 319, 340, 354, 302, 305, 352, 350, 353, 342, 346, 355

5544-2010 V05	Food Science/Human Nutrition	816	258	Other	Black lab countertop	Misc			Sample 5 of 5	ND	N	160, 253, 212, 258, 263, 277, 279A, 264, 212, 229, 229A, 259, 210, 223, 225, 359, 302D, 302H, 317, 319, 340, 354, 302, 305, 352, 350, 353, 342, 346, 355
5544-2010 W01	Food Science/Human Nutrition	816	202	Mastic	Tan carpet mastic	Misc			Sample 1 of 4	ND	N	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101
5544-2010 W02	Food Science/Human Nutrition	816	216	Mastic	Tan carpet mastic	Misc			Sample 2 of 4	ND	N	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101

5544-2010 W03	Food Science/Human Nutrition	816	164	Mastic	Tan carpet mastic	Misc			Sample 3 of 4	ND	N	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101
5544-2010 W04	Food Science/Human Nutrition	816	101	Mastic	Tan carpet mastic	Misc			Sample 4 of 4	ND	N	216, 202, 204, 208, 210, 212, 214, 202, 166A, 168, 168A, 106L, 106K, 106J, 106H, 106E, 106F, 106, 106A, 102, 302A, 302B, 302E, 302F, 302G, 302J, 302K, 302L, 302M, 302N, T-101
5544-2010 X04	Food Science/Human Nutrition	816	147	Other	Ceramic floor and wall tile/grout	Misc			Sample 4 of 4	ND	N	147, 151, 247, 251
5544-2010 Y01	Food Science/Human Nutrition	816	103	Other	Beige vinyl sheet flooring/yellow mastic	Misc			Sample 1 of 3	ND	N	103, 119, 119A, 140, 148, 155, 160, 167, 302A, 302H, 323
5544-2010 Y02	Food Science/Human Nutrition	816	148	Other	Beige vinyl sheet flooring/yellow mastic	Misc			Sample 2 of 3	ND	N	103, 119, 119A, 140, 148, 155, 160, 167, 302A, 302H, 323
5544-2010 Y03	Food Science/Human Nutrition	816	155	Other	Beige vinyl sheet flooring/yellow mastic	Misc			Sample 3 of 3	ND	N	103, 119, 119A, 140, 148, 155, 160, 167, 302A, 302H, 323

5544-2010 Z01	Food Science/Human Nutrition	816	119	Other	White Sink Undercoating	Surf			Sample 1 of 2	ND	N	119, 150, 345, 303, 373
5544-2010 Z02	Food Science/Human Nutrition	816	150	Other	White Sink Undercoating	Surf			Sample 2 of 2	ND	N	119, 150, 345, 303, 373
5544-2010 AA01	Food Science/Human Nutrition	816	119A	gypsum wallboard w/joint compound	Gypsum wall board system	Misc			Sample 1 of 4	ND	N	All room walls of the first and second floor, excluding 278
5544-2010 AA02	Food Science/Human Nutrition	816	123	gypsum wallboard w/joint compound	Gypsum wall board system	Misc			Sample 2 of 4	ND	N	All room walls of the first and second floor, excluding 278
5544-2010 AA03	Food Science/Human Nutrition	816	167	gypsum wallboard w/joint compound	Gypsum wall board system	Misc			Sample 3 of 4	ND	N	All room walls of the first and second floor, excluding 278
5544-2010 AA04	Food Science/Human Nutrition	816	253	gypsum wallboard w/joint compound	Gypsum wall board system	Misc			Sample 4 of 4	ND	N	All room walls of the first and second floor, excluding 278
5544-2010 BB01	Food Science/Human Nutrition	816	278	gypsum wallboard w/joint compound	Green and white gypsum wall board system	Misc			Sample 1 of 3	ND	N	278, 374
5544-2010 BB02	Food Science/Human Nutrition	816	374	gypsum wallboard w/joint compound	Green and white gypsum wall board system	Misc			Sample 2 of 3	ND	N	278, 374
5544-2010 BB03	Food Science/Human Nutrition	816	374	gypsum wallboard w/joint compound	Green and white gypsum wall board system	Misc			Sample 3 of 3	ND	N	278, 374
5544-2010 CC01	Food Science/Human Nutrition	816	252 Exterior	Other	Brown pebbled exterior siding/gray soft binder	Surf			Sample 1 of 7	ND	N	Exterior of Food Science/ Human Nutrition

5544-2010 CC02	Food Science/Hu man Nutrition	816	252 Exterior	Other	Brown pebbled exterior siding/gray soft binder	Surf			Sample 2 of 7	ND	N	Exterior of Food Science/ Human Nutrition
5544-2010 CC03	Food Science/Hu man Nutrition	816	252 Exterior	Other	Brown pebbled exterior siding/gray soft binder	Surf			Sample 3 of 7	ND	N	Exterior of Food Science/ Human Nutrition
5544-2010 CC04	Food Science/Hu man Nutrition	816	252 Exterior	Other	Brown pebbled exterior siding/gray soft binder	Surf			Sample 4 of 7	ND	N	Exterior of Food Science/ Human Nutrition
5544-2010 CC05	Food Science/Hu man Nutrition	816	252 Exterior	Other	Brown pebbled exterior siding/gray soft binder	Surf			Sample 5 of 7	ND	N	Exterior of Food Science/ Human Nutrition
5544-2010 CC06	Food Science/Hu man Nutrition	816	252 Exterior	Other	Brown pebbled exterior siding/gray soft binder	Surf			Sample 6 of 7	ND	N	Exterior of Food Science/ Human Nutrition
5544-2010 CC07	Food Science/Hu man Nutrition	816	252 Exterior	Other	Brown pebbled exterior siding/gray soft binder	Surf			Sample 7 of 7	ND	N	Exterior of Food Science/ Human Nutrition
5544-2010 DD01	Food Science/Hu man Nutrition	816	SE stairwell level 1	Other	Beige textured interior siding	Surf			Sample 1 of 7	ND	N	On NE and SE Stairwell
5544-2010 DD02	Food Science/Hu man Nutrition	816	SE stairwell level 2	Other	Beige textured interior siding	Surf			Sample 2 of 7	ND	N	On NE and SE Stairwell
5544-2010 DD03	Food Science/Hu man Nutrition	816	SE stairwell level 3	Other	Beige textured interior siding	Surf			Sample 3 of 7	ND	N	On NE and SE Stairwell
5544-2010 DD04	Food Science/Hu man Nutrition	816	400	Other	Beige textured interior siding	Surf			Sample 4 of 7	ND	N	On NE and SE Stairwell

5544-2010 DD05	Food Science/Hu man Nutrition	816	400	Other	Beige textured interior siding	Surf			Sample 5 of 7	ND	N	On NE and SE Stairwell
5544-2010 DD06	Food Science/Hu man Nutrition	816	400	Other	Beige textured interior siding	Surf			Sample 6 of 7	ND	N	On NE and SE Stairwell
5544-2010 DD07	Food Science/Hu man Nutrition	816	400	Other	Beige textured interior siding	Surf			Sample 7 of 7	ND	N	On NE and SE Stairwell
5544-2010 EE01	Food Science/Hu man Nutrition	816	Roof above 352	Other	Silver-coat paint atop asphaltic coating	Surf			Sample 1 of 2	ND	N	Interior walls of Rooftop parapets
5544-2010 EE02	Food Science/Hu man Nutrition	816	Roof above 324	Other	Silver-coat paint atop asphaltic coating	Surf			Sample 2 of 2	ND	N	Interior walls of Rooftop parapets
5544-2010 FF01	Food Science/Hu man Nutrition	816	Above 300	Other	Silver coat, asphaltic roofing material, perlite, asphaltic paper, perlite, brown fibrous felt paper, asphaltic felt paper, asphaltic paper, brown foam board.	Misc			Sample 1 of 1	ND	N	On 400 level and 300 level roofs
ND5544-2010 GG01	Food Science/Hu man Nutrition	816	Above 400	Other	Silver coat, asphaltic roofing material, beige fibrous material, brown foam board, silver metallic paper	Misc			Sample 1 of 1	ND	N	Above 400 level
5544-2010 HH01	Food Science/Hu man Nutrition	816	T101	12" ceiling tile w/mastic	White 12x12 inch ceiling tile with glue dot	Misc			Sample 1 of 2	ND	N	T101
5544-2010 HH02	Food Science/Hu man Nutrition	816	T101	12" ceiling tile w/mastic	White 12x12 inch ceiling tile with glue dot	Misc			Sample 2 of 2	ND	N	T101
5544-2010JJ02	Food Science/Hu man Nutrition	816	SE exterior	Other	Beige exterior texture	Misc			Sample 1 of 1	ND	N	Exterior of Food Science/ Human Nutrition

5544-2010KK01	Food Science/Human Nutrition	816	S 100 Hallway	vinyl tile 12 w/ mastic	Blue on off-white 12"x12" Vinyl floor tile/gold mastic	Misc			Sample 1 of 1	ND	N	South 100 Hallway
5544-2010LL01	Food Science/Human Nutrition	816	Room 166B	Other	Gray Sink Undercoating	Surf			Sample 1 of 3	ND	N	Room 166B
5544-2010LL02	Food Science/Human Nutrition	816	Room 166B	Other	Gray Sink Undercoating	Surf			Sample 2 of 3	ND	N	Room 166B
5544-2010LL03	Food Science/Human Nutrition	816	Room 166B	Other	Gray Sink Undercoating	Surf			Sample 3 of 3	ND	N	Room 166B
5544-2010MM01	Food Science/Human Nutrition	816	T100	Other	Stair tread	Surf			Sample 1 of 3	ND	N	T100
5544-2010MM02	Food Science/Human Nutrition	816	T100	Other	Stair tread	Surf			Sample 2 of 3	ND	N	T100
5544-2010MM03	Food Science/Human Nutrition	816	T100	Other	Stair tread	Surf			Sample 3 of 3	ND	N	T100
5544-2010NN01	Food Science/Human Nutrition	816	Roof	Other	Roof penetration sealant	Misc			Sample 1 of 1	ND	N	Roof

Sample # Column: sample # format is the WSU job # + a unique identifier.

Sample # Column: If multiple samples are being taken of a homogeneous material, use the same WSU project/job # + unique number + a letter qualifier behind it for each sample, e.g. Job1-4032A, Job1-B4032b, etc.

Building # Column: A list of WSU building numbers can be found at: <http://www.cpd.wsu.edu/FacilityRoster/>

Sample Location Column: column is for the space number. Any project officer you work for should get you an R-sheet prior to any survey. R-sheets are .pdf floor plans with room numbers. For locations not numbered on R-sheets (roofs, tunnels, etc.) use descriptive terms like north flat roof.

Material Column: The descriptors are generic in the material column. There should be a pull down menu in this template. Please use only the descriptions from the pull down menu.

Material Description/color Column: Please enter specific material descriptions in this column.

Type Column: Surf (Surfacing, TSI (thermal system insulation, Misc (miscellaneous material). Please use only the descriptions in the pull-down menu.

Location Quantity Column: is meant to be the total quantity of a homogenous material. Please use whole interger(s). The descriptor is placed in the Quantity descriptor column.

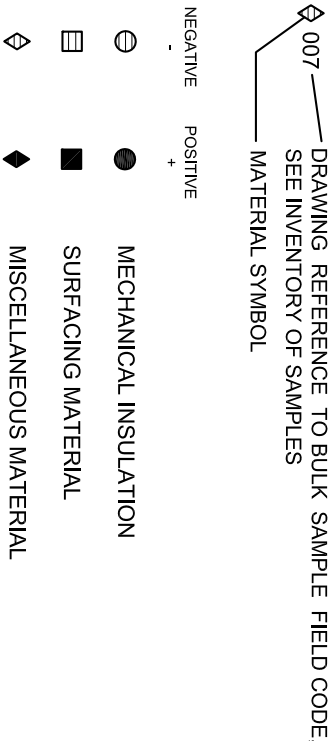
down menu.

Comments Column: General comments about the sample, material or other information can be placed in this column
Sample results Column: Use ND as a descriptor for "None Detected", or the format "% asbestos, type of asbestos"
ACM? Column: Y = yes, N = no
Homogeneous Material Location Column: describes homogeneous material location. Use space identifiers from R-sheets. For un-numbered spaces like roofs, use descriptors like roof.
NOTE: Quantities need not be included for materials that do not contain asbestos; Empty cells are acceptable.
NOTE: Please place firm name, WSU project #, report title and report date in the header.

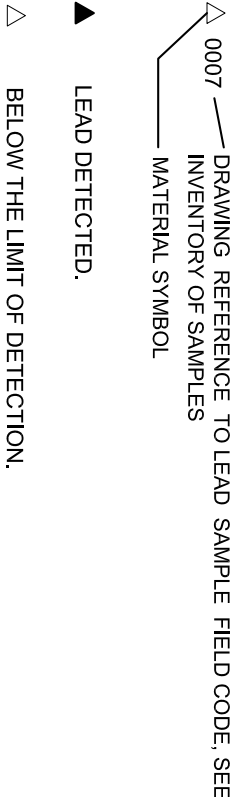
NOTES

- THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION.
- ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.

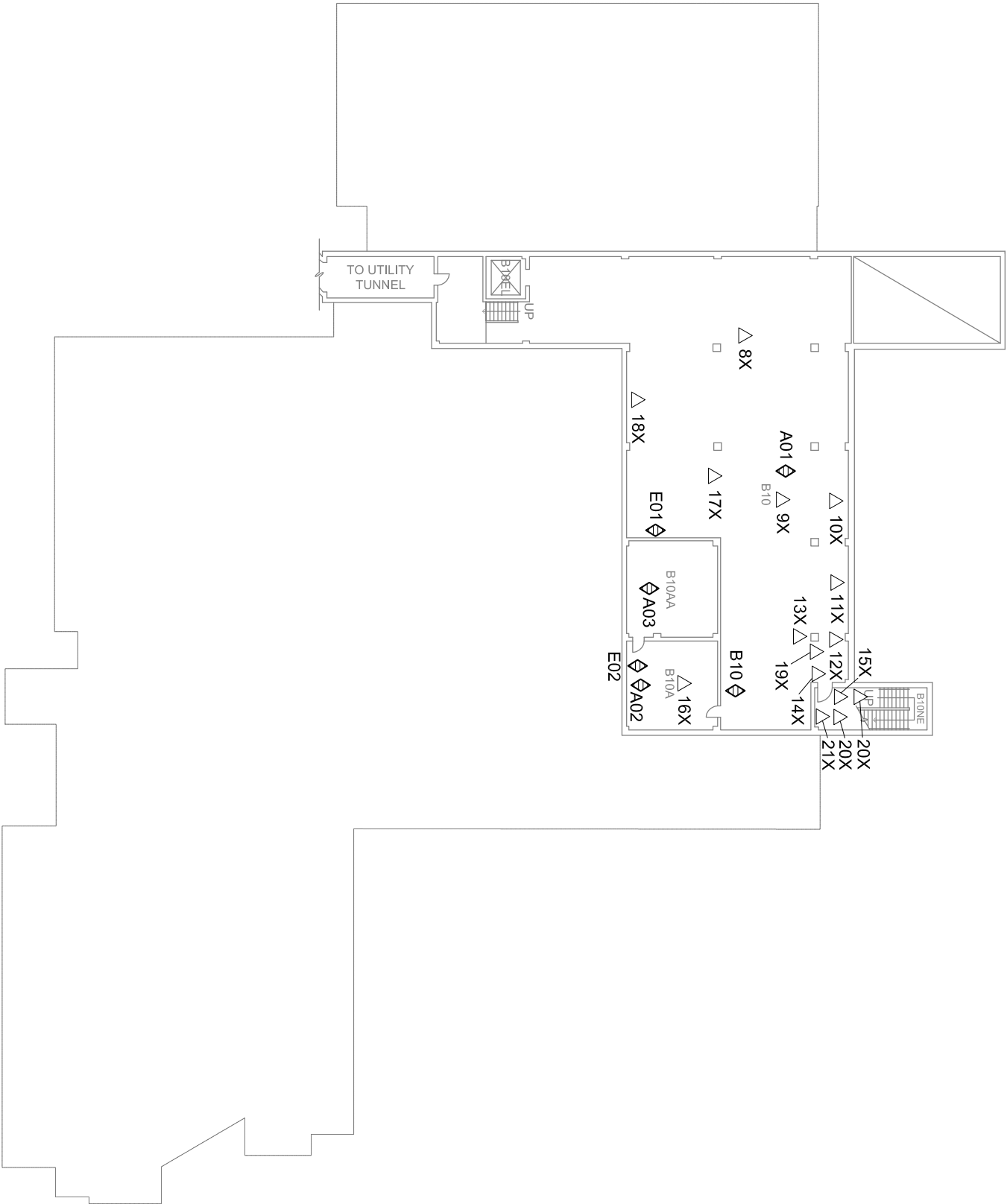
ASBESTOS SAMPLE SYMBOLS



LEAD SAMPLE SYMBOLS



NO ASBESTOS-CONTAINING
MATERIALS FOUND THIS AREA



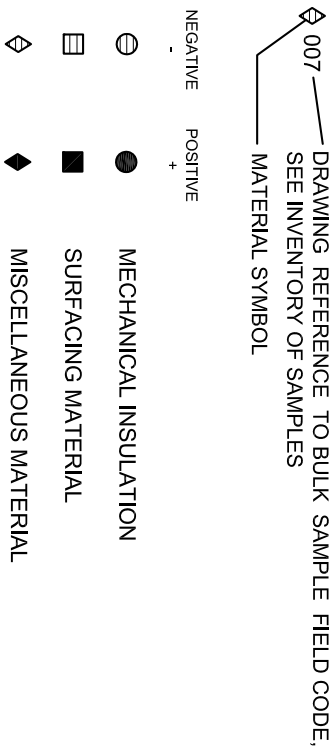
BASEMENT FLOOR PLAN



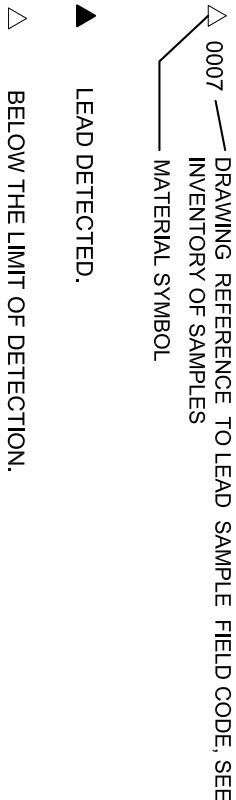
NOTES

1. THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION.
2. ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.

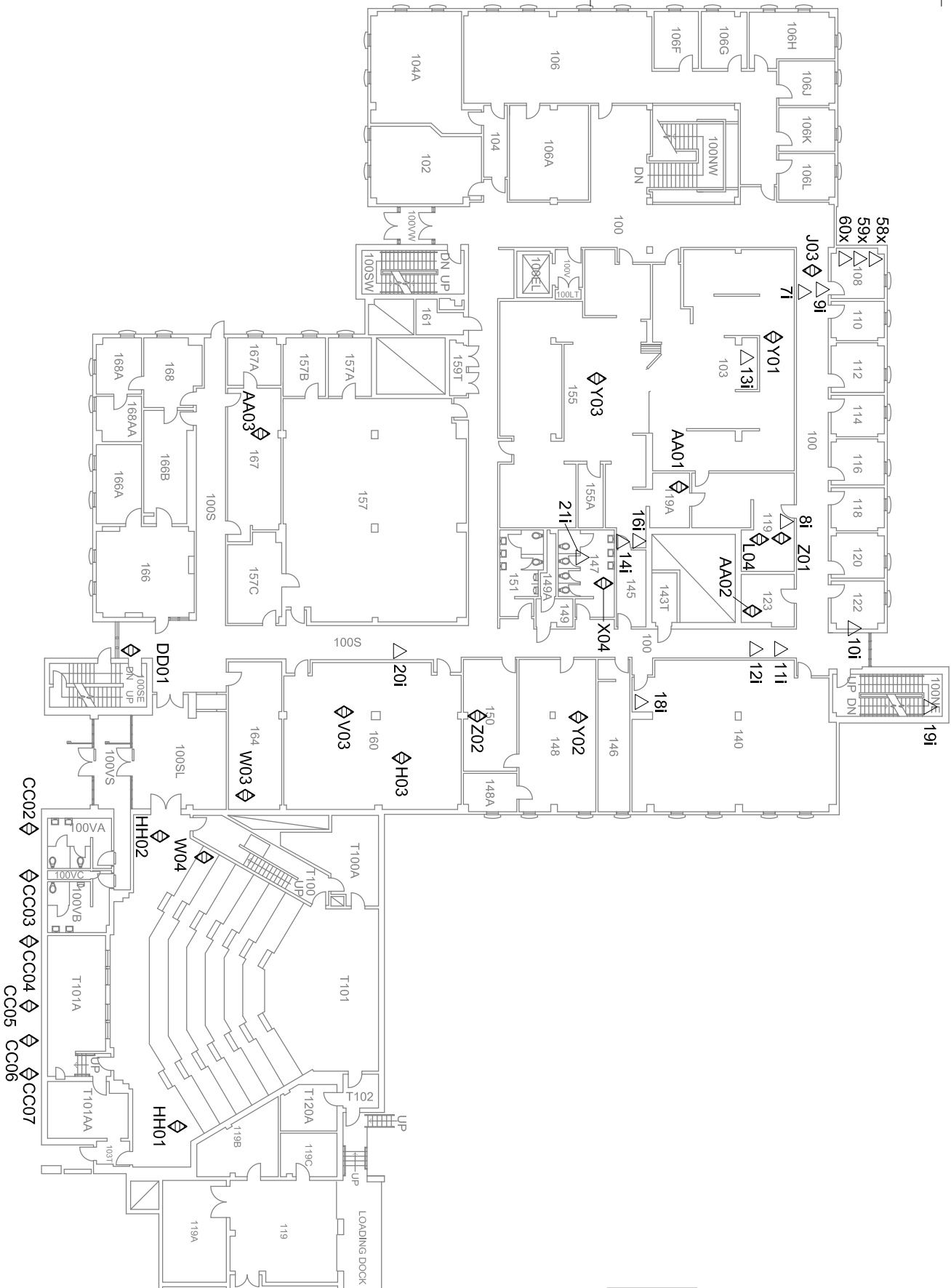
ASBESTOS SAMPLE SYMBOLS



LEAD SAMPLE SYMBOLS



**NO ASBESTOS-CONTAINING
MATERIALS FOUND THIS AREA**



FIRST FLOOR PLAN

NOT TO SCALE

PBS
Engineering +
Environmental
320 N Johnson Street
Suite 700
Kennewick, WA 99338
509.735.2698 Main
866.727.0140 Fax
www.pbsenv.com

FOOD SCIENCE / HUMAN
NUTRITION BUILDING
BLDG. NO. 816
PULLMAN, WASHINGTON

HAZARDOUS

MATERIALS SURVEY

PROJECT: 61987.029

DATE: FEBRUARY 2011

FIGURE:

HMH3

NOTES

- THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION.
- ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.

ASBESTOS SAMPLE SYMBOLS

007

DRAWING REFERENCE TO BULK SAMPLE FIELD CODE. SEE INVENTORY OF SAMPLES

MATERIAL SYMBOL

NEGATIVE -

POSITIVE +

MECHANICAL INSULATION

SURFACING MATERIAL

MISCELLANEOUS MATERIAL

LEAD SAMPLE SYMBOLS

0007

DRAWING REFERENCE TO LEAD SAMPLE FIELD CODE. SEE INVENTORY OF SAMPLES

MATERIAL SYMBOL

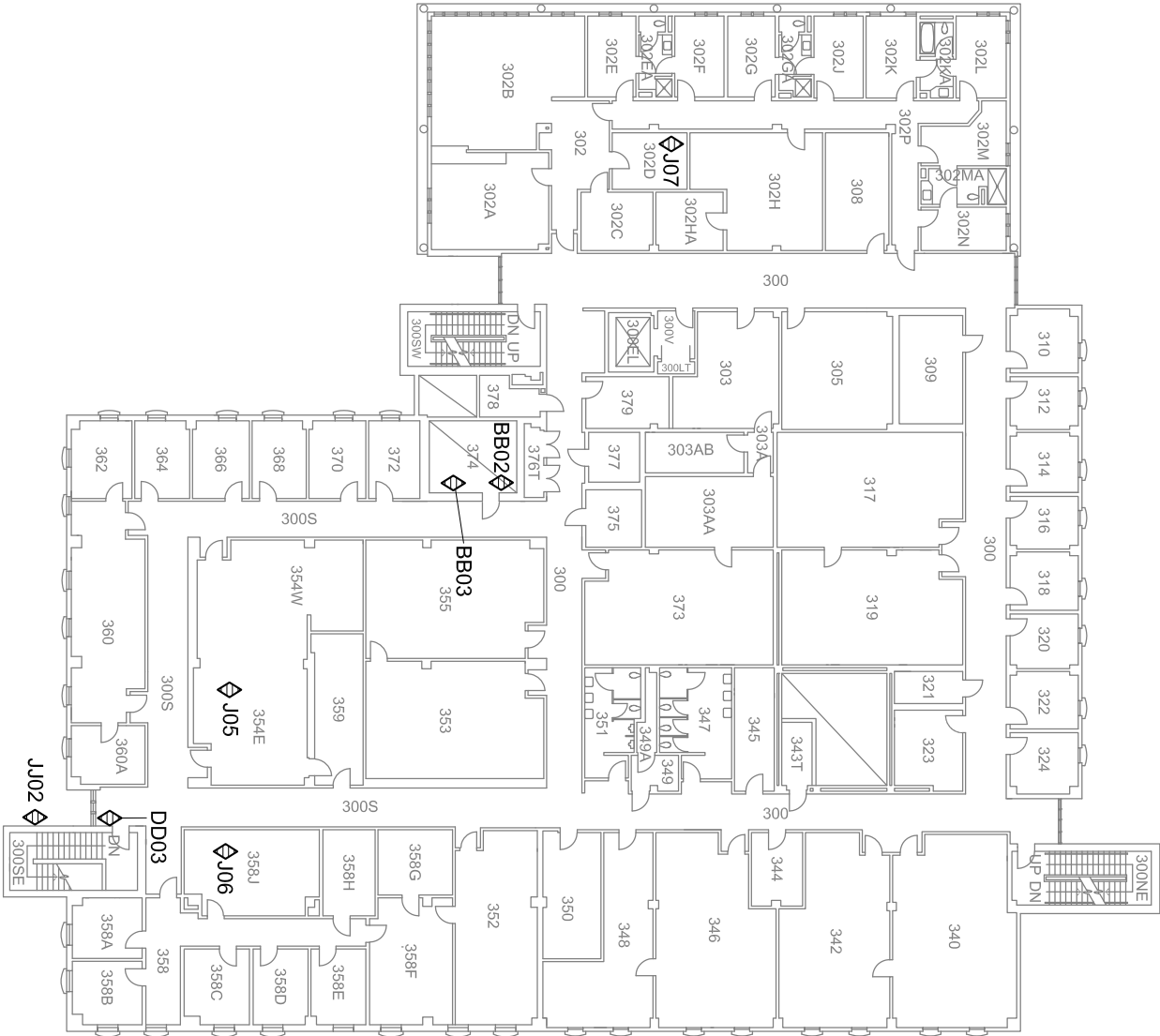
▲

LEAD DETECTED.

△

BELOW THE LIMIT OF DETECTION.

NO ASBESTOS-CONTAINING MATERIALS FOUND THIS AREA



NOTES

- 1. THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION.
- 2. ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.

LEGEND

ASBESTOS-CONTAINING BLACK COUNTERTOP

ASBESTOS SAMPLE SYMBOLS

007 — DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES

MATERIAL SYMBOL

- NEGATIVE POSITIVE
- MECHANICAL INSULATION
- SURFACING MATERIAL
- MISCELLANEOUS MATERIAL

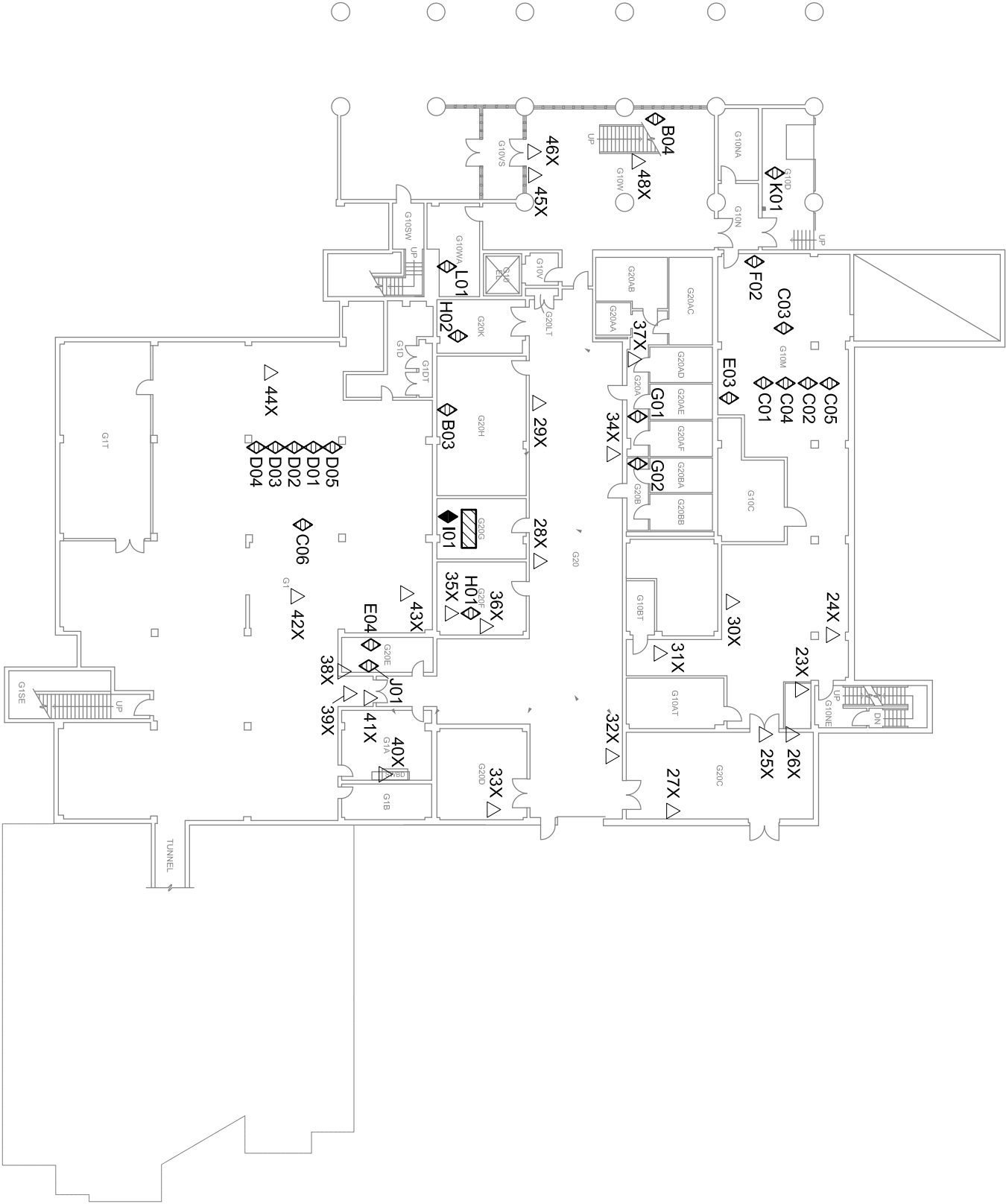
LEAD SAMPLE SYMBOLS

0007 — DRAWING REFERENCE TO LEAD SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES

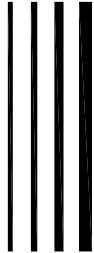
MATERIAL SYMBOL

LEAD DETECTED.

BELOW THE LIMIT OF DETECTION.



GROUND FLOOR PLAN



Engineering +
Environmental
320 N Johnson Street
Suite 700
Kennewick, WA 99336
509.735.2698 Main
866.727.0140 Fax
www.pbsevenv.com

FOOD SCIENCE / HUMAN
NUTRITION BUILDING
BLDG. NO. 816
PULLMAN, WASHINGTON

HAZARDOUS

MATERIALS SURVEY

PROJECT: 61987.029

DATE: FEBRUARY 2011

FIGURE:

HM2

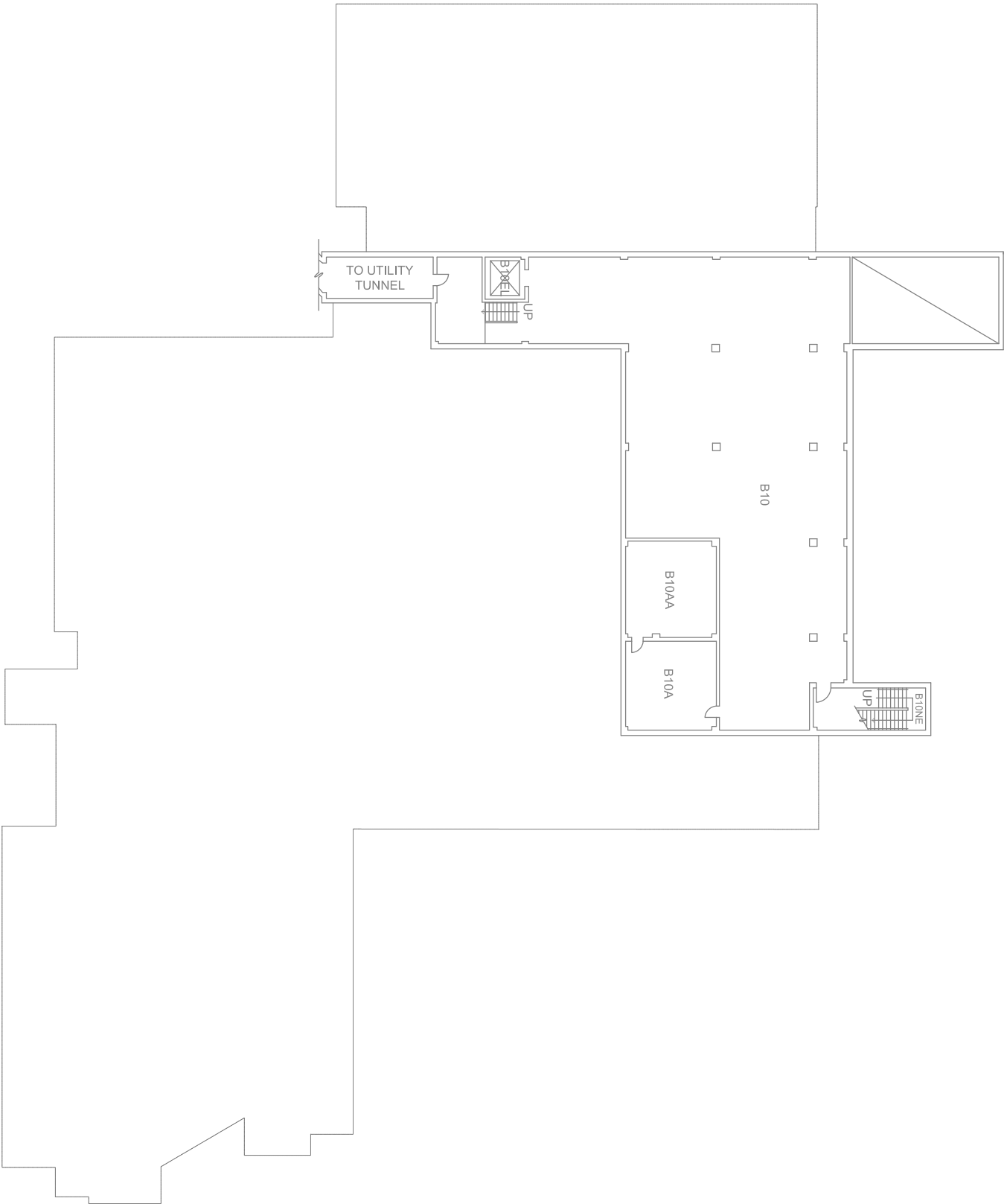


NOT TO SCALE

NOTES

- 1. THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION.
- 2. ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.

NO ASBESTOS-CONTAINING
MATERIALS FOUND THIS AREA



NOT TO SCALE

BASEMENT FLOOR PLAN

PBS
Engineering +
Environmental
320 N Johnson Street
Suite 700
Kennewick, WA 99336
509.735.2698 Main
866.727.0140 Fax
www.pbsevenv.com

FOOD SCIENCE / HUMAN
NUTRITION BUILDING
BLDG. NO. 816
PULLMAN, WASHINGTON

HAZARDOUS

MATERIALS SURVEY

PROJECT: 61987.029

DATE: JANUARY 2011

FIGURE:

HM1

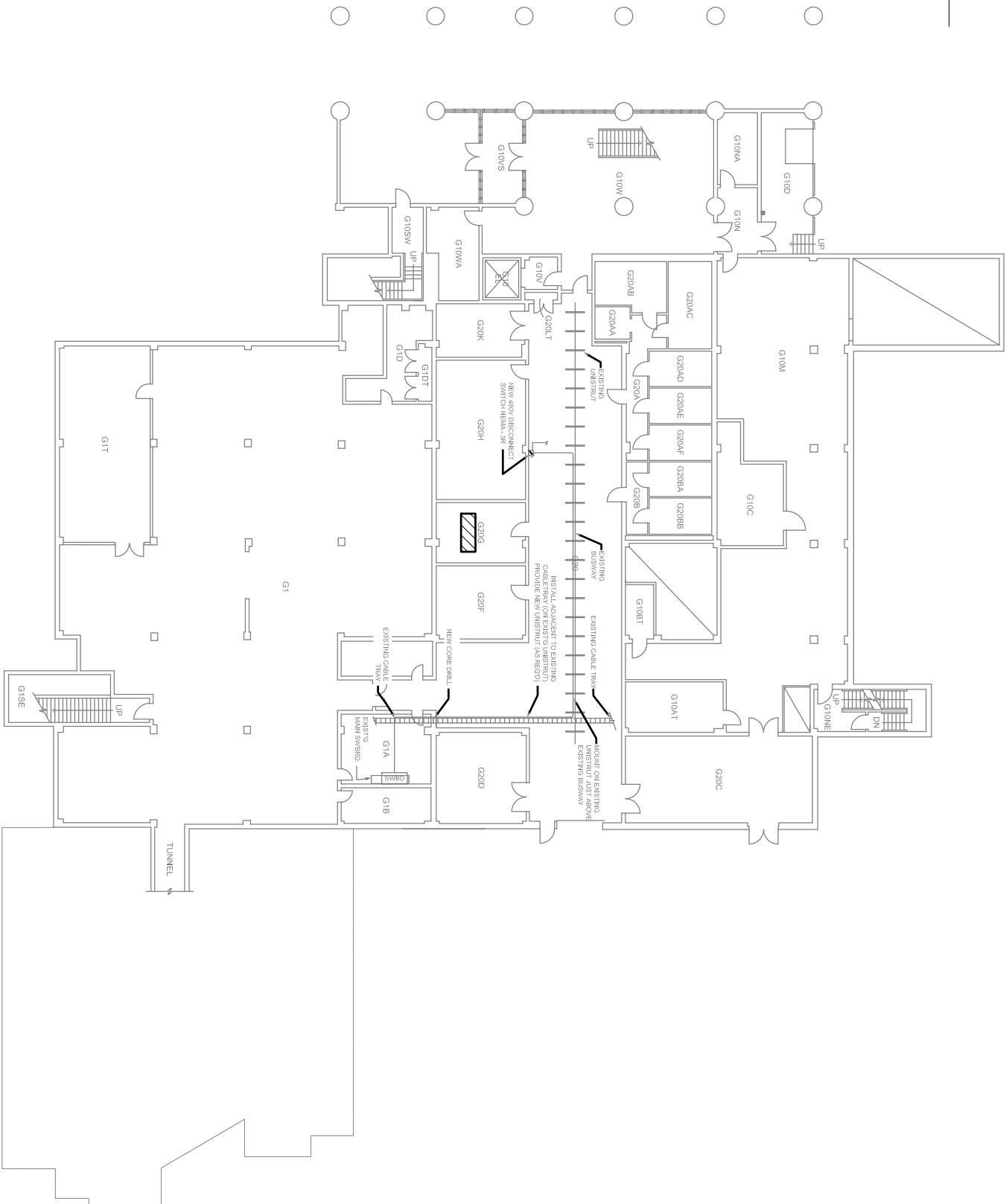
NOTES

1. THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION.
2. ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.

LEGEND



ASBESTOS-CONTAINING BLACK COUNTERTOP



GROUND FLOOR PLAN



NOT TO SCALE

**Engineering +
Environmental**
320 N Johnson Street
Suite 700
Kennewick, WA 99336
509.735.2698 Main
866.727.0140 Fax
www.pbseenv.com

FOOD SCIENCE / HUMAN
NUTRITION BUILDING
BLDG. NO. 816
PULLMAN, WASHINGTON

HAZARDOUS

MATERIALS SURVEY

PROJECT: 61987.029

DATE: JANUARY 2011

FIGURE:

HM2

- NOTES
1.

THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION.
2.

ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.

ASBESTOS SAMPLE SYMBOLS

007

DRAWING REFERENCE TO BULK SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES

MATERIAL SYMBOL

NEGATIVE

POSITIVE

-

+

MECHANICAL INSULATION

SURFACING MATERIAL

MISCELLANEOUS MATERIAL

LEAD SAMPLE SYMBOLS

0007

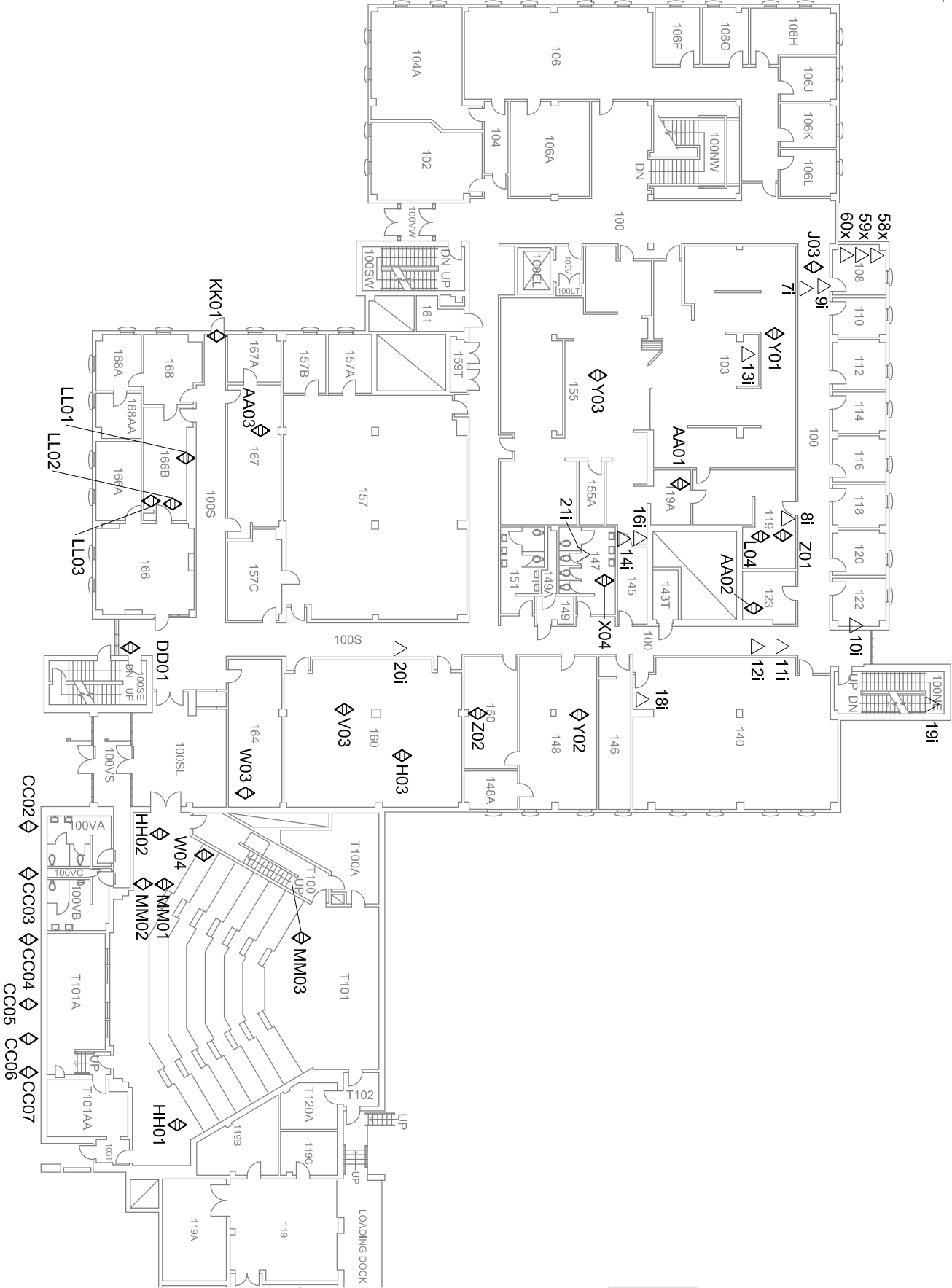
DRAWING REFERENCE TO LEAD SAMPLE FIELD CODE, SEE INVENTORY OF SAMPLES

MATERIAL SYMBOL

LEAD DETECTED.

BELOW THE LIMIT OF DETECTION.

NO ASBESTOS-CONTAINING MATERIALS FOUND THIS AREA



PBS

Engineering + Environmental

320 N Johnson Street
Suite 700
Kennewick, WA 99336
509.735.2698 Main
866.727.0140 Fax
www.pbssenv.com

FOOD SCIENCE / HUMAN NUTRITION BUILDING

BLDG. NO. 816

PULLMAN, WASHINGTON

HAZARDOUS MATERIALS SURVEY

PROJECT: 61987.029

DATE: FEB 2012

FIGURE: HM13

NOTES

1. THIS DRAWING IS DIAGRAMMATIC. IT IS FOR GENERAL INFORMATION.
2. ACCESSIBLE SPACES WERE SURVEYED FOR SUSPECT HAZARDOUS MATERIALS. WHEN OBSERVED, THE MATERIALS WERE NOTED ON THE DRAWING.

ASBESTOS SAMPLE SYMBOLS

007 — DRAWING REFERENCE TO BULK SAMPLE FIELD CODE.
SEE INVENTORY OF SAMPLES
MATERIAL SYMBOL

NEGATIVE POSITIVE

MECHANICAL INSULATION

SURFACING MATERIAL

MISCELLANEOUS MATERIAL

LEAD SAMPLE SYMBOLS

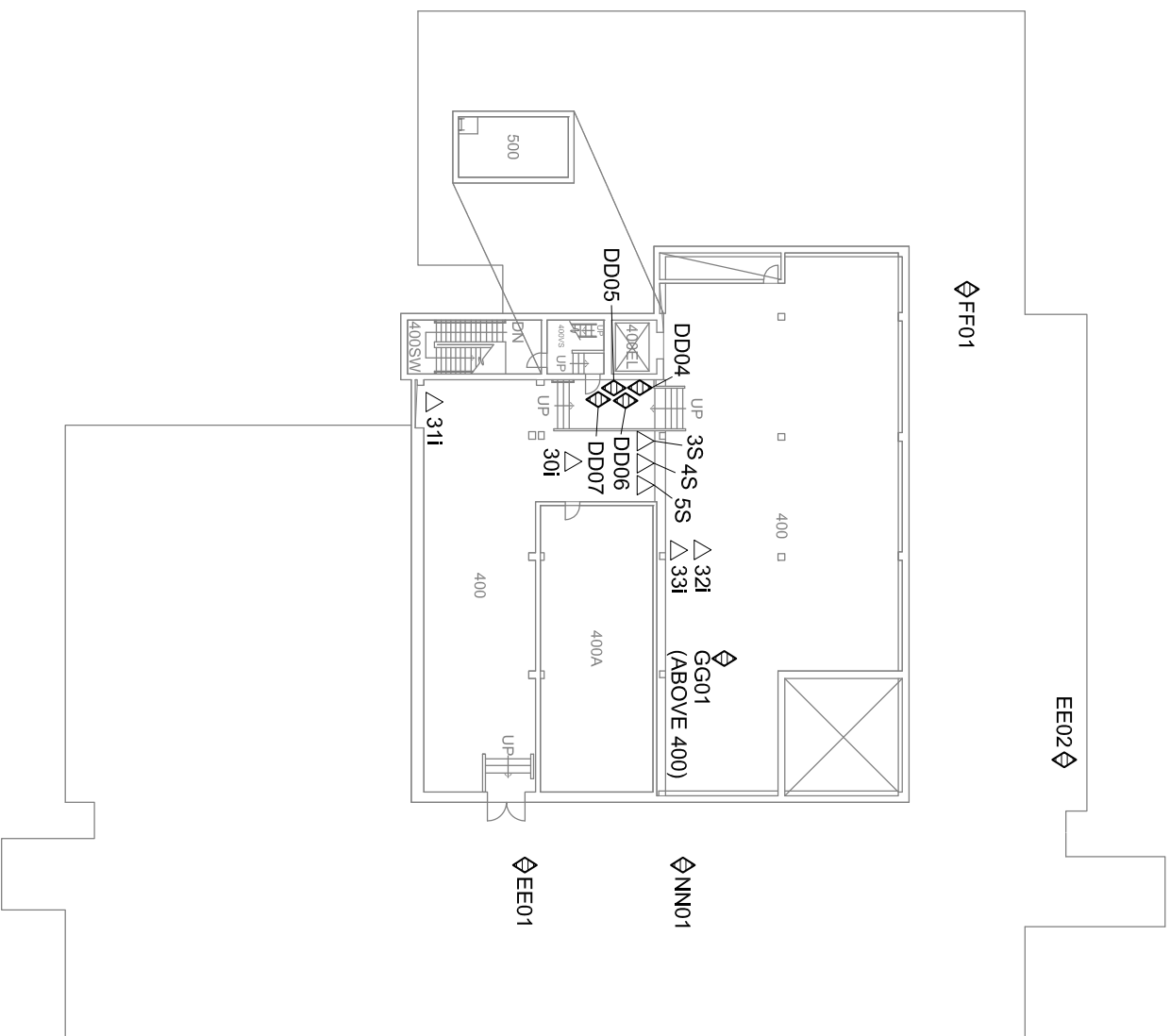
0007 — DRAWING REFERENCE TO LEAD SAMPLE FIELD CODE; SEE INVENTORY OF SAMPLES

MATERIAL SYMBOL

▲ LEAD DETECTED.

BELOW THE LIMIT OF DETECTION.

**NO ASBESTOS-CONTAINING
MATERIALS FOUND THIS AREA**



MECHANICAL PENTHOUSE FLOOR PLAN



NOT TO SCALE



PBS

Engineering +
Environmental

320 N Johnson Street
Suite 700
Kennewick, WA 99333
509.735.2698 Main
866.727.0140 Fax
www.pbseenv.com

FOOD SCIENCE/HUMAN NUTRITION BUILDING

BLDG. NO. 816
PULLMAN, WASHINGTON

HAZARDOUS

MATERIALS SURVEY

PROJECT: 61987.029

DATE: FEBRUARY 2012

FIGURE:

HMG

June 26, 2020

MEMORANDUM

Attention: Kevin Poitra
Project Manager
WSU Facilities Services - Capital

Subject: Assumed Asbestos-Containing Materials
Elevator Modernization Project
Abelson and Food Service Buildings
Washington State University
Pullman, Washington

From: Matthew McKibbin
Industrial Hygienist
WSU Environmental Health and Safety

The following full-building asbestos and lead surveys were provided to use in the Contract Documents for the project:

- Good Faith Survey Update – Food Science and Human Nutrition Building (0816) – WSU Environmental Health and Safety – September 20, 2013.
- Asbestos and Lead Survey – Abelson Hall – E3RA, Inc., February 5, 2009.

In addition to the above referenced reports, Washington State University (WSU) assumes the following materials within the elevator equipment contain asbestos:

- o Friction products such as brake shoes and lining
- o Internal insulation
- o Electrical components (i.e switches, paneling, wiring insulation, insulators)

Although the above materials appear to be intact, dust and degradation of the assumed asbestos-containing materials may be present inside the contained equipment and the materials must be handled accordingly. A copy of this memorandum must be provided to any entity bidding on work for the project and available on-site must also be on site with the good faith surveys during any demolition, renovation and/or construction activities at the site.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

<u>Section</u>	<u>Description</u>	
PART 1 -	GENERAL PROVISIONS	3
1.01	DEFINITIONS	3
1.02	ORDER OF PRECEDENCE	5
1.03	EXECUTION AND INTENT	6
PART 2 -	INSURANCE AND BONDS	6
2.01	CONTRACTOR'S LIABILITY INSURANCE	6
2.02	COVERAGE LIMITS	8
2.03	INSURANCE COVERAGE CERTIFICATES	8
2.04	PAYMENT AND PERFORMANCE BONDS	8
2.05	ALTERNATIVE SURETY	8
2.06	BUILDER'S RISK	9
PART 3 -	TIME AND SCHEDULE	9
3.01	PROGRESS AND COMPLETION	9
3.02	CONSTRUCTION SCHEDULE	9
3.03	OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE	10
3.04	OWNER'S RIGHT TO STOP AND/OR CARRY OUT THE WORK FOR CAUSE	11
3.05	DELAY	11
3.06	NOTICE TO OWNER OF LABOR DISPUTES	13
3.07	DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION	13
PART 4 -	SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS	13
4.01	DISCREPANCIES AND CONTRACT DOCUMENT REVIEW	13
4.02	PROJECT RECORD	14
4.03	SUBMITTALS	15
4.04	ORGANIZATION OF SPECIFICATIONS	16
4.05	OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS	16
PART 5 -	PERFORMANCE	17
5.01	CONTRACTOR CONTROL AND SUPERVISION	17
5.02	PERMITS, FEES, AND NOTICES	17
5.03	PATENTS AND ROYALTIES	18
5.04	PREVAILING WAGES	18
5.05	HOURS OF LABOR	19
5.06	NONDISCRIMINATION	19
5.07	SAFETY PRECAUTIONS	20
5.08	OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS	22
5.09	PRIOR NOTICE OF EXCAVATION	22
5.10	UNFORESEEN PHYSICAL CONDITIONS	22
5.11	PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES AND IMPROVEMENTS	23
5.12	LAYOUT OF WORK	23
5.13	MATERIAL AND EQUIPMENT	24
5.14	AVAILABILITY AND USE OF UTILITY SERVICES	24
5.15	TESTS AND INSPECTION	24
5.16	CORRECTION OF NONCONFORMING WORK	25
5.17	CLEAN UP	26
5.18	ACCESS TO WORK	27
5.19	OTHER CONTRACTS	27

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

<u>Section</u>	<u>Description</u>	
5.20	SUBCONTRACTORS AND SUPPLIERS	27
5.21	WARRANTY OF CONSTRUCTION	29
5.22	INDEMNIFICATION.....	29
PART 6 -	PAYMENTS AND COMPLETION	30
6.01	CONTRACT SUM.....	30
6.02	SCHEDULE OF VALUES.....	30
6.03	APPLICATION FOR PAYMENT.....	30
6.04	PROGRESS PAYMENTS	31
6.05	PAYMENTS WITHHELD	32
6.06	RETAINAGE, BOND CLAIM RIGHTS, AND LIENS.....	33
6.07	SUBSTANTIAL COMPLETION	33
6.08	PRIOR OCCUPANCY	34
6.09	FINAL COMPLETION, ACCEPTANCE, AND PAYMENT.....	35
PART 7 -	CHANGES	36
7.01	CHANGE IN THE WORK	36
7.02	CHANGE IN THE CONTRACT SUM	37
7.03	CHANGE IN THE CONTRACT TIME.....	40
PART 8 -	CLAIMS AND DISPUTE RESOLUTION	41
8.01	CLAIMS	41
8.02	INFORMAL RESOLUTION OF DISPUTES	42
8.03	FORMAL RESOLUTION OF CLAIMS.....	43
8.04	CLAIMS PROCESS.....	44
PART 9 -	TERMINATION OF THE WORK	48
9.01	TERMINATION BY OWNER FOR CAUSE	48
9.02	TERMINATION BY OWNER FOR CONVENIENCE	49
9.03	TERMINATION BY CONTRACTOR FOR CAUSE	50
PART 10 -	MISCELLANEOUS PROVISIONS	50
10.01	GOVERNING LAW	50
10.02	SUCCESSORS AND ASSIGNS.....	50
10.03	MEANING OF WORDS	51
10.04	RIGHTS AND REMEDIES.....	51
10.05	CONTRACTOR REGISTRATION AND COMPLIANCE	51
10.06	TIME COMPUTATIONS	52
10.07	RECORDS RETENTION.....	52
10.08	THIRD-PARTY AGREEMENTS	52
10.09	ANTITRUST ASSIGNMENT.....	52
10.10	HEADINGS AND CAPTIONS.....	52
10.11	INDEPENDENT CONTRACTOR	52
10.12	OWNER'S ROLE.....	52

WSU amendments to the Washington State Facility Construction
General Conditions are identified by a bar on the right hand side of modified paragraphs

GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS

PART 1 - GENERAL PROVISIONS

1.01 DEFINITIONS

- A. "Application for Payment" means a written request submitted by Contractor to Owner for payment of Work completed in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner may require.
- B. "Architect," "Engineer," or "A/E" means a person or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.
- C. An "Allowance" is an amount included in the Contract Sum for a stated part of the Work that is not fully defined and/or quantified at the time the Contract Sum is established. When that part of the Work is adequately defined and/or quantified, the Contract Sum will be adjusted to account for the difference between the Allowance and the actual cost of the item. Following the adjustment, that part of the Work will no longer be an Allowance item. Although not capitalized in Section 5.02B, "allowance" shall mean "Allowance."
- D. "Change Order" means a written instrument signed by Owner and Contractor stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any, and (3) the extent of the adjustment in the Contract Time, if any.
- E. "Claim" means Contractor's exclusive remedy for resolving disputes with Owner arising out of or relating to the Contract Documents or the breach thereof or requesting an adjustment in the Contract Sum or Contract Time, as more fully set forth in Part 8. As used in the Contract Documents, the exclusive meaning of "equitable adjustment" is the ability of Contractor to follow the contractual dispute resolution process in Part 8, including the requirement for submitting a timely Notice, substantiation, and Claim.
- F. The "Contract" is the agreement between Owner and Contractor and is formed by the Contract Documents. The Contract represents the entire and integrated agreement between Owner and Contractor and supersedes prior negotiations, representations or agreements, either written or oral.
- G. "Contract Award Amount" is the sum of the Base Bid and any accepted Alternates, if any, for Design-Bid-Build projects and is the accepted initial Guaranteed Maximum Price for Design-Build and GC/CM projects.
- H. "Contract Documents" means the General Conditions, modifications to the General Conditions, Supplemental Conditions, Agreement, Drawings and Specifications, and all addenda and modifications thereof.
- I. "Contract Sum" is the total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents, including all taxes imposed by law and properly chargeable to the Work, except Washington State sales tax.
- J. "Contract Time" is the number of Days or other time period allotted in the Contract Documents from the Notice to Proceed for achieving Substantial Completion of the Work.
- K. "Contractor" means the person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.
- L. "Day(s)" means calendar day(s) unless otherwise specified.

**FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- M. "Drawings" are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans, elevations, sections, details, schedules, and diagrams.
- N. "Final Acceptance" means the written acceptance of the Work by Owner, as more fully set forth in Section 6.08B.
- O. "Final Completion" means that the Work is fully and finally complete in accordance with the Contract Documents and Contractor has submitted its final Application for Payment, as more fully set forth in Section 6.09A.
- P. "Force Majeure" means those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in paragraph 3.05A.
- Q. "Notice" means a written notice which has been delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice. Although not capitalized in the following provisions, "notice" shall mean "Notice" in Sections 3.03B, 3.03C, 3.06A, 5.01D, 5.02C, 5.03, 5.09A, 5.10A, 5.15A, 5.16F, 5.17, 9.01A, 9.02A, and 9.02B.
- R. "Notice to Proceed" means a written Notice from Owner to Contractor that permits pre-construction and construction activities to commence upon specified terms and defines the date on which the Contract Time begins to run.
- S. "Owner" means the Washington State University Board of Regents, which has the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents. Owner shall designate in writing a Representative who shall have authority to bind Owner with respect to all matters requiring Owner's approval or authorization. A/E does not have such authority.
- T. "Person" means a corporation, partnership, business association of any kind, trust, company, or individual.
- U. "Prior Occupancy" means Owner's use of all or parts of the Project before Substantial Completion, as more fully set forth in Section 6.08A.
- V. "Progress Schedule" means a schedule of the Work, in a form satisfactory to Owner, as further set forth in Section 3.02.
- W. "Project" means the total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.
- X. "Project Record" means the separate set of Drawings and Specifications as further set forth in paragraph 4.02A.
- Y. "Schedule of Values" means a written breakdown allocating the total Contract Sum to each principal category of Work, in such detail and format as requested by Owner.
- Z. "Specifications" are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- AA. "Subcontract" means a contract between Contractor and a Subcontractor for the purpose of obtaining supplies, materials, equipment, work or services of any kind for or in connection with the Work. Although not capitalized in the following provisions, "subcontract" shall mean "Subcontract" in Sections 5.10A, 5.20E, 9.01B, and 9.02B.
- BB. "Subcontractor" means any Person of any tier, other than Contractor, who agrees to furnish or furnishes by contract with, or through Contractor, any supplies, materials, equipment, or services of any kind in connection with the Work. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor. Although not capitalized in the following provisions, "subcontractor" shall mean "Subcontractor" in Sections 5.04B, 5.04C, 5.04G, 5.20A, and 5.21B.
- CC. "Substantial Completion" means that stage in the progress of the Work (or portion of the Work designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so that Owner can fully occupy or utilize the Work (or portion designated by Owner) for its intended use, as more fully set forth in Section 6.07. There may be separate dates of Substantial Completion specified in the Contract Documents for various phases or portions of the Work.
- DD. "Work" means the construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents. Although not capitalized in the following provisions, "work" shall mean "Work" in Sections 3.02D, 5.04B, 5.04C, 5.07D, 5.12A, 6.02 and 7.02A.
- EE. A "Work Directive" ("WD") is a binding written order prepared by Owner that directs Work prior to total agreement on adjustment, if any, in the Contract Sum or Contract Time, or both.
- FF. "Work Site" means the space identified and circumscribed on construction documents. The work site is controlled by the Contractor and the Contractor is responsible for compliance to regulatory requirements within the circumscribed area. Changes to the work site shall be submitted by Contractor and approved by Owner.

1.02 ORDER OF PRECEDENCE

Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order, with a revision to a Contract Document having precedence over the original document and a later document having precedence over an earlier document:

1. Signed Agreement, with any Change Orders having precedence.
2. Supplemental Conditions.
3. Modifications to the General Conditions.
4. General Conditions.
5. Specifications and Drawings. The Specifications and Drawings are complementary and shall have equal precedence. Thus, anything mentioned in the Specifications but not shown on the Drawings, or shown on the Drawings but not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both. If there is any inconsistency between the Specifications and Drawings, Contractor will make an inquiry to Owner to determine how to proceed. Unless otherwise directed, Contractor will provide the better quality or greater quantity of any Work or materials, as reasonably interpreted by Owner, at no change in the Contract Sum or Contract

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Time. In case of conflict within the Specifications, provisions in Division 1 shall take precedence over provisions of any other Division. In case of conflict within the Drawings, large scale Drawings shall take precedence over small scale Drawings.

1.03 EXECUTION AND INTENT

Contractor Representations: Contractor makes the following representations to Owner:

1. Contract Sum and Contract Time reasonable: The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents;
2. Contractor familiar with project: Contractor has carefully reviewed the Contract Documents, visited and examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof;
3. Contractor financially capable: Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents; and
4. Contractor can complete Work: Contractor is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform the obligations required by the Contract Documents and has sufficient experience and competence to do so.

PART 2 - INSURANCE AND BONDS

2.01 CONTRACTOR'S LIABILITY INSURANCE

General insurance requirements: Prior to commencement of the Work, Contractor shall obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Owner that such insurance has been procured, including but not limited to (1) Certificates of Insurance on ACORD Form 25, and/or ACORD Form 27 or their equivalents, and which shall list any applicable self-insured retentions, (2) the actual costs (expressed as a percentage) of Contractor's liability insurance under Section 2.01A.1 below, (3) applicable endorsements evidencing proof of compliance with the requirements listed below, (4) evidence of State Workers' Compensation coverage, and (5) a copy of any builder's risk policy required by the Contract Documents. All policies, endorsements and certificates must be signed copies and shall contain a provision that policies will not be cancelled without first giving thirty (30) days (or in the event of non-payment of premium, ten (10) days) prior written Notice to Owner. Contractor shall furnish to Owner copies of any subsequently issued endorsements amending, modifying, altering or restricting coverage terms or limits. Review of Contractor's insurance by Owner shall not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by Part 2 shall be licensed to do business under Chapter 48 RCW or comply with the Surplus Lines Law of the State of Washington. Contractor shall include in the Contract Sum the cost of all insurance and bond costs required for the Work. Insurance carriers providing insurance shall be acceptable to Owner, and its A. M. Best rating shall be indicated on the insurance certificates.

- A. Term of insurance coverage: Contractor shall maintain the following insurance coverage during the Work and for one year after Substantial Completion. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by Section 5.16.

**FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

1. General Liability Insurance: Commercial General Liability (CGL) on an occurrence-based ISO Form CG 00 01 or broader, including products and completed operations, personal and advertising injury, bodily injury and property damage liability arising from Contractor's operations or Work, including operations or Work Contractor may subcontract or sublet to others.

The policy shall be purchased from a company or companies lawfully authorized to do business in the State of Washington possessing an A.M. Best's policyholder's rating of A or better and a financial rating of no less than XI.

Contractor's policy shall be designated primary and non-contributory to Owner's policies, and shall include a waiver of subrogation against Owner. Any self-insured retentions or deductibles must be disclosed and approved by Owner, and Contractor agrees to be responsible for payment of any and all self-insured retentions or deductibles.
 2. Automobile Liability Insurance: Automobile liability on ISO Form CA 00 01 covering Code 1 (any auto).
 3. Stop Gap Liability Insurance for damages because of bodily injuries to Contractor's employees.
- B. Industrial Insurance compliance: Contractor shall comply with the Washington State Industrial Insurance Act and, if applicable, the Federal Longshoremen's and Harbor Workers' Act and the Jones Act.
- C. Insurance to protect for the following: All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Contractor or any Subcontractor.
- D. Owner as Additional Insured: All insurance coverages shall be endorsed to include Owner, its officers, and employees, and any required governmental agencies as additional named insureds with coverage at least as broad as ISO Forms CG 20 10, CG 20 37, and CA 20 48, with no self-insured retentions applicable to the additional insureds.
- E. Subcontractor Coverage: Contractor shall ensure and require that Subcontractors have insurance coverage to cover bodily injury and property damage on all operations and all vehicles owned or operated by Subcontractors. Subcontractors shall name Contractor and Owner, any required governmental agencies, and others designated in the Contract Documents as well as their officers and employees, as additional insureds and give at least thirty (30) Days' Notice of cancellation.

2.02 COVERAGE LIMITS

Insurance amounts: The coverage limits shall be not less than the amounts specified in the Agreement; if limits are not specified in the Agreement, coverage limits shall be not less than as follows:

- A. \$1,000,000 per occurrence for bodily injury, property damage, personal and advertising injury.
- B. \$2,000,000 general aggregate to apply separately to each project or location.
- C. \$2,000,000 annual aggregate for products and completed operations.
- D. \$1,000,000 combined single limit each automobile accident or loss.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- E. \$1,000,000 per accident for bodily injury or occupational disease of Contractor's employees

Coverages and Minimums: Owner's review, specification or approval of the insurance in this Contract or of its coverage or amount shall not relieve or decrease the liability of Contractor under the Contract Documents or otherwise. Coverages are the minimum to be provided and are not limitations of liability under the Contract, indemnification, or applicable law provisions. Contractor may, at its expense, purchase larger coverage amounts.

2.03 PROOF OF INSURANCE COVERAGE

- A. Certificate & endorsements required: Prior to commencement of the Work, Contractor shall furnish to Owner completed certificates of insurance coverage and endorsements evidencing compliance with the additional insured, cancellation, and waiver of subrogation requirements..
- B. List Project info: All insurance certificates shall name Owner's Project number and Project title.
- C. Policy: In the event of a claim or loss, Contractor shall promptly provide Owner with a complete copy of all applicable policies.

2.04 PAYMENT AND PERFORMANCE BONDS

Conditions for bonds: Payment and performance bonds for 100% of the Contract Award Amount, plus Washington State sales tax, shall be furnished for the Work, using the current version of the Payment Bond and Performance Bond form published by and available from the American Institute of Architects (AIA) – form A312. No payment or performance bond is required if the Contract Sum is \$150,000 or less and Contractor requests and the Owner agrees that Owner may, in lieu of the bond, retain 10% of the Contract Sum for the period specified in RCW 39.08.010.

2.05 ALTERNATIVE SURETY

When alternative surety required: Contractor shall promptly furnish payment and performance bonds from an alternative surety if:

- A. Owner has a reasonable objection to the surety; or
- B. Any surety fails to furnish reports on its financial condition if required by Owner.

2.06 BUILDER'S RISK

- A. Owner to buy builder's risk insurance: Owner shall purchase and maintain builder's risk insurance in the amount of the Contract Sum, including all Change Orders, for the Work on a replacement cost basis until Substantial Completion. For projects not involving new building construction, an "Installation Floater" is an acceptable substitute for the builder's risk insurance. The insurance shall cover the interests of Owner, Contractor, and any Subcontractors, as their interests may appear.
- B. Losses covered: Builder's risk insurance shall be placed on an "all risk" basis or equivalent policy form and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, flood, wind, temporary buildings, earthquake, debris removal including demolition, and shall cover reasonable compensation for A/E's services and expenses required as a result of an insured loss. Losses up to the deductible amount shall be the responsibility of Contractor.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- C. Waiver of subrogation rights: Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/E's subconsultants, separate contractors described in Section 5.19, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this Section 2.06 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a Person or entity even though that Person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the Person or entity had an insurable interest in the property damaged.

PART 3 - TIME AND SCHEDULE

3.01 PROGRESS AND COMPLETION

Contractor to meet schedule: Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within the time period specified in the Contract Documents. If Contractor fails to perform in a timely manner in accordance with the Contract Documents and, through the fault of Contractor or Subcontractor(s), fails to meet the Progress Schedule, Contractor shall be in default and shall take such steps as may be necessary to immediately improve its progress without change in the Contract Sum or Contract Time.

3.02 CONSTRUCTION SCHEDULE

- A. Preliminary Progress Schedule: Unless otherwise provided in Division 1, Contractor shall, within 14 Days after issuance of the Notice to Proceed, submit a preliminary Progress Schedule consistent with the requirements of the Contract Documents. The Progress Schedule shall not exceed time limits specified by the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work, and shall show the sequence in which Contractor proposes to perform the Work, and the dates on which Contractor plans to start and finish major portions of the Work, including dates for submission of Submittals per Section 4.03, which shall be coordinated with the Progress Schedule and identify dates for Owner review, and for acquiring materials and equipment.
- B. Form of Progress Schedule: Unless otherwise provided in Division 1, the Progress Schedule shall be in the form of a bar chart, or a critical path method analysis, as specified by Owner. The preliminary Progress Schedule may be general, showing the major portions of the Work, with a more detailed Progress Schedule submitted as directed by Owner.
- C. Owner comments on Progress Schedule: Owner shall return comments on the preliminary Progress Schedule to Contractor within 14 Days of receipt. Review by Owner of Contractor's schedule does not constitute an approval or acceptance of Contractor's construction means, methods, logic or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold a portion of progress payments until a Progress Schedule has been submitted that meets the requirements of this Section 3.02.
- D. Monthly updates and compliance with Progress Schedule: Contractor shall utilize and comply with the Progress Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Progress Schedule at its own expense to Owner indicating actual progress. If, in the opinion of Owner, Contractor is not in conformance with the Progress Schedule for reasons other than acts of Force Majeure as identified in Section 3.05, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Progress Schedule, and if directed by Owner, Contractor shall submit a

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

corrective action plan or revise the Progress Schedule to reconcile with the actual progress of the Work.

- E. Contractor to notify Owner of delays: Contractor shall perform the Work in accordance with the most recent Progress Schedule submitted to Owner. Contractor shall promptly notify Owner in writing of any actual or anticipated event that is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Progress Schedule, and the action being or to be taken to correct the problem. Provision of such Notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.

3.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE

- A. Owner may suspend Work: Owner may, at its sole discretion, order Contractor, in writing, to suspend all or any part of the Work for up to 90 Days, or for such longer period as mutually agreed.
- B. Compliance with suspension; Owner's options: Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 Days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed, Owner shall either:
1. Cancel the written notice suspending the Work; or
 2. Terminate the Work covered by the notice as provided in the termination provisions of Part 9.
- C. Resumption of Work: If a written notice suspending the Work is cancelled or the period of the notice or any extension thereof expires, Contractor shall resume Work.
- D. Equitable Adjustment for suspensions: Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance directly attributable to such suspension, provided Contractor complies with all requirements set forth in Part 7.

3.04 OWNER'S RIGHT TO STOP AND/OR CARRY OUT THE WORK FOR CAUSE

- A. Owner may stop Work for Contractor's failure to perform: If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order Contractor, in writing, to stop the Work, or any portion thereof, until Owner has accepted satisfactory corrective action.
- B. Owner may carry out the Work after Contractor's failure to perform: If Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a 14-Day period after receipt of written Notice from Owner to commence and continue to make reasonable progress toward the correction of such default or neglect with diligence and promptness, Owner may, without prejudice to other remedies Owner may have, correct such deficiencies, and an appropriate Change Order shall be issued deducting from payments then or thereafter due Contractor the reasonable cost of correcting the deficiencies, including Owner's expenses and compensation for A/E's additional services made necessary by the default, neglect or failure. If payments then or thereafter due Contractor are not sufficient to cover such amounts, Contractor shall pay the difference to Owner.

**FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- C. No equitable adjustment for Contractor's failure to perform: Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

3.05 DELAY

- A. Force Majeure actions not a default; Force Majeure defined: Any delay in or failure of performance by Owner or Contractor shall not constitute a default if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party. Acts of Force Majeure include, but are not limited to:

1. Acts of God or the public enemy;
2. Acts or omissions of any government entity not the fault of Owner or Contractor;
3. Fire or other casualty for which Contractor is not responsible;
4. Quarantine or epidemic;
5. Industry-wide strike or defensive lockout;
6. Unusually severe weather conditions which could not have been reasonably anticipated; and
7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Owner was available.
 - a. "Unusually severe weather" shall mean weather conditions that are abnormal for the period of time for which Force Majeure is claimed, that could not reasonably have been anticipated or avoided, and that had an adverse effect on the Progress Schedule. Neither the Contract Time nor the Contract Sum will be adjusted for normal inclement weather or if the Work was behind schedule (unless behind schedule for a reason not the responsibility of the Contractor) at the time the unusually severe weather occurred. The Contractor shall be entitled to a change in the Contract Time only (but not a change in the Contract Sum) if the Contractor can substantiate to the reasonable satisfaction of the Owner that there was unusually severe weather as compared to normal using a ten (10) year average of accumulated record mean values from climatological data compiled by the U.S. Department of Commerce National Oceanic and Atmospheric Administration for the locale closest to the Project, and that the abnormal inclement weather actually impacted and extended the critical path of the Work. Unusual is defined as a 10-year weather event of either or both precipitation or temperature extremes that fall outside the upper and lower ranges within a 10-year periodicity

- B. Contract Time adjustment for Force Majeure: Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of Force Majeure, provided it makes a request for equitable adjustment. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of Force Majeure.

- C. Contract Time or Contract Sum adjustment if Owner at fault: Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request for equitable adjustment.

- D. No Contract Time or Contract Sum adjustment if Contractor at fault: Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.
- E. Contract Time adjustment only for concurrent fault: To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment, but shall not be entitled to an adjustment in Contract Sum.
- F. Contractor to mitigate delay impacts: Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of Force Majeure or otherwise. Contractor shall not recover damages, an equitable adjustment or an increase in the Contract Sum or Contract Time from Owner where Contractor could have reasonably avoided the delay by the exercise of due diligence.
- G. Types of damages permitted: If Contractor and its Subcontractors are entitled to a change in the Contract Sum, the amount of the change shall be the actual costs incurred by the Contractor and Subcontractors directly related to the change calculated in accordance with Section 7.02. Contractor and its Subcontractors shall not otherwise (not reflected by the actual costs incurred as calculated in accordance with Section 7.02) be entitled to damages arising out of actual or alleged loss of efficiency; morale, fatigue, attitude, or labor rhythm; constructive acceleration; home office overhead; expectant underrun; trade stacking; reassignment of workers; rescheduling of Work, concurrent operations; dilution of supervision; learning curve; beneficial or joint occupancy; logistics; ripple; season change; extended overhead; profit upon damages for delay; impact damages including cumulative impacts; or similar damages. Any effect that such alleged events may have on Contractor or its Subcontractors, to the extent not otherwise paid, is subsumed in and fully compensated through the percentage Fee on Change Orders paid through Section 7.02A.3.e and any liquidated damages paid hereunder.

3.06 NOTICE TO OWNER OF LABOR DISPUTES

- A. Contractor to notify Owner of labor disputes: If Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.
- B. Pass through notification provisions to Subcontractors: Contractor agrees to insert a provision in its Subcontracts and to require insertion in all sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

3.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION

- A. Liquidated Damages:
 - 1. Reason for Liquidated Damages: Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Consequently, provisions for liquidated damages are included in the Contract Documents.

2. Calculation of Liquidated Damages amount: The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.
 3. Contractor responsible even if Liquidated Damages assessed: Assessment of liquidated damages shall not release Contractor from any obligations or liabilities pursuant to the Contract Documents. If Contractor substantially fails to perform in a timely manner in accordance with the Contract Documents and, through the fault of Contractor or Subcontractor(s), fails to achieve Substantial Completion within the Contract Time, Contractor shall be in default.
- B. Actual Damages: If no liquidated damages are established, actual damages may be assessed for failure to achieve both Substantial Completion and Final Completion within the time provided. Actual damages will be calculated on the basis of direct architectural, administrative, and other related costs attributable to the Project from the date when Substantial and/or Final Completion should have been achieved, as applicable. Owner may offset these costs against any payment due Contractor.

PART 4 - SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

4.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW

- A. Specifications and Drawings are basis of the Work: The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.
- B. Parts of the Contract Documents are complementary: The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.
- C. Contractor to report discrepancies in Contract Documents: Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If, during the performance of the Work, Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby, report such conflict, error, inconsistency, or omission to A/E in writing.
- D. Contractor knowledge of discrepancy in documents – responsibility: Contractor shall do no Work without applicable Drawings, Specifications, and, where required, accepted shop drawings and other Submittals, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or reasonably should have known that any of the Contract

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.

- E. Contractor to perform Work implied by Contract Documents: Contractor shall provide any work or materials the provision of which is clearly implied and is within the scope of the Contract Documents even if the Contract Documents do not mention them specifically.
- F. Interpretation questions referred to A/E: Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

4.02 PROJECT RECORD

- A. Contractor to maintain Project Record Drawings and Specifications: Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction, including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, changes made to the building enclosure, and Change Order Proposals. This separate set of Drawings and Specifications shall be the "Project Record." The Project Record shall include all Architectural, Mechanical, Electrical, Structural and Civil as-built drawings, whether or not any changes occur and shall also include Addenda, Change Orders, WDs and other modifications to the Contract, in good order and marked currently to indicate field changes and selections made during construction, as well as one copy of accepted shop drawings, product data, samples and other required Submittals.
- B. Update Project Record weekly and keep on site: The Project Record shall be maintained on the Project site throughout the construction and shall be clearly labeled "PROJECT RECORD." The Project Record shall be available to A/E and Owner at all times. The Project Record shall be updated at least weekly noting all changes and shall be available to Owner at all times.
- C. Final Project Record to A/E before Final Acceptance: Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.

4.03 SUBMITTALS

- A. Definition of Submittals: "Submittals" means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. Submittals can include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents. For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its own expense. Owner may duplicate, use, and disclose Submittals provided in accordance with the Contract Documents.
- B. Approval of Submittals by Contractor and A/E: Contractor shall coordinate all Submittals with the Progress Schedule per Section 3.02A, shall review them for accuracy, completeness, and compliance with the Contract Documents, and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, Submittals shall be stamped by an appropriate professional licensed by the state of Washington. Submittals submitted to A/E without evidence of Contractor's approval shall be returned for resubmission. Contractor shall

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

review, approve, and submit Submittals with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor's submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the Submittals. Contractor shall perform no portion of the Work requiring submittal and review of Submittals until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to Submittal with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed Submittals. Submittals made by Contractor which are not required by the Contract Documents may be returned without action.

- C. Contractor not relieved of responsibility when Submittals approved: Approval, or other appropriate action with regard to Submittals, by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such Submittals, nor from responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction, or constitute an approval of Contractor's means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.
- D. Variations between Submittals and Contract Documents: Submittals, including product data, samples and similar submissions, are not Contract Documents. If Submittals vary from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the Submittals, at the time it submits the Submittals containing such variations. If Owner approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be approved by Owner in writing and recorded upon the Project Record. Approval for substitutions shall not be sought and shall not be approved through the submission of Submittals.
- E. Contractor to submit 5 copies of Submittals: Unless otherwise provided in Division 1, Contractor shall submit to A/E for approval 5 copies of all Submittals. Unless otherwise indicated, 3 sets of all Submittals shall be retained by A/E and 2 sets shall be returned to Contractor.

4.04 ORGANIZATION OF SPECIFICATIONS

Specification organization by trade: Specifications are prepared in sections which conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

4.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS

- A. A/E, not Contractor, owns Copyright of Drawings and Specifications: The Drawings, Specifications, and other documents prepared by A/E are instruments of A/E's service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.
- B. Drawings and Specifications to be used only for this Project: The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner and A/E. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.

- C. License granted to Owner: Contractor and all Subcontractors grant a non-exclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all Submittals, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing Submittals, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the Submittals, and that such license is not in violation of any copyright or other intellectual property right. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in Section 5.03 and 5.22 from any violations of copyright or other intellectual property rights arising out of Owner's use of the Submittals hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this section.
- D. Submittals to be used only for this Project: Submittals prepared by Contractor, Subcontractors of any tier, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor of any tier, or material or equipment supplier, on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Submittals appropriate to and for use in the execution of their Work under the Contract Documents.
- E. Electronic Files: If the parties intend to transmit the instruments of service or any other information or documentation in digital form (other than PDF), they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Contract Documents.

PART 5 - PERFORMANCE

5.01 CONTRACTOR CONTROL AND SUPERVISION

- A. Contractor responsible for Means and Methods of construction: Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, unless the Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.
- B. Competent superintendent required: Contractor, as soon as practicable after award of the Contract, shall furnish in writing to Owner the name and qualifications of its proposed superintendent. Owner may reply within 14 Days to Contractor in writing stating (1) whether Owner has reasonable objection to the proposed superintendent or (2) that Owner requires additional time to review. Failure of Owner to reply within the 14-Day period shall constitute Notice of no reasonable objection. The superintendent shall not be employed on any other project during the course of the Work. Unless approved by the Owner's representative and only when overseeing projects on the same campus or location where oversight and supervision will not be degraded. Performance of the Work shall be directly supervised by a competent superintendent who shall be in attendance at the Project site during performance of the Work and who has authority to act on behalf of Contractor. Communications given to the superintendent shall be as binding as if given to Contractor. The superintendent must be satisfactory to Owner and shall not be changed without the prior written consent of Owner. Owner may require

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Contractor to remove the superintendent from the Work or Project site, if Owner reasonably deems the superintendent incompetent, careless, or otherwise objectionable, provided Owner has first notified Contractor in writing and allowed a reasonable period for transition.

- C. Contractor responsible for acts and omissions of self and agents: Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.
- D. Contractor to employ competent and disciplined workforce: Contractor shall enforce strict discipline and good order among all of the Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor's employees shall at all times conduct business in a manner which assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.
- E. Contractor to keep project documents on site: Contractor shall keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed Submittals, and permits and permit drawings.
- F. Contractor to comply with ethical standards: Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the Ethics in Public Service Act RCW 42.52, which, among other things, prohibits state employees from having an economic interest in any public works contract that was made by, or supervised by, that employee. Contractor shall remove, at its sole cost and expense, any of its, or its Subcontractors' employees, if they are in violation of this act.

5.02 PERMITS, FEES, AND NOTICES

- A. Contractor to obtain and pay for permits: Unless otherwise provided in the Contract Documents, Contractor shall secure and pay for the building, any land use permits and all other permits, licenses, and inspections necessary for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.
- B. Allowances for permit fees: If allowances for permits or utility fees are called for in the Contract Documents and set forth in Contractor's bid, and the actual costs of those permits or fees differ from the allowances in the Contract Documents, the difference shall be adjusted by Change Order.
- C. Contractor to comply with all applicable laws: Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.
- D. Taxes: Contractor shall pay sales, consumer, use, business and occupation, income and similar taxes for the Work that are legally enacted when the initial Contract Sum is agreed.

5.03 PATENTS AND ROYALTIES

Payment, indemnification, and notice: Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

5.04 PREVAILING WAGES

- A. Contractor to pay Prevailing Wages: Contractor shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the rules and regulations of the Department of Labor and Industries. The schedule of prevailing wage rates for the locality or localities of the Work, is determined by the Industrial Statistician of the Department of Labor and Industries. It is the Contractor's responsibility to verify the applicable prevailing wage rate.
- B. Statement of Intent to Pay Prevailing Wages: Before payment is made by the Owner to the Contractor for any work performed by the Contractor and subcontractors whose work is included in the application for payment, the Contractor shall submit, or shall have previously submitted to the Owner for the Project, a Statement of Intent to Pay Prevailing Wages, approved by the Department of Labor and Industries, certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate.
- C. Affidavit of Wages Paid: Prior to release of retainage, the Contractor shall submit to the Owner an Affidavit of Wages Paid, approved by the Department of Labor and Industries, for the Contractor and every subcontractor that performed work on the Project.
- D. Disputes: Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of the Department of Labor and Industries. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by RCW 39.12.060.
- E. Statement with pay application; Post Statements of Intent at job site: Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefilled statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of the Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made.
- F. Contractor to pay for Statements of Intent and Affidavits: In compliance with chapter 296-127 WAC, Contractor shall pay to the Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Department of Labor and Industries for certification.
- G. Certified Payrolls: Consistent with WAC 296-127-320, the Contractor and any subcontractor shall submit a certified copy of payroll records if requested.

5.05 HOURS OF LABOR

- A. Overtime: Contractor shall comply with all applicable provisions of RCW 49.28 and they are incorporated herein by reference.

5.06 NONDISCRIMINATION

- A. Discrimination prohibited by applicable laws: Discrimination in all phases of employment is prohibited by, among other laws and regulations, Title VII of the Civil Rights Act of 1964, the Vietnam Era Veterans Readjustment Act of 1974, Sections 503 and 504 of the Vocational Rehabilitation Act of 1973, the Equal Employment Act of 1972, the Age Discrimination Act of 1967, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, Presidential Executive Order 11246, Executive Order 11375, the Washington State Law Against Discrimination, RCW 49.60, and Gubernatorial Executive Order 85-09. These laws and

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.

B. During performance of the Work:

1. Protected Classes: Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in RCW 49.60.
2. Advertisements to state nondiscrimination: Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that all qualified applicants will be considered for employment, without regard to race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability.
3. Contractor to notify unions and others of nondiscrimination: Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers' representative of Contractor's obligations according to the Contract Documents and RCW 49.60.
4. Owner and State access to Contractor records: Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.
5. Pass through provisions to Subcontractors: Contractor shall include the provisions of this section in every Subcontract.

5.07 SAFETY PRECAUTIONS

- A. Contractor responsible for safety: Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work. Contractor shall be solely and completely responsible for conditions of the Project site, including safety of all persons and property, during performance of the Work. Contractor shall maintain the Project site and perform the Work in a manner that meets statutory and common-law requirements for the provision of a safe place to work. This requirement shall apply continuously and not be limited to working hours. Any review by Owner or A/E of Contractor's performance shall not be construed to include a review of the adequacy of Contractor's safety measures in, on or near the site of the Work.
- B. Contractor safety responsibilities: In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether on site or stored off-site; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work may affect them.
- C. Contractor to maintain safety records: Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report

GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS

any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.

- D. Contractor to provide HazMat training: Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
1. Information. At a minimum, Contractor shall inform persons working on the Project site of:
 - a. WAC: The requirements of chapter 296-62 WAC, General Occupational Health Standards;
 - b. Presence of hazardous chemicals: Any operations in their work area where hazardous chemicals are present; and
 - c. Hazard communications program: The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by chapter 296-62 WAC.
 2. Training. At a minimum, Contractor shall provide training for persons working on the Project site which includes:
 - a. Detecting hazardous chemicals: Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
 - b. Hazards of chemicals: The physical and health hazards of the chemicals in the work area;
 - c. Protection from hazards: The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
 - d. Hazard communications program: The details of the hazard communications program developed by Contractor, or its Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.
- E. Hazardous, toxic or harmful substances: Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:
1. Illegal use of dangerous substances: Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site, any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or harmful by any federal, state or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances"), in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 Days on the Project site.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

2. Contractor notifications of spills, failures, inspections, and fines: Contractor shall promptly notify Owner of all spills or releases of any hazardous substances which are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.
- F. Public safety and traffic: All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.
- G. Contractor to act in an emergency: In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.
- H. No duty of safety by Owner or A/E: Nothing provided in this Section 5.07 shall relieve Contractor of sole and complete responsibility for safety at the Project site, for sole and complete responsibility for any violation of safety or property protection requirements or the correction thereof, or impose any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public. Any Notice Owner or A/E gives to Contractor of a safety or property protection violation will not: (1) relieve Contractor of sole and complete responsibility for the violation and the correction thereof, or for sole liability for the consequences of said violation; (2) impose any obligation upon Owner or A/E to inspect or review Contractor's safety program or precautions or to enforce Contractor's compliance with the requirements of this Section 5.07; or (3) impose any continuing obligation upon Owner or A/E to provide such Notice to Contractor or any other persons or entity.

5.08 OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS

- A. Limited storage areas: Contractor shall confine all operations, including storage of materials, to Owner-approved areas.
- B. Temporary buildings and utilities at Contractor expense: Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall be removed by Contractor at its expense upon completion of the Work.
- C. Roads and vehicle loads: Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by federal, state, or local law or regulation.
- D. Ownership and reporting by Contractor of demolished materials: Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- E. Contractor responsible for care of materials and equipment on-site: Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.
- F. Contractor responsible for loss of materials and equipment: Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.

5.09 PRIOR NOTICE OF EXCAVATION

- A. Excavation defined; Use of locator services: "Excavation" means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line. Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities or utilities, through locator services.

5.10 UNFORESEEN PHYSICAL CONDITIONS

- A. Notice requirement for concealed or unknown conditions: If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly and in no event later than 7 Days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.
- B. Adjustment in Contract Time and Contract Sum: If such conditions differ materially and cause a change in Contractor's cost of, or time required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum, or both, provided it makes a request therefore as provided in Part 7.

5.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES AND IMPROVEMENTS

- A. Contractor to protect and repair property: At all times until Owner's occupancy of the Work or a designated portion of the Work, Contractor shall protect the Work from damage, weather, deterioration, theft, vandalism and malicious mischief and shall bear the risk of any uninsured loss or destruction of, or injury or damage to, all materials, equipment, tools, and other items incorporated or to be incorporated in the Work or designated portion, or consumed or used in the performance of the Work or designated portion, including all Work in process and completed Work. Contractor shall protect from damage all existing structures, equipment, improvements, utilities, streets, curbs, walks and vegetation at or near the Project site or on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage

GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS

promptly, Owner may have the necessary work performed and charge the cost to Contractor. If a governmental authority having jurisdiction requires that the repairing and patching be done with its own labor and/or materials, Contractor shall abide by such regulations, and it shall pay for this work at no additional cost to Owner.

- B. Tree and vegetation protection: Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.
- C. Special site conditions: If, in the course of the Work, Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, Contractor shall immediately suspend any operations that would affect them and shall notify Owner and A/E. Upon receipt of such Notice, Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. Contractor shall continue to suspend these operations until otherwise instructed by Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Part 8.

5.12 LAYOUT OF WORK

- A. Advanced planning of the Work: Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.
- B. Layout responsibilities: Contractor shall lay out the Work from Owner-established baselines and bench marks indicated on the Drawings, and shall be responsible for all field measurements in connection with the layout. Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the Work. Contractor shall be responsible for executing the Work to the lines and grades that may be established. Contractor shall be responsible for maintaining or restoring all stakes and other marks established.

5.13 MATERIAL AND EQUIPMENT

- A. Contractor to provide new and equivalent equipment and materials: All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of A/E and after submittal and approval of a substitute request, is equal to that named in the Specifications, unless otherwise specifically provided in the Contract Documents.
- B. Contractor responsible for fitting parts together: Contractor shall do all cutting, fitting, or patching that may be required to complete the Work or to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonably implied by, the Contract Documents. Contractor shall not damage or endanger any work of Owner or separate contractors by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner. Contractor shall restore all areas requiring cutting, fitting and patching to the condition existing prior to the cutting, fitting and patching, unless otherwise required by the Contract Documents.
- C. Owner may reject defective Work: Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this Work, in whatever stage of completion, may be

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

rejected by Owner. However, neither this authority of Owner nor a decision made either to exercise or not to exercise such authority shall give rise to a duty or responsibility of Owner or its representatives to Contractor, Subcontractors, their agents or employees, or other persons or entities performing portions of the Work.

5.14 AVAILABILITY AND USE OF UTILITY SERVICES

- A. Owner to provide and charge for utilities: Owner shall make all reasonable utilities available to Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless otherwise provided in the Contract Documents, the utility service consumed shall be charged to or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by Owner, at reasonable rates determined by Owner. Contractor will carefully conserve any utilities furnished.
- B. Contractor to install temporary connections and meters: Contractor shall, at its expense and in a skillful manner satisfactory to Owner, install and maintain all necessary temporary connections and distribution lines, together with appropriate protective devices, and all meters required to measure the amount of each utility used for the purpose of determining charges. Prior to the date of Final Acceptance, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

5.15 TESTS AND INSPECTION

- A. Contractor to provide for all testing and inspection of Work: Contractor shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. Contractor shall give Owner timely notice of when and where tests and inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.
- B. Owner may conduct tests and inspections: Owner may, at any reasonable time, conduct such inspections and tests as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:
1. Constitute or imply acceptance;
 2. Relieve Contractor of responsibility for providing adequate quality control measures;
 3. Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment;
 4. Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents; or
 5. Impair Owner's right to reject defective or nonconforming items, or to avail itself of any other remedy to which it may be entitled.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- C. Inspections or inspectors do not modify Contract Documents: Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.
- D. Contractor responsibilities on inspections: Contractor shall promptly furnish, without additional charge, all facilities, labor, material and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes reinspection or retest necessary. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.

5.16 CORRECTION OF NONCONFORMING WORK

- A. Work covered by Contractor without inspection: If a portion of the Work is covered contrary to the request of Owner or the requirements in the Contract Documents or a governmental authority having jurisdiction, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at Contractor's expense and without change in the Contract Sum or Contract Time.
- B. Payment provisions for uncovering covered Work: If, at any time prior to Final Completion, Owner desires to examine the Work, or any portion of it, which has been covered, Owner may request to see such Work and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and, if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes such a request as provided in Part 7. If such Work is not in accordance with the Contract Documents, the Contractor shall pay the costs of examination and reconstruction.
- C. Contractor to correct and pay for non-conforming Work: Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.
- D. Contractor's compliance with correction and warranty provisions: If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or within one year after the date for commencement of any system warranties established under Section 6.08, or within the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written Notice from Owner to do so. Owner shall give such Notice promptly after discovery of the condition. This period of one year shall be extended, with respect to portions of Work first performed after Substantial Completion, by the period of time between Substantial Completion and the actual performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced shall run for one year from the date of repair or replacement. Obligations under this Section 5.16D shall survive Final Acceptance and are in addition to other warranties provided by contract or law.
- E. Contractor to remove non-conforming Work: Contractor shall remove from the Project site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.

**FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- F. Owner may charge Contractor for non-conforming Work: If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.
- G. Contractor to pay for damaged Work during correction: Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
- H. No Period of limitation on other requirements: Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations which Contractor might have according to the Contract Documents. Establishment of the time period of one year as described in Section 5.16D relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.
- I. Owner may accept non-conforming Work and charge Contractor: If Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract Sum may be reduced as appropriate and equitable.

5.17 CLEAN UP

Contractor to keep site clean and leave it clean: Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

5.18 ACCESS TO WORK

Owner and A/E access to Work site: Contractor shall provide Owner and A/E access to the Work in progress wherever located.

5.19 OTHER CONTRACTS

Owner may award other contracts; Contractor to cooperate: Owner may undertake or award other contracts for additional work at or near the Project site. Owner shall help coordinate the activities of Owner's own forces and of each separate contractor engaged by Owner with the Work of Contractor, who shall reasonably cooperate with the other contractors and with Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with these Contract Documents to reasonably accommodate the other work.

5.20 SUBCONTRACTORS AND SUPPLIERS

- A. Subcontractor Responsibility: The Contractor shall include the language of this paragraph in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this paragraph apply to all subcontractors

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

regardless of tier. At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
 2. Have a current Washington Unified Business Identifier (UBI) number;
 3. If applicable, have:
 - a. Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
 - b. A Washington Employment Security Department number, as required in Title 50 RCW;
 - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - d. An electrical contractor license, if required by Chapter 19.28 RCW;
 - e. An elevator contractor license, if required by Chapter 70.87 RCW.
 4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).
 5. On a project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the date of the Owner's first advertisement of the project.
 6. Meet all supplemental responsibility criteria set forth in the Contract Documents.
- B. Provide names of Subcontractors and use qualified firms: Before submitting the first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of \$2,500. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any Subcontractor or supplier to whom Owner has a "reasonable objection," and shall obtain Owner's written consent before making any substitutions or additions. A "reasonable objection" shall include without limitation:
- .1 a proposed Subcontractor differing from the entity listed with a proposal or bid,
 - .2 lack of "responsibility" of the proposed Subcontractor, as defined in RCW 39.04.350 or otherwise in the Contract Documents, or
 - .3 lack of qualification, including technical qualification, as required by the Specifications.
- C. Subcontracts in writing and pass through provision: All Subcontracts must be in writing. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.

- D. Coordination of Subcontractors; Contractor responsible for Work: Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.
- E. Automatic assignment of subcontracts: Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Owner provided that:
1. Effective only after termination and Owner approval: The assignment is effective only after termination by Owner for cause pursuant to Section 9.01 and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and
 2. Owner assumes Contractor's responsibilities: After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor which Contractor assumed in the Subcontract.
 3. Impact of bond: The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

5.21 WARRANTY OF CONSTRUCTION

- A. Contractor warranty of Work: In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed by Contractor.
- B. Contractor responsibilities: With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor shall:
1. Obtain warranties: Obtain, assign if requested, and furnish directly to Owner, all warranties that would be given in normal commercial practice or that are required by the Contract Documents, first executed by the applicable Subcontractor and those suppliers and manufacturers furnishing materials for the Work, and subsequently countersigned by Contractor, which shall extend to Owner all rights, claims, benefits and interests that Contractor may have under express or implied warranties or guarantees against the Subcontractor, supplier or manufacturer for defective or non-conforming Work;
 2. Warranties for benefit of Owner: Require all warranties to be executed, in writing, for the benefit of Owner;
 3. Enforcement of warranties: Enforce all warranties for the benefit of Owner, if directed by Owner; and

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

4. Contractor responsibility for subcontractor warranties: Be responsible to enforce any subcontractor's, manufacturer's, or supplier's warranties should they extend beyond the period specified in the Contract Documents.
- C. Warranties beyond Final Acceptance: The obligations under this section shall survive Final Acceptance.

5.22 INDEMNIFICATION

- A. Contractor to indemnify Owner: To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold Owner and A/E, their consultants, and agents and employees, directors, officers, lenders, successors and assigns of any of them (collectively, the "Indemnified Parties"), harmless from and against all third-party claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, direct and indirect, or consequential (including but not limited to costs and attorneys' fees incurred on such claims or in proving the right to indemnification), arising out of, caused by or resulting from:

1. Sole negligence of Contractor: The sole negligence or willful misconduct of Contractor or any of its Subcontractors, their agents and anyone directly or indirectly employed by them or anyone for whose acts they may be liable ("Indemnitor");
2. Concurrent negligence: The concurrent negligence of Indemnitor, but only to the extent of the negligence of Indemnitor; and
3. Patent infringement: The use of any design, process, or equipment that constitutes an infringement of any United States patent presently issued, or violates any other proprietary interest, including copyright, trademark, and trade secret, unless specifically directed to use such design, process, or equipment by Owner.

The obligations of Contractor under this Section 5.22 shall not be construed to negate, abridge, or otherwise reduce any other right or obligations of indemnity that would otherwise exist as to any party or person described in this Section. To the extent the wording of this Section 5.22 would reduce or eliminate the insurance coverage of Owner or Contractor, this Section 5.22 shall be considered modified to the extent that such insurance coverage is not affected. To the extent that any portion of this Section 5.22 is stricken by a court or arbitrator for any reason, all remaining provisions shall retain their vitality and effect. The provisions of this Section 5.22 shall survive completion, acceptance, final payment and termination of the Contract.

- B. Employee action and RCW Title 51: In any action against Owner and any other entity indemnified in accordance with this section, by any employee of Contractor, its Subcontractors, Sub-subcontractors, agents, or anyone directly or indirectly employed by any of them, the indemnification obligation of this section shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under RCW Title 51, the Industrial Insurance Act, or any other employee benefit acts. In addition, Contractor waives immunity as to Owner and A/E only, in accordance with RCW Title 51.

PART 6 - PAYMENTS AND COMPLETION

6.01 CONTRACT SUM

Owner shall pay Contract Sum: Owner shall pay Contractor the Contract Sum plus Washington State sales tax for performance of the Work, in accordance with the Contract Documents.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

6.02 SCHEDULE OF VALUES

Contractor to submit Schedule of Values: Before submitting its first Application for Payment, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principal category of work, in such detail as requested by Owner ("Schedule of Values"). The approved Schedule of Values shall allocate at least the percentage of the original Contract Sum so designated in the Contract Documents to that portion of the Work between Substantial Completion and Final Completion to recognize not-yet-earned costs for demobilization, Project Record, O&M manuals, and any other requirements for Project closeout and in advancing the Work from Substantial Completion to Final Completion. The approved Schedule of Values shall be used by Owner as a basis for reviewing progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

6.03 APPLICATION FOR PAYMENT

- A. Monthly Application for Payment with substantiation: At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work (using Owner's form) completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.
- B. Contractor certifies Subcontractors paid: By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.011, as their interests appeared in the last preceding Application for Payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in Section 1.03 are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment. Owner has the right to request written evidence from Contractor that Contractor has properly paid Subcontractors and material and equipment suppliers amounts paid by Owner to Contractor for subcontracted Work. Owner shall have the right to contact Subcontractors to ascertain whether they have been properly paid. Owner shall not have an obligation to pay or to see to the payment of money to a Subcontractor, except as may otherwise be required by law.
- C. Reconciliation of Work with Progress Schedule: At the time it submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Progress Schedule. The submission of an Application for Payment constitutes a certification that the Work is current on the Progress Schedule.
- D. Payment for material delivered to site or stored off-site: If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:
1. Suitable facility or location: The material will be placed in a facility or location that is structurally sound, dry, lighted and suitable for the materials to be stored or otherwise approved by Owner;
 2. Facility or location within 10 miles of Project: The facility or location is located within a 10-mile radius of the Project. Other locations may be utilized, if approved in writing, by Owner;

**FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

3. Facility or location exclusive to Project's materials: Only materials for the Project are stored within the facility or location (or a secure portion of a facility or location set aside for the Project);
4. Insurance provided on materials in facility or location: Contractor furnishes Owner a certificate of insurance extending Contractor's insurance coverage for damage, fire, and theft to cover the full value of all materials stored, or in transit;
5. Facility or location locked and secure: The facility or location (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access;
6. Owner right of access to facility or location: Owner shall at all times have the right of access in company of Contractor;
7. Contractor assumes total responsibility for stored materials: Contractor and its surety assume total responsibility for the stored materials; and
8. Contractor provides documentation and Notice when materials moved to site: Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish Notice to Owner when materials are moved from storage to the Project site.

6.04 PROGRESS PAYMENTS

- A. Owner to pay within 30 Days: Owner shall make progress payments, in such amounts as Owner determines are properly due, within 30 Days after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with chapter 39.76 RCW if the Application for Payment does not comply with the requirements of the Contract Documents.
- B. Withholding retainage; Options for retainage: Owner shall retain 5% of the amount of each progress payment until 45 Days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including, at Owner's request, consent of surety to release of the retainage. In accordance with chapter 60.28 RCW, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor. Owner may permit Contractor to provide an appropriate bond in lieu of the retained funds.
- C. Title passes to Owner upon payment: Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Contractor with the Contract Documents. A progress payment, or partial or entire use or occupancy of the Project by Owner, shall not constitute acceptance of Work.
- D. Interest on unpaid balances: Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in chapter 39.76 RCW.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

6.05 PAYMENTS WITHHELD

- A. Owner's right to withhold payment: Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:
1. Non-compliant Work: Work not in accordance with the Contract Documents;
 2. Remaining Work to cost more than unpaid balance: Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum;
 3. Owner correction or completion of Work: Work by Owner to correct defective Work or complete the Work in accordance with Section 5.16;
 4. Third party claims for which Contractor may be responsible: Claims (except where an insurer has unconditionally accepted coverage without prior payment of any deductibles or self-insured retentions) filed or reasonable evidence indicating probable filing of such claims unless Contractor provides security acceptable to Owner;
 5. Failure to pay Subcontractor: The failure of Contractor to make payments to Subcontractors for labor, materials or equipment;
 6. Damages: Damage to Owner or a separate contractor (except where an insurer has unconditionally accepted coverage);
 7. Affidavits of Wages Paid: Failure to submit affidavits pertaining to wages paid as requested or otherwise required by statute;
 8. Progress Schedule: Failure to submit a properly updated Progress Schedule;
 9. Maintenance of Project Record: Failure to properly maintain as the Project Record;
 10. Other construction records: Failure to properly submit any other required construction reports or records;
 11. Certified payrolls: Failure to properly submit certified payrolls when requested;
 12. Contractor's failure to perform: Contractor's failure otherwise to perform in accordance with the Contract Documents; or
 13. Contractor's negligent acts or omissions: Cost or liability that may occur to Owner as the result of Contractor's fault or negligent acts or omissions.
- B. Owner to notify Contractor of withholding for unsatisfactory performance: In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with chapter 39.76 RCW.

6.06 RETAINAGE, BOND CLAIM RIGHTS, AND LIENS

- A. Chapters 39.08 RCW and 60.28 RCW incorporated by reference: Chapters 39.08 RCW and 60.28 RCW, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- B. Liens: Contractor shall promptly pay (and secure the discharge of any liens asserted by) all persons properly furnishing labor, equipment, materials or other items in connection with the performance of the Work (including, but not limited to, any Subcontractors) to the extent that Owner has paid Contractor for this Work. Owner may, at its option, withhold payment, in whole or in part, to Contractor until lien and claim releases are furnished. Contractor may provide other security acceptable to Owner, such as a bond, in lieu of paying disputed liens or claims. Contractor shall defend, indemnify, and hold harmless Owner from any liens, including all expenses and attorneys' fees, except to the extent a lien has been recorded because of a failure of payment by Owner for the Work implicated in any such lien.

6.07 SUBSTANTIAL COMPLETION

- A. Substantial Completion defined: Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner has full and unrestricted use and benefit of the facilities (or portion thereof designated and approved by Owner) for the use for which it is intended, the Project has been constructed in substantial accordance with the Contract Documents, and at a minimum the following elements have been accomplished (see also, Section 01 70 00 Project Completion):

1. A written punch list has been prepared;
2. The Authority Having Jurisdiction has granted a certificate of occupancy; and
3. The first final draft of the Operation and Maintenance manuals has been submitted to Owner.

All Work other than incidental corrective or punch list work shall be completed. Substantial Completion shall not have been achieved if the Work cannot achieve Final Completion within the time specified in the Agreement. The date Substantial Completion is achieved shall be established in writing by Owner. Contractor may request an early date of Substantial Completion which must be approved by Change Order. Owner's occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved.

- B. Contractor to provide weekly reports before Substantial Completion: Beginning at least 30 Days before the scheduled date of Substantial Completion, Contractor shall prepare reports weekly, identifying items to be completed in order to obtain necessary occupancy certificates and permits, and make recommendations to Owner for effectuating the earliest possible completion. When Contractor considers that the Work, or a portion thereof that Owner agrees to accept separately, has achieved Substantial Completion, Contractor shall prepare and submit to Owner a comprehensive list of items to be completed or corrected prior to final payment. Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on the list does not alter the responsibility of Contractor to complete all Work in accordance with the Contract Documents.
- C. Owner to determine if Work is complete: Upon receipt of Contractor's list, Owner will make an inspection to determine whether the Work or designated portion thereof has achieved Substantial Completion. If Owner's inspection discloses any item, whether or not included on Contractor's list, that is not sufficiently complete in accordance with the Contract Documents so that Owner can occupy or utilize the Work or designated portion thereof for its intended use, Contractor shall, before the occurrence of Substantial Completion, complete or correct the item upon notification by Owner, and Contractor shall then submit a request for another inspection by Owner to determine Substantial Completion. If Owner determines that the Work or designated portion has not achieved Substantial Completion, Contractor shall expeditiously complete the Work or

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

designated portion, again request an inspection, and pay the costs associated with the re-inspection.

- D. Owner may take over punch list: If, at 30 Days after the date of Substantial Completion, Owner considers that the remaining items on its list ("punch list") are unlikely to be completed within the time period specified in the Contract Documents for Final Completion, Owner may, upon seven Days' written Notice to Contractor, take over and perform some or all of the punch list items. If Contractor fails to correct the deficiencies within the time period specified, Owner may deduct the actual cost of performing this punch list work, including any design costs, plus ten 10% to account for Owner's transaction costs, from the Contract Sum.
- E. Owner to establish date of Substantial Completion: When the Work or designated portion thereof has achieved Substantial Completion, Owner shall establish the date of Substantial Completion in writing, establish responsibilities of Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and fix the time within which Contractor shall finish all items on the list accompanying the document. The writing establishing Substantial Completion shall be submitted to Contractor for its written acceptance of the responsibilities assigned to it. Any items not included in the document but required or necessary for Final Completion of the Work shall be supplied and installed by Contractor as a part of the Contract Sum, notwithstanding their not being included in the punch list. Upon written acceptance of the writing establishing Substantial Completion by Contractor and Owner, and upon Contractor's Application for Payment, Owner shall make payment as provided in the Contract Documents. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents. No further payment will be due or owing until the payment following Final Completion.
- F. Contractor to complete punch list in timely manner: Contractor shall prepare, continue to monitor, and cause to be completed, all punch lists with respect to the activity of each Subcontractor and report weekly to Owner on outstanding punch list items.

6.08 PRIOR OCCUPANCY

- A. Prior Occupancy defined; Restrictions: Owner may, when legally permissible to do so and upon written Notice to Contractor, take possession of or use any completed or partially completed portion of the Work ("Prior Occupancy") at any time prior to Substantial Completion, and Contractor shall cooperate with such occupancy and use and the establishment of a punch list. Unless otherwise agreed in writing, Prior Occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the obligations established by the Contract Documents; establish a date of Substantial or Final Completion; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.
- B. Damage; Duty to repair and warranties: Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss of or damage to the Work resulting from Prior Occupancy. Contractor's one year duty to repair any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

6.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT

- A. Final Completion defined: Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing, but in no case shall it constitute Final Acceptance, which is a subsequent, separate, and distinct action (see also, Section 01 70 00 Project Completion).

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- B. Final Acceptance defined: Unless otherwise determined by Owner, Final Acceptance shall be achieved after Contractor has completed all the requirements of the Contract Documents. The date Final Acceptance is achieved shall be established by Owner in writing. Pursuant to RCW 60.28, "Lien for Labor, Materials, Taxes on Public Works," completion of the Contract Work shall occur upon Final Acceptance. Neither Final Acceptance nor final payment shall release Contractor or its sureties from any obligations of these Contract Documents or the payment and performance bonds, or constitute a waiver of any claims by Owner arising from Contractor's failure to perform the Work in accordance with the Contract Documents (see also, Section 01 70 00 Project Completion).
- C. Final payment waives Claim rights: Acceptance of final payment by Contractor or any Subcontractor shall constitute a waiver and release to Owner of all claims by Contractor or any such Subcontractor for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in Part 8.

PART 7 - CHANGES

7.01 CHANGE IN THE WORK

- A. Changes in the Work: Changes in the Work may be accomplished after execution of the Contract without invalidating the Contract. Changes in the Work that adjust the Contract Sum and/or Contract Time are incorporated into the Contract solely by Change Order and are subject to the limitations stated in this Part 7 and elsewhere in the Contract Documents. A Change Order may be bilateral or unilateral, as described below. Change Orders may be initiated by mutual agreement or through a Contract Change Proposal ("CCP") or Work Directive ("WD").
- B. Change Orders:
1. A Bilateral Change Order is signed by Owner and Contractor to record their agreement on the terms of a change in the Work. A Bilateral Change Order may reflect the agreement of Owner and Contractor on a standalone issue, or it may incorporate one or more mutually agreed upon CCPs or WDs. A Bilateral Change Order shall constitute full payment and final settlement of all claims for time and cost, including direct, indirect, impact and consequential costs, related to the Change Order and Work covered by, affected by and related to the events giving rise to the Change Order.
 2. A Unilateral Change Order is initially signed only by Owner to set forth, subject to the Contract, the terms of a change in the Work based upon one or more CCPs and/or WDs to which the parties have not yet fully agreed. Within 7 Days of its receipt of a Unilateral Change Order, Contractor shall notify Owner in writing either (a) of its acceptance of its terms, in which case the Unilateral Change Order will automatically become a Bilateral Change Order, or (b) of Contractor's rejection, in which case Contractor must submit a written rejection within 14 Days after Contractor delivered written Notice of rejection to Owner as noted above. The written rejection must fully explain the reasons for rejecting the Unilateral Change Order and include all necessary supporting documentation. The rejection will then be considered in accordance with Section 8.02 (Informal Resolution of Disputes). Failure to submit a written Notice of rejection within 7 Days of Contractor's receipt of a Unilateral Change Order or a written rejection within 14 Days shall constitute Contractor's acceptance of the terms of the Unilateral Change Order.

GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS

C. Change Orders via Contract Change Proposal:

1. Contractor shall be responsible for maintaining an Issues Log. If Contractor at any time believes that a change in the Work has or may have occurred, Contractor shall add such item to the Issues Log. At a minimum, the Issues Log shall identify:
 - a. Detailed scope of the change in the Work;
 - b. Contract Time impact noting specifically how it impacted the critical path of the project, if any;
 - c. The amount of any anticipated, proposed, or approved change in the Contract Sum;
 - d. Date first included on the Issues Log;
 - e. Owner-initiated or Contractor-initiated; and
 - f. Action status.
2. If the Contractor believes an item on the Issues Log warrants a CCP, Contractor shall provide written Notice to Owner in accordance with Section 8.02, and shall submit a written CCP in accordance with this Section. All CCPs shall be substantiated and submitted within 7 Days of being added to the Issues Log along with a revised progress schedule identifying the time impact affecting the critical path, if any. The CCP shall identify the proposed full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time. Upon receipt of the CCP, Owner may accept the proposal and incorporate it into a Bilateral Change Order, reject the proposal and either issue a WD or elect not to proceed with the proposal, request further documentation, or negotiate acceptable terms with Contractor.

D. Work Directives:

1. A WD is a written order prepared by Owner that directs Contractor to perform Work prior to total agreement on an adjustment, if any, in the Contract Sum and/or Contract Time. Owner may direct Contractor, at any time and without invalidating the Contract, through a WD to proceed with a change in the Work or to perform Work that Contractor contends to be a change in the Work, with or without the agreement of Contractor and prior to agreement of the basis for adjustment, if any, to the Contract. Owner's use of a WD does not constitute agreement that the directive constitutes a change in the Work, the Contract Sum or the Contract Time.
2. A WD normally includes:
 - a. The scope of the directed Work,
 - b. Any proposed adjustment to the Contract Sum or not-to-exceed amount,
 - c. Any proposed change to the Contract Time,
 - d. The proposed method of determining any change in the Contract Sum and/or Contract Time, and

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- e. The supporting data that Contractor must submit in accordance with the requirements of Part 7 of the General Conditions.
- 3. Upon receipt of a WD, Contractor shall promptly commence and proceed diligently with performance of the directed Work. Within 7 Days of its receipt of a WD, Contractor shall notify Owner in writing either (a) of its acceptance of its terms, in which case the terms will become effective, and the WD will be incorporated into a Bilateral Change Order, or (b) of Contractor's rejection of the terms, in which case Contractor must submit a written rejection within 14 Days after Contractor delivered written Notice to Owner as noted above. The written rejection must fully explain the reasons for rejecting the WD and include all necessary supporting documentation. The rejection will then be considered in accordance with Section 8.02. Contractor's rejection of a WD shall not relieve Contractor of its obligation to comply promptly with the WD.
- E. Contractor fault or negligence alleged as basis for change in Contract Sum: No change in the Contract Sum shall be allowed to the extent Contractor's changed cost of performance is due to the fault or negligence of Contractor or anyone for whose acts Contractor is responsible; or to the extent Contractor is responsible for change concurrently caused by Contractor and Owner; or to the extent the change is caused by an act of Force Majeure as defined in Section 3.05.

7.02 CHANGE IN THE CONTRACT SUM

A. General Application

- 1. Contract Sum changes only by Change Order: The Contract Sum shall only be changed by a Change Order.
- 2. Allowances: Any Allowances stated in the Contract Documents shall be included in the Contract Sum. Items covered by Allowances shall be supplied for such amounts and by such persons or entities as Owner may direct, but Contractor shall not be required to employ persons or entities to whom Contractor has made reasonable and timely objection. Owner shall select materials and equipment under an Allowance with reasonable promptness. Allowances shall cover the net cost to Contractor of materials and equipment delivered and/or installed at the site, as identified in the Allowance, and all required taxes, less applicable trade discounts. Whenever actual costs are more than or less than Allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect the difference between actual, reasonable costs and the Allowances.
- 3. Pricing Components: Contractor shall maintain and submit a complete itemization of the costs incurred as a result of any change in the Work, including labor, material, Subcontractor costs, and fee. The total cost of any change in the Work or of any other increase or decrease in the Contract Sum, including a Claim, shall be limited to the actual, reasonable amounts for the following components, itemized in the manner set forth below and submitted on breakdown sheets in a form approved by Owner. If the total cost of the change in the Work does not exceed \$5,000.00, Contractor shall not be required to submit a breakdown if the description of the change in the Work is sufficiently definitive for Owner to determine fair value.
 - a. Labor costs: The labor cost component is determined by multiplying the estimated or actual additional number of hours needed to perform the change in the Work by the fully burdened hourly labor costs. The fully burdened hourly costs shall include the following:

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- (1) Basic wages and benefits: Hourly rates and benefits as stated on the Department of Labor and Industries approved "Statement of Intent to Pay Prevailing Wages" shall be applicable unless a high, documented amount is actually paid by a contractor for the laborers, apprentices, journeymen, foremen, and other staff performing and/or directly supervising the change in the Work at the site. Any amount in excess of approved "Statement of Intent to Pay Prevailing Wages" shall be substantiated and subject to audit.
 - (2) Worker's insurance: Direct contributions to the State of Washington for industrial insurance; medical aid; and supplemental pension, by the class and rates established by the Department of Labor and Industries.
 - (3) Federal insurance: Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.
 - (4) Supervision: The labor cost component may include the actual, demonstrated additional supervision hours (not already compensated by Owner) directly related to a change in the Work.
 - (5) Travel and Per Diem allowance: Travel allowance and/or subsistence, if applicable, required by regional labor union agreements, which are itemized and identified separately.
- b. Material costs: The material cost component must be itemized and include material invoices or reasonable lump-sum estimates of the quantity and cost of additional materials needed to perform the change in the Work. Material costs shall be developed first from actual known costs; second from supplier quotations; and, if neither of these is available, then from standard industry pricing guides acceptable to Owner. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges shall be itemized.
- c. Equipment costs: The equipment cost component must be itemized by the type of equipment and include the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work on site. Costs will be allowed for construction equipment only to the extent used solely for the changed Work, or for additional rental costs actually incurred by Contractor solely for the changed Work. Equipment charges shall be computed on the basis of actual invoice costs or, if owned, from the current edition of the Associated General Contractors Washington State Department of Transportation (AGC WSDOT) Equipment Rental Agreement current edition as of the Contract execution date. The EquipmentWatch Rental Rate Blue Book shall be used as a basis for establishing rental rates of equipment not listed in the above source. The maximum rate for standby equipment shall not exceed that shown in the AGC WSDOT Equipment Rental Agreement. The rate for Contractor-owned equipment necessarily standing by for future use on the changed Work shall be no more than 50% of the rate established above unless otherwise approved by Owner. The total rental cost shall not exceed the cost of purchasing the equipment outright.
- d. Subcontractor costs: The Subcontractor cost component consists of payments Contractor makes to Subcontractors for the cost of changed Work performed by

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Subcontractors. Subcontractors' costs shall be calculated and itemized in the same manner as prescribed herein for Contractor.

- e. Fee: The Fee component is compensation for all items and costs not listed in subparagraphs a through d above, and is added to the total cost to Owner of the sum of these items. The Fee shall compensate Contractor, Subcontractor and suppliers for, among other things, combined overhead, profit and other costs, including all office, home office and site overhead, employee per diem, subsistence and travel costs not separately reimbursable under subparagraph a above, warranty, safety costs, printing and copying, quality control/assurance, purchasing, small or hand tool (a tool that costs \$250 or less and is normally furnished by the performing contractor) or expendable charges, temporary construction facilities, field engineering, schedule updating, Project Record, home office cost, taxes (including all taxes except B&O tax and Washington State sales tax payable based on the amount of the approved Application for Payment), office engineering, estimating costs, additional overhead because of extended time, Claim and change preparation, direct and indirect delay, acceleration or impact, and any other cost incidental to the change in the Work. The Fee shall be strictly limited in all cases to the rates below.
- (1). Contractor markup on Contractor Work: Contractor is allowed a Fee for any Work actually performed by Contractor's own forces of 16% of the first \$50,000 of the cost of such Work and 4% of the remaining cost, if any.
 - (2). Subcontractor markup for Subcontractor Work: Each Subcontractor (including lower-tier Subcontractors) is allowed a Fee for any Work actually performed by its own forces of 16% of the first \$50,000 of the cost of such Work and 4% of the remaining cost, if any.
 - (3). Contractor markup for Subcontractor Work: Contractor is allowed a Fee for any Work performed by its Subcontractor(s) of 6% of the first \$50,000 of the amount due each Subcontractor for such Work and 4% of the remaining amount, if any.
 - (4). Subcontractor markup for lower-tier Subcontractor Work: Each Subcontractor is allowed a Fee for any Work performed by its Subcontractor(s) of any lower-tier of 4% of the first \$50,000 of the amount due the lower-tier Subcontractor for such Work and 2% of the remaining amount, if any.
 - (5). Basis of cost applicable for markup: The cost of the Work to which the Fee is to be applied shall be based on the cost components in subparagraphs 7.02.A 3.a – d.
 - (6). Application of Fee: The Fee shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by Contractor or the same Subcontractor, the Fee as well as bond and insurance markups will apply to the net difference.
- f. Insurance and bond premiums: The cost of any change in insurance or bond premium is added to the sum of the cost components in subparagraphs 7.02.A 3.a – e and is limited to the following:

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- (1) Contractor's liability insurance: The cost of any changes in Contractor's contractually required liability insurance arising directly from the Change Order; and
- (2) Payment and Performance Bond: The cost of any additional premium for Contractor's contractually required bond arising directly from the Change Order.
- g. Tax: Washington State sales tax and B&O tax arising directly from the Change Order shall be added to the cost of the Change Order.
- h. Unit Prices: If Unit Prices, including pre-agreed rates for material quantities, are applicable to a change in the Work, the Unit Prices shall be applied to the quantities of the items involved as determined in Section 7.02A. Quantities must be supported by field measurement statements signed by Owner. Owner shall be afforded access and be permitted to measure quantities. Contractor shall not exceed any cost limit(s) without Owner's prior written approval. Unit Prices shall include reimbursement for all direct and indirect costs of the Work, but exclude Fee (7.02 A.e), bond, and insurance costs (7.02 A.f.).s.

7.03 CHANGE IN THE CONTRACT TIME

- A. Changes in Contract Time: The Contract Time shall only be changed by a Change Order.
- B. Time extension permitted only if delay is not Contractor's fault: If Contractor is delayed at any time in the commencement or progress of the Work (1) by an act or neglect of Owner or anyone for whose acts Owner is responsible; or (2) by changes ordered by Owner in the Work; or (3) by Force Majeure; or (4) by delay authorized by Owner pending dispute resolution; or (5) by other causes that Owner determines may justify delay, then Contractor shall reasonably attempt to mitigate the delay, and the Contract Time shall be extended by Change Order for such reasonable time as Owner may reasonably determine consistent with the provisions of the Contract Documents. No adjustment in the Contract Time shall be allowed to the extent Contractor's changed time of performance is due to the fault or negligence of Contractor or anyone for whose acts Contractor is responsible.
- C. Contractor must demonstrate impact on critical path of schedule: Any change in the Contract Time covered by a Change Order or Claim shall be limited to the change in the critical path of the Work attributable to the change or event(s) giving rise to the Change Order or Claim. Contractor shall be responsible for showing clearly on the Progress Schedule that the change or event had a specific impact on the critical path and, except in case of concurrent delay, was the sole cause of such impact, and could not have been avoided by resequencing of the Work or other reasonable alternatives in accordance with Section 01 32 13 Project Schedule.
- D. Cost arising from change in Contract Time: Contractor is entitled to compensation for the cost of a change in Contract Time only if all the following conditions are met:
 - 1. Must be solely fault of Owner: The change in Contract Time must solely be caused by the fault or negligence of Owner or others for whom Owner is responsible;
 - 2. Procedures: Contractor must follow the procedure set forth in Section 7.03B and Section 8.02;
 - 3. Demonstrate impact on critical path: Contractor must establish the extent of the change in Contract Time in accordance with Section 7.03C and Section 01 32 13 Project

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Schedule. Owner is not obligated directly or indirectly for damages or an increase in the Contract Sum for any delay suffered by a Subcontractor that does not increase the Contract Time; and

4. Cost measured exclusively by the pricing components of Section 7.02A.3: If Contractor or a Subcontractor of any tier is entitled to compensation arising from or related to a change in Contract Time, the pricing components of Section 7.02A.3 shall exclusively be used to measure the actual costs incurred as a result of the change in Contract Time. Neither Contractor nor a Subcontractor of any tier is entitled to payment for costs arising out of actual or alleged loss of efficiency; morale, fatigue, attitude, or labor rhythm; home office overhead; expectant underrun; trade stacking; reassignment of workers; rescheduling of work; concurrent operations; dilution of supervision; learning curve; beneficial or joint occupancy; logistics; ripple; season change; extended overhead; profit upon damages for delay; impact damages, including cumulative impact; or similar damages.

PART 8 - CLAIMS AND DISPUTE RESOLUTION

8.01 CLAIMS

- A. Definition: A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of the Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract Documents. The term "Claim" also includes other disputes and matters in question between Owner and Contractor arising out of or relating to the Contract Documents. Claims must be initiated in writing and be made in accordance with the Contract Documents. Neither a CCP, a Request for Information, a Bilateral or Unilateral Change Order, a reservation of rights, minutes of a meeting, a daily report, or a log entry shall constitute a Claim or Notice of a Claim. However, Owner and Contractor may agree in a signed writing to supplement how Contractor can provide a Notice of Claim as specified in this Part 8.
- B. Continuing Contract performance: Pending final resolution of a Claim, including the dispute resolution process in Part 8, and except as otherwise agreed in writing or in the Contract Documents, Contractor shall proceed diligently with performance of the Work and maintain the Progress Schedule, and Owner shall continue to make payments of undisputed amounts in accordance with the Contract Documents.
- C. Claims for additional cost: If Contractor wishes to make a Claim for an increase in the Contract Sum, written Notice as provided herein shall be given before proceeding to execute the Work, and written Notice and a written Claim must be made in accordance with this Part 8, or it will be waived.
- D. Claims for additional time: If Contractor wishes to make a Claim for an increase in the Contract Time, written Notice as provided herein shall be given, and a written Claim must be made in accordance with this Part 8, or it will be waived.
- E. Claims for consequential damages: Contractor and Owner waive certain Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes damages incurred by Owner for profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and damages incurred by Contractor for principal and home office overhead and expenses including but not limited to the compensation of personnel stationed there, for loss of financing, business and/or reputation, for losses on other projects, for loss of profit, and for interest or financing costs. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination. Nothing contained in this subparagraph E, however, shall be deemed to preclude an

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

award of liquidated or other delay damages, when applicable, in accordance with the Contract Documents, or to preclude or limit Contractor's obligation to procure and maintain the insurance policies required by this Contract or indemnify Owner for damages, including direct, indirect or consequential damages, alleged by a third party.

8.02 INFORMAL RESOLUTION OF DISPUTES

- A. Procedure to reduce disputes: In an effort to reduce the incidence and cost to all parties of extended disputes, all disputes, direct or indirect, arising out of or relating to the Contract Documents or the breach thereof, except those that have been waived under the terms of the Contract Documents, shall be decided exclusively by the dispute resolution procedure of Part 8 unless the parties mutually agree in writing otherwise. To the extent that Owner and Contractor agree to a partnering or dispute review process to help address disputes, these processes shall be in addition to, and not in place of, the mandatory contractual dispute resolution procedures.
- B. Notice: Except for disputes requiring Notice before proceeding with the affected Work as otherwise described in the Contract Documents, Contractor shall submit a written Notice of any Claim to Owner's Project Manager, consistent with the requirements of the Contract Documents, within 7 Days of the occurrence of the event giving rise to a dispute. If Contractor did not have actual knowledge of such an event, the written Notice shall be submitted within 7 Days of the date that Contractor reasonably should have been aware of the event. The Notice shall set forth, at a minimum, a description of the event(s) leading to or causing the dispute, the nature of the impacts to Contractor and its Subcontractors, if any, and an estimate of any claimed adjustments in the Contract Sum and/or Contract Time. Without waiving any rights, Owner and Contractor may discuss and attempt to resolve a dispute identified in a Notice of Claim directly with each other or with a third-party neutral or dispute review board if utilized on a Project.
- C. Substantiation: If an issue remains unresolved, Contractor shall submit timely written substantiation to support Contractor's position relating to the Notice of Claim. Such substantiation, which shall include an explanation of Contractor's position and any supporting documentation, shall be provided within 30 Days of submitting a Notice. Contractor may delay submitting data by an additional 14 Days if it notifies Owner that substantial data must be assembled.
- D. Owner's Project Manager to make initial decision on all disputes: After Contractor has submitted written substantiation to Owner that complies with all applicable provisions of Parts 7 and 8, as well as Section 01 32 13, Project Schedule, Owner's Project Manager will endeavor to respond, in writing, to Contractor within 7 Days of the date substantiation is received, or with Notice to Contractor of the date by which Owner's Project Manager expects to render a decision. If necessary to fully and fairly evaluate an issue, the Project Manager may request additional information or extend the time in which to respond. If the issue is not resolved, or if Project Manager does not respond within the later of 7 Days of the date written substantiation is received or the date specified for rendering a decision, the dispute may be escalated by Contractor to Owner's Assistant Vice President, Facilities Services, Capital as set forth in Section 8.02E below.
- E. Contractor may respond to initial decision: The initial decision of the Project Manager will be final and conclusive unless, within 7 Days of the date Contractor receives the initial decision or the date specified for rendering a decision, Contractor notifies Owner's Project Manager in writing of Contractor's disagreement with the initial decision, in which case Contractor must then submit a written rejection to Owner's Assistant Vice President, Facilities Services, Capital within 14 Days. The written rejection must attach the submitted Notice and substantiation and fully explain the reasons for Contractor's disagreement with the initial decision. It must also include all applicable supporting documentation. Failure to submit a written rejection to Owner's Assistant Vice

GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS

President, Facilities Services, Capital within 14 Days shall constitute Contractor's acceptance of the initial decision.

- F. Assistant Vice President, Facilities Services, Capital decision: Following Contractor's full compliance with the procedure above, Owner's Assistant Vice President, Facilities Services, Capital will endeavor to respond in writing to Contractor with a decision within 7 Days of delivery of the Contractor's rejection or with Notice to Contractor of the date by which Owner's Assistant Vice President, Facilities Services, Capital expects to render a decision. If Owner's Assistant Vice President, Facilities Services, Capital does not respond within the later of 7 Days after delivery of the rejection or the date specified to render a decision, the dispute will be deemed denied and Contractor may further escalate the dispute as set forth in Section 8.02G below.
- G. Claim: If Contractor disagrees with the decision of the Assistant Vice President, Facilities Services, Capital, or if no decision is timely received, Contractor shall timely submit a Claim if it wishes to pursue formal dispute resolution or seek additional relief against Owner of any kind. A Claim must be consistent with the Notice, substantiation and rejection previously provided, be submitted to Owner in writing within 14 Days of the date the decision of the Assistant Vice President, Facilities Services, Capital is received by Contractor or due, and comply with Section 8.04. Any claim of a Subcontractor of any tier may be brought only through, and after review by, Contractor. Contractor acknowledges and agrees that no additional documentation from what was submitted to Owner's Assistant Vice President, Facilities Services, Capital (per part 'F' of this section) may be submitted and considered in any subsequent dispute resolution proceeding. Contractor's failure to provide timely information for Owner's consideration during the dispute resolution procedure of Part 8 has a substantial impact upon and prejudices Owner, including but not limited to its inability to fully investigate or verify a Claim, mitigate damages, choose alternative options, adjust the budget, delete or modify the impacted Work, and/or monitor time, cost and quantities.

8.03 FORMAL RESOLUTION OF CLAIMS

- A. Option for direct discussions: At any time following Contractor's initiation of formal dispute resolution, Owner may require that an officer of Contractor and Owner's Assistant Vice President, Facilities Services, Capital (all with authority to settle) meet, confer, and attempt to resolve the Claim. If the Claim is not resolved during such meeting, or if no such meeting is requested, Contractor may bring no litigation against Owner unless Contractor complies with the procedures described in Sections 8.03B and C. This requirement cannot be waived except by an explicit written waiver signed by Owner and Contractor.
- B. Mediation:
1. Mediation required: Claims, disputes, or other matters in controversy arising out of or related to the Contract shall be subject to mediation as a condition precedent to the initiation of binding dispute resolution. This requirement cannot be waived except by an explicit written waiver signed by both Owner and Contractor. Unless Owner and Contractor mutually agree in writing otherwise, all unresolved Claims shall be considered at a single mediation session that shall occur after Substantial Completion and prior to Final Acceptance by Owner.
 2. Mediation procedure: The parties shall endeavor to resolve Claims by mediation. A request for mediation shall be delivered in writing to the other party to the Contract, and the parties shall promptly attempt to mutually agree on a mediator. If the parties do not agree on a mediator within 30 Days of a party's demand, the mediation, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

on the date of the Agreement. Mediation shall proceed in advance of binding dispute resolution proceedings.

3. Mediation fee to be shared: The parties to the mediation shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction.
 4. Representatives with authority must attend mediation: Representatives of Contractor and Owner must attend the mediation session in person with authority to settle the Claim. To the extent there are other parties in interest, such as A/E, insurers or Subcontractors, their representatives, also with authority to settle the Claim, shall also attend the mediation session in person.
- C. Litigation: Contractor may bring no litigation on a Claim unless the Claim has been raised and considered in accordance with the procedures of this Part 8, including mandatory mediation. Contractor shall have the burden to demonstrate in any litigation that it has complied with all requirements of this Part 8. All unresolved Claims of Contractor shall be waived and released unless Contractor has complied with the time limits of the Contract Documents, and litigation is served and filed within 180 Days after the Date of Substantial Completion approved in writing by Owner. This requirement cannot be waived except by an explicit, written waiver signed by Owner and Contractor. The pendency of a mediation, which shall mean the time period between a party's receipt of a written mediation demand and the date of the initial mediation session, shall stay this deadline for serving and filing a lawsuit. The deadline may also be stayed for an additional period by agreement of the parties or court order. Neither Contractor nor a Subcontractor, whether claiming under a bond or lien statute or otherwise, shall be entitled to attorneys' fees directly or indirectly from Owner (but may recover attorneys' fees from the bond or statutory retainage fund itself to the extent allowable under law).

8.04 CLAIMS PROCESS

- A. Notice and Claims: Any Notice and any Claim of Contractor, whether under the Contract or otherwise, must be made pursuant to and in strict accordance with the applicable provisions of the Contract Documents. No act, omission, or knowledge, actual or constructive, of Owner or anyone for whose acts Owner is responsible shall in any way be deemed to be a waiver of the requirement for timely written Notice and a timely written Claim unless Owner and Contractor sign an explicit, unequivocal written waiver. The fact that Owner and Contractor may consider, discuss, or negotiate a Claim that has or may have been procedurally or substantively defective or untimely under the Contract shall not constitute a waiver of the provisions of the Contract Documents unless Owner and Contractor sign an explicit, unequivocal written waiver. Contractor acknowledges and agrees that Contractor's failure to timely submit required Notices and/or timely submit Claims has a substantial impact upon and prejudices Owner, including but not limited to its inability to fully investigate or verify the Claim, mitigate damages, choose alternative options, adjust the budget, delete or modify the impacted Work, and/or monitor time, cost and quantities.
- B. Claim must cover all costs and be documented: A Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor (and Subcontractors) may be entitled and may not contain reservations of rights without Owner's written approval; any such unapproved reservations of rights shall be without effect. Any requests by Contractor for an adjustment in both the Contract Sum and Contract Time that arise out of the same event(s) shall be submitted together. A Claim must be fully substantiated and documented. At a minimum, a Claim shall contain the following information:

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

1. Factual statement of Claim: A detailed factual statement of the Claim for additional compensation and/or time, if any, providing all necessary dates, locations, and items of Work affected by the Claim, that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of;
 2. Dates: The date on which event(s) arose which gave rise to the Claim;
 3. Owner and A/E employee's knowledgeable about Claim: The name of each employee of Owner and/or A/E believed to be knowledgeable about the Claim;
 4. Support from Contract Documents: The specific provisions of the Contract Documents that support the Claim;
 5. Identification of other supporting information: The identification of any documents and the substance of any oral communications that support the Claim;
 6. Copies of supporting documentation: Data and copies of any identified documents, other than the Contract Documents, that support the Claim, including without limitation a complete explanation as to why the relief sought is not within the scope of the Contract Documents;
 7. Details on Claim for Contract Time: If an adjustment in the Contract Time is sought, the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted, and Contractor's analysis of its Progress Schedule to demonstrate the reason for the extension in Contract Time showing cause and analysis of the resultant delay to the critical path and other information required by the Contract Documents and Section 01 32 13, Project Schedule;
 8. Details on Claim for adjustment of Contract Sum: If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories and with the detail required by Section 7.02; and
 9. Statement certifying Claim: A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes Owner is responsible.
- C. False Claims: Contractor shall not make any negligent or fraudulent misrepresentations, concealments, errors, omissions, or inducements to Owner in the formation or performance of this Contract. If Contractor or a Subcontractor submits false or frivolous substantiation or a Claim to Owner, which for purposes of this Section 8.01C is defined as substantiation or a Claim based in whole or in part upon a materially incorrect fact, statement, representation, assertion, or record, Owner shall be entitled to collect from Contractor by offset or otherwise (without prejudice to any right or remedy of Owner) any and all costs and expenses, including investigation and consultant costs, incurred by Owner in investigating, responding to, and defending against such false or frivolous substantiation or Claim.
- D. Notification of surety: Owner may, but is not obligated to, notify Contractor's surety, if any, of the nature and amount of any claim it may assert against Contractor. If the claim relates to a possibility of Contractor's default, Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

**FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

- E. Liens: If a Claim relates to or is the subject of a lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice and filing deadlines.
- F. All Claims must be submitted for final resolution within the time period specified by applicable law: Owner and Contractor shall commence all Claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of this Part 8 and within the time period specified by applicable law.
- G. Waiver of rights: Any Claim of Contractor against Owner shall be conclusively deemed to have been waived by Contractor unless made in accordance with the requirements of Part 8.
- H. Owner may investigate: To assist in the review of a Claim, Owner may at any time visit the Project site, communicate directly with Subcontractors, or request additional information (including requesting an audit as authorized below) in order to fully evaluate the issues raised by the Claim.
- I. Owner may audit Claims: All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor or Subcontractors of any tier to permit Owner access to the books and records of Contractor or Subcontractors of any tier, or to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim, shall constitute a waiver of the Claim and shall bar any recovery.
- J. Contractor to make documents promptly available: In support of Owner's audit of any Claim, Contractor and any Subcontractor shall, upon request, promptly make available to Owner within seven Days of Owner's request, at the office of Contractor or any requested Subcontractor during normal business hours, at least the following documents and other documents requested by Owner; failure to fully comply with this requirement shall constitute a material breach of contract and waiver of any Claim:
1. Daily time sheets and supervisor's daily reports;
 2. Collective bargaining agreements;
 3. Insurance, welfare, and benefits records;
 4. Payroll registers;
 5. Earnings records;
 6. Payroll tax forms;
 7. Material invoices, requisitions, and delivery confirmations;
 8. Material cost distribution worksheet;
 9. Equipment records (list of company equipment, rates, etc.);
 10. Vendors', rental agencies', Subcontractors', and agents' invoices;
 11. Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts;
 12. Subcontractors' and agents' payment certificates;

GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS

13. Cancelled checks (payroll and vendors);
 14. Job cost reports, including job cost summary and job cost detail reports, related labor and equipment reports, and monthly totals;
 15. Job payroll ledger;
 16. Planned resource loading schedules and summaries;
 17. General ledger;
 18. Cash disbursements journal;
 19. Financial statements for all years during performance of the Work. In addition, Owner may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work;
 20. Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others;
 21. If a source other than depreciation records is used to develop costs for Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents;
 22. All non-privileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in the Contract Sum or Contract Time sought by each Claim;
 23. Work sheets or software used to prepare and establish the cost components for items of the Claim, including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents that establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals;
 24. Work sheets, software, and all other documents used by Contractor to prepare its bid;
 25. The above items for its Subcontractors; and
 26. Any other information in any form or media not expressly protected from discovery by applicable law.
- K. Contractor to cooperate and provide facilities for audit: The audit may be performed by employees or representatives of Owner. Contractor and its Subcontractors shall provide adequate facilities acceptable to Owner for the audit during normal business hours. Contractor and all Subcontractors shall make a good faith effort to cooperate with Owner's auditors.
- L. Reciprocal RCW 42.56 rights: Contractor agrees, on behalf of itself and Subcontractors, that any invocation of RCW 42.56 at any time by Contractor or a Subcontractor, or their respective representatives, shall initiate an equivalent right to disclosures from Contractor and Subcontractors for the benefit of Owner. Failure to fully comply with these requirements shall constitute a material breach of the Contract and shall constitute a waiver of all Claims by Contractor and any Subcontractor that does not fully comply.

GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS

PART 9 - TERMINATION OF THE WORK

9.01 TERMINATION BY OWNER FOR CAUSE

- A. 7 Day Notice to Terminate for Cause: Owner may, upon 7 Days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for cause upon the occurrence of any one or more of the following events:
1. Contractor fails to prosecute Work: Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time;
 2. Contractor bankrupt: Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency;
 3. Contractor fails to correct Work: Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents;
 4. Contractor fails to supply workers or materials: Contractor repeatedly fails to supply skilled workers or proper materials or equipment;
 5. Contractor failure to pay Subcontractors or labor: Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor;
 6. Contractor violates laws: Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or
 7. Contractor in material breach of Contract: Contractor is otherwise in material breach of any provision of the Contract Documents.
- B. Owner's actions upon termination: Upon termination, Owner may at its option:
1. Take possession of Project site: Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of, and to finish, the Work;
 2. Accept assignment of Subcontracts: Accept assignment of subcontracts pursuant to Section 5.20; and
 3. Finish the Work: Finish the Work by whatever other reasonable method it deems expedient.
- C. Surety's role: Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.
- D. Contractor's required actions: When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in paragraph 9.02B, and shall not be entitled to receive further payment until the Work is accepted.
- E. Contractor to pay for unfinished Work: Contractor shall not be entitled to receive further payment until the Work is finished. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E's services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of

**FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.

- F. Contractor and Surety still responsible for Work performed: Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.
- G. Conversion of "Termination for Cause" to "Termination for Convenience": If Owner terminates Contractor for cause and it is later determined that none of the circumstances set forth in paragraph 9.01A exist, then such termination shall be deemed a termination for convenience pursuant to Section 9.02.

9.02 TERMINATION BY OWNER FOR CONVENIENCE

- A. Owner Notice of Termination for Convenience: Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for the convenience of Owner.
- B. Contractor response to termination Notice: Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:
1. Cease Work: Stop performing Work on the date and as specified in the notice of termination;
 2. No further orders or Subcontracts: Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;
 3. Cancel orders and Subcontracts: Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;
 4. Assign orders and Subcontracts to Owner: Assign to Owner all of the right, title, and interest of Contractor in all orders and subcontracts;
 5. Take action to protect the Work: Take such action as may be necessary or as directed by Owner to preserve and protect the Work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest; and
 6. Continue performance not terminated: Continue performance only to the extent not terminated.
- C. Terms of adjustment in Contract Sum if Contract terminated: If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination, plus reasonable allowance for overhead and profit on Work performed prior to termination, plus the reasonable administrative costs of the termination, but shall not be entitled to any other costs or damages, whatsoever, provided however, the total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of Part 7.
- D. Owner to determine whether to adjust Contract Time: If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

9.03 TERMINATION BY CONTRACTOR FOR CAUSE

- A. Contractor termination: Except as provided by RCW 60.28.080, Contractor may terminate the Contract for any of the following reasons:
1. Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped permanently;
 2. An act of government, such as a declaration of national emergency, that requires all Work to be stopped permanently;
 3. Because Owner has improperly not made payment of undisputed amounts within the time stated in the Contract Documents; or
 4. The Work is stopped for a period of 60 consecutive Days through no act or fault of Contractor, a Subcontractor, or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with Contractor,
- B. Contractor termination procedure: If one of these reasons exists, Contractor may, upon seven Days' written Notice to Owner (during which period Owner has the opportunity to cure), terminate the Contract and recover from Owner payment for Work executed in accordance with the Contract Documents, including reasonable overhead and profit on Work executed and costs incurred by reason of such termination. The total recovery of Contractor shall not exceed the unpaid balance of the Contract Sum.

PART 10 - MISCELLANEOUS PROVISIONS

10.01 GOVERNING LAW

Applicable law and venue: The Contract Documents and the rights of the parties herein shall be governed by the internal laws of the state of Washington, without regard to its choice-of-law provisions. Venue shall be in the county in which the Project is located, unless otherwise specified.

10.02 SUCCESSORS AND ASSIGNS

Bound to successors; Assignment of Contract: Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to the partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Contract without written consent of the other, except that Contractor may assign the Work for security purposes to a bank or lending institution authorized to do business in the state of Washington. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents. If a majority of the ownership or the control of Contractor is acquired by a third party, and such acquisition reasonably imperils performance or creates a conflict of interest that Owner, in its sole discretion, cannot reasonably reconcile, then Owner may terminate this Contract at any time for cause under Section 9.01.

10.03 MEANING OF WORDS

Meaning of words used in Contract Documents: Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard Specifications, manuals, or codes of any technical society, organization, or association, or to the code of any governmental authority, whether such reference is specific or by implication, shall be to the latest

**GENERAL CONDITIONS
FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS**

standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Wherever in the Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such items as are shown on the Drawings, or required to complete the installation.

10.04 RIGHTS AND REMEDIES

- A. No waiver of rights: Waiver of any provisions of the Contract Documents must be in writing and authorized by Owner. No other waiver is valid on behalf of Owner. No action, delay in acting, or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded under the Contract Documents, nor shall action, delay in acting, or failure to act constitute approval or an acquiescence in a breach therein, or otherwise prejudice the right of Owner to enforce a right or remedy at any subsequent time, except as may be specifically agreed in writing.
- B. Rights under Contract do not limit other rights: Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.
- C. If portion of Contract is void, remainder is enforceable: If any portion of this Contract is held to be void or unenforceable, the remainder of the Contract shall be enforceable without such portion.

10.05 CONTRACTOR REGISTRATION AND COMPLIANCE

- A. Contractor must be registered and licensed: Pursuant to RCW 39.06, Contractor shall be registered and licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27. Contractor shall also have a current state unified business identifier number; have industrial insurance coverage for Contractor's employees working in Washington as required in Title 51 RCW; have an employment security department number as required in Title 50 RCW; have a state excise tax registration number as required in Title 82 RCW; and not be disqualified from bidding on any public works contract under RCW 39.06.010 (unregistered or unlicensed contractors) or RCW 39.12.065(3) (prevailing wage violations).
- B. Employer contributions: Pursuant to RCW 50.24, "Contributions by Employers," in general and RCW 50.24.130 in particular, Contractor shall pay contributions for wages for personal services performed under this Contract or arrange for a bond acceptable to the Commissioner.
- C. Apprenticeship requirements: If the Contract Sum for the Project exceeds one million dollars, Contractor shall comply with all applicable apprenticeship requirements.

10.06 TIME COMPUTATIONS

Computing time: When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

10.07 RECORDS RETENTION

Six year records retention period: The wage, payroll, and cost records of Contractor, and its Subcontractors, and all records subject to audit in accordance with Section 8.03, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

**FOR WASHINGTON STATE FACILITY CONSTRUCTION
WITH WASHINGTON STATE UNIVERSITY AMENDMENTS****10.08 THIRD-PARTY AGREEMENTS**

No third party relationships created: The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

10.09 ANTITRUST ASSIGNMENT

Contractor assigns overcharge amounts to Owner: Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges which result from antitrust violations commencing after the Contract Sum is established and which are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts, and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

10.10 HEADINGS AND CAPTIONS

Headings for convenience only: All headings and captions used in these General Conditions are only for convenience of reference, and shall not be used in any way in connection with the meaning, effect, interpretation, construction, or enforcement of the General Conditions, and do not define the limit or describe the scope or intent of any provision of these General Conditions.

10.11 INDEPENDENT CONTRACTOR

Contractor is independent contractor: Contractor shall be and operate as an independent contractor in the performance of the Work and shall have complete control over and responsibility for all personnel performing the Work. Contractor is not authorized to enter into any agreements or undertakings for or on behalf of Owner or to act as or be an agent or employee of Owner.

10.12 OWNER'S ROLE

Owner's role is limited. Owner will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely Contractor's responsibility under the Contract Documents. The presence of Owner at the Project site shall not in any manner be construed as assurance that the Work is being completed in compliance with the Contract Documents, nor as evidence that any requirement of the Contract Documents of any kind, including Notice, has been met or waived. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Owner will not have control over or charge of and will not be responsible for acts or omissions of Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

END OF SECTION 00 72 00

PART 1 GENERAL

1.01 SUMMARY

- A. Contractor shall perform the entire Work in accordance with the Contract Documents.
- B. Without limiting the requirements of the Contract Documents, the Work of the Contract can be summarized as follows:
- C. Expected Owner-supplied Contractor-installed Work:
 - 1. Food Science Human Nutrition Building Elevator: Full modernization and upgrade of traction passenger elevator. Extent of elevator work is described in the schedules, and provisions as specified in the elevator specification section 14 29 00, and is non-inclusive of all possible requirements for a complete, proper, code compliant and fully functional installation. All work shall comply with all applicable National and State codes and procedures. Work shall comply with current code requirements for ASME A17.1 and Washington State Elevator code, 296-96 WAC and other applicable codes, and in the event of conflicts between these standards, the more stringent standard shall prevail. Contract time shall be 300 days from Notice to Proceed Substantial Completion. Proposals must be based on this Contract time.

1.02 SCHEDULE OF ALTERNATES

- A. Without limiting the requirements of the Contract Documents, the Work of the Alternates can be summarized as follows:
 - 1. Alternate No.1 - New UL Label Door Panels-SS#4.
 - 2. Alternate No.2 - New Entrance Frame Cladding-SS#4.

1.03 SCHEDULE OF ALLOWANCES – NOT USED

1.04 SCHEDULE OF UNIT PRICES – NOT USED

1.05 GENERAL INFORMATION

- A. Owner and Owner's Designated Representative:
 - 1. Owner: Board of Regents
Washington State University
Pullman, WA 99164-1045
 - 2. Owner's Designated Representative:
 - a. All Owner capital projects are administered by the Department of Facilities Services, Capital. Project specific designated representatives are listed within the Agreement.

3. Consulting Services: Owner has retained a Consultant to design the entire Project. The Consultant is identified below:
 - a. Elevator Consultant: JSG Consulting LLC, San Jose, CA

1.06 SPECIAL CONDITIONS

- A. Owner Occupancy: Building will be occupied during construction.
- B. Hazardous Material: See Section 00 72 00 – General Conditions; Attachment A: Good Faith Hazardous Material Survey.

END OF SECTION 01 11 00

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes the administrative and procedural requirements for executing changes in the Work. This Section is subject to and governed by the Agreement and General Conditions. In the event of any conflict, the Agreement and General Conditions will have a higher precedence as established in the General Conditions.

1.02 SUBMITTALS

- A. Contractor shall submit a breakdown of its actual wage rates prior to commencement of construction activities. The breakdown must show:
 - 1. Basic wage rate (Based on L&I Intent to Pay Prevailing Wages);
 - 2. Fringe Package (Based on L&I Intent to Pay Prevailing Wages);
 - 3. FUI (Federal Unemployment Insurance);
 - 4. FICA (Federal Insurance Compensation Act);
 - 5. SUI (State Unemployment Compensation Act);
 - 6. Medicare; and
 - 7. WC (Workers Compensation).
- B. Contractor shall submit detailed supporting documentation to verify the above rates, if requested by Owner. All such rates shall be subject to audit.
- C. Contractor shall submit prior to commencement of construction activities a list of all equipment that it anticipates will be used on the Project and the actual operating cost of each piece of equipment. The General Conditions describe allowable equipment charges. All costs shall be subject to audit.

1.03 CONTRACT CHANGE PROPOSAL PROCEDURES

- A. Contractor shall maintain an Issues Log/ CCP Log as described in the General Conditions:
 - 1. The action status shall indicate which party is currently responsible and when it is appropriate to submit a CCP to Owner. Contractor shall submit a Contract Change Proposal (CCP) with Substantiating Documentation, as described in subsection C below, to Owner within 7 Days of this action status change.
 - 2. Upon final agreement and authorization by Owner a CCP may be incorporated into the Contract via Change Order and shall be reflected on the Issues Log.

B. Direction to perform Work:

1. Owner may directly order Work by a written Work Directive (WD). WDs may be unilateral or bilateral as described in the General Conditions and may be issued on a fixed price or on a "cost-not-to-exceed" basis. The WD may include the following:
 - a. A detailed description of the proposed change, products, and location of modification to the Work;
 - b. Supplementary or revised Drawings and/or Specifications; and
 - c. Projected time for making the change and a statement as to whether overtime work is, or is not, acceptable.

C. Substantiating Documentation required with all CCPs:

1. Contractor shall provide back-up documentation required to substantiate any proposed change in the following format:
 - a. CCP narrative, including:
 - 1) Description of proposed change. In order to allow for efficient review of a change proposal Contractor shall provide enough narrative to the line item breakdown to allow Owner to properly assess that the change is fair and reasonable;
 - 2) Cause of or reason for making change with a statement of why proposed change is not covered by Contract Documents
 - 3) Both credited and additive elements relating to a change in Contract Sum and/or Contract Time;
 - 4) A specific period of time during which Contractor's pricing will be considered valid;
 - 5) Any schedule considerations that may trigger further impact to the Contract Time if acceptance of the proposed change is delayed beyond a specific date; and
 - 6) Date change Work is to be completed.
 - b. Owner supplied Change Proposal Submittal Form.
 - c. CCP Cost Estimate Detail Sheet(s), or other form acceptable to Owner, including:
 - 1) Line-item estimate detailing material, labor, equipment, Subcontractor, and supplier costs and quantities; and
 - 2) Subcontractor and supplier proposals with supporting line-item estimates.
 - d. CCP Progress Schedule with Contemporaneous Period Analysis detailing if any impact to the planned progress of the Work and

critical path.

- e. Other supporting documentation, as appropriate.

D. Correlation with Contractor's Submittals:

1. Application for Payment forms shall record each Unilateral and Bilateral Change Order as a separate item of Work.
2. The Progress Schedule shall be revised to reflect changes in the Contract Time.
3. Project Record shall incorporate all changed Work.

END OF SECTION 01 26 00

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes procedures for preparation and submittal of Applications for Payment.

1.02 SUBMITTALS

- A. Prior to submitting its first Application for Payment, Contractor shall:
1. Submit a preliminary Progress Schedule per Section 01 32 13 – Progress Schedule.
 2. If requested, submit a projected monthly cash-flow analysis for the duration of the Project.
 3. Submit an approved Intent to Pay Prevailing Wages form prior to commencing the Work. An approved Intent to Pay Prevailing Wages form must be on file with Owner for each classification of laborers, workers, or mechanics employed by Contractor or Subcontractors whose Work is included in an Application for Payment.
 4. **“Washington State Prevailing Wage Rates for Public Works Contracts/Whitman County” are made a part of the Contract Documents and are included at the end of this Section.** It is Contractor’s responsibility to verify with the Washington State Department of Labor and Industries the most current and applicable prevailing wage rates for this Project.
 5. Submit and receive approval of the Schedule of Values per Section 01 29 73 – Schedule of Values, and the General Conditions. All Applications for Payment shall be in the same format.
 6. Submit a list of all Subcontractors with points of contact and other contact information, including phone number, email address, and mailing address.
 7. Submit a list of all major material suppliers with points of contact and other contact information, including phone number, email address, and mailing address.
 8. Submit Retainage Option Form to Owner for the disposition of retainage funds.
 - a. In accordance with Chapter 60.28 of the Revised Code of Washington (RCW), Owner shall reserve retainage not to exceed 5% of the monies earned by Contractor as a trust fund for the protection and payment of:
 - 1) The claims of any person and/or Owner arising out of or relating to Work performed on the Project; and
 - 2) The State with respect to taxes, fees, or penalties that may

be imposed and due from Contractor (see General Conditions).

- b. Retainage will be released per Section 01 70 00 - Project Close-Out.
- c. At the option of Contractor, the moneys reserved by Owner shall be:
 - 1) Retained in a fund by Owner;
 - 2) Bonded for all of the retainage using a bond form acceptable to Owner;
 - 3) Placed in escrow with a bank or trust company by Owner.
 - a) Escrow: If the retained funds are to be placed in escrow, Contractor will select the escrow agent, subject to approval by Owner. The selected agent must be a bank or trust company in the State of Washington.
 - b) Escrow Agent: If Contractor elects the escrow option, an escrow agreement shall be executed by Contractor, Owner, and bank or trust company. Three copies of the agreement should be completed and executed by Contractor and returned to Owner for execution; Owner will forward copies to the bank or trust company for receipt, acceptance, and execution. The bank or trust company will retain one copy and return one copy each to Contractor and Owner. A completed and signed escrow agreement must be on file with Owner before Contractor's first Application for Payment is processed.
 - c) Escrow Investments: The bank or trust company may invest the retained funds in bonds and other securities selected by Contractor, except stocks, subject to the written approval of Owner.
 - d) The investments selected must mature on or prior to the date 45 Days following Final Acceptance of the Work. Interest on such investments may be paid to Contractor as it accrues.
 - e) Escrow Costs and Fees: All escrow costs and fees shall be paid by Contractor.
 - f) Release of Escrow Investments to Contractor: Retainage will be released per Section 01 70 00 - Project Close-Out. Once Contractor has fully complied with the Contract Documents and statute, Owner shall issue written instructions to the bank or trust company to release to Contractor the investment held in escrow.

B. Draft Application for Payment:

1. Contractor shall submit a draft, itemized Application for Payment within the last 7 Days of the month.
2. The draft application does not constitute a payment request and shall not be signed.
3. Contractor shall carefully check all extensions, totals, and required information for accuracy before submittal.
4. Contractor and Owner may meet to confer regarding the current progress of the Work and the amount of payment to which Contractor is entitled. Owner may request that Contractor provide supporting documentation substantiating its right to payment. Contractor is not entitled to make a final payment request, nor is any payment due Contractor, until such data is furnished. Contractor may include in its Application for Payment projected costs to the end of the month.
 - a. Fill in the following information within Owner's Application for Payment form:
 - 1) Percentage of Work completed based upon the approved schedule of values.
 - 2) List Change Orders approved by Owner prior to submission date. Use Owner's designations. Do not bill for changed Work until a fully executed Change Order has been received.
 - 3) Certification of Participation WBE and MBEs, all certification types acceptable, supply this regardless of having firms to report upon.
 - 4) List all Subcontractors that have performed Work at the site during the pay period.
 - 5) If applicable, Apprentice/Journeyman Participation.
5. Contractor shall submit or make available for review the following prior to the draft Application for Payment:
 - a. Project Record; (see Section 01 78 39 – Project Record)
 - b. Updated Progress Schedule in native format (see section 01 32 13 – Progress Schedule);
 - c. Contractor Quality Control Reports (see Section 01 45 00 - Quality Control); and
 - d. Stored Materials: Requests for payment of stored materials may only be made for materials properly stored on or off-site and in full compliance with the General Conditions.

C. Application for Payment:

1. Contractor may not submit the approved Application for Payment (or payment will be withheld) until all requirements of the draft application for

- payment are met.
2. Upon approval of the Draft Application for Payment, contractor will be authorized to submit the agreed upon Application for Payment for processing and payment. This application for payment shall be signed by hand by a responsible officer of the Contractor and may be submitted in scanned format electronically.
 3. Formal submittal must include all parts of the Application for Payment form.
 4. Owner shall make progress payments in such amounts as it determines are properly due within 30 Days of receipt of a properly executed Application for Payment.
 5. Owner shall notify Contractor in accordance with Chapter 39.76 RCW if the Application for Payment does not comply with the requirements of the Contract Documents.
- D. Disputed Amounts: If Contractor believes it is entitled to payment for Work performed during the prior calendar month in addition to the agreed-upon amount, Contractor may, also within the same period, submit to Owner along with the approved Application for Payment a separate, written payment request specifying the exact additional amount claimed due, the category in the Schedule of Values in which the payment is claimed due, the specific Work for which the additional amount is due, and why the additional payment is due. Furthermore, for the submittal to be considered, Contractor and all Subcontractors shall file with Owner by the same date certified copies of all payroll records relating to the additional amount due, pursuant to WAC 296-127-320.
- E. Payments to Subcontractors: Contractor shall pay each Subcontractor no later than 10 Days after receipt of payment from Owner the amount to which the Subcontractor is entitled. Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to lower-tier Subcontractors in a similar manner.
1. Applications for Payment shall not request payment for portions of the Work that Contractor does not intend to pay a Subcontractor, unless such Work has been performed by others whom Contractor intends to pay.
 2. If, after making an Application for Payment but before paying a Subcontractor for its performance covered by the Application, Contractor discovers that part or all of the payment otherwise due to the Subcontractor is subject to withholding from the Subcontractor under the Subcontract (such as for unsatisfactory performance or non-payment of lower-tier Subcontractors), Contractor may withhold the amount as allowed under the Subcontract, but it shall:
 - a. Give the Subcontractor and Owner written notice of the withholding as soon as practicable once Contractor determines the cause for the withholding but before the due date of the Subcontractor payment;
 - b. Include the reasons for the withholding and the actions the

Subcontractor must take to release the payment; and

- c. Once Subcontractor has taken the required remedial actions, pay Subcontractor within 8 Days.
- 3. Owner may, at its sole option, issue joint checks to Contractor and to any Subcontractor. If Owner makes payments by joint check, such value shall be reflected on the next Application for Payment.

F. Application for Final Payment:

- 1. Application for Final Payment will be accepted for processing only after Contractor has completed the requirements of Final Completion as described in Section 01 70 00 – Project Close-Out.

G. Release of Retainage:

- 1. Retainage will be released per Section 01 70 00 - Project Close-Out.

END OF SECTION 01 29 00

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Procedures for preparation and submittal of the Schedule of Values.

1.02 SUBMITTALS

- A. Contractor shall submit an initial Schedule of Values per the Pre-Construction Submittal Requirements of Section 01 33 00.
- B. Contractor shall submit supporting documentation justifying the amounts in the Schedule of Values if requested by Owner.

1.03 SCHEDULE OF VALUES

- A. Contractor shall submit a typed schedule on Owner's form. Once approved, Contractor shall not revise the Schedule of Values without prior approval by Owner.
- B. Format:
 1. Separate each category of Work into a separate line item.
 2. List all major Work activities indicated on the Progress Schedule.
 3. Separate floors, phases, and other easily recognized building divisions when appropriate.
 4. Separate labor, materials and equipment for each item.
 5. Identify site mobilization, demobilization, bonds, and insurance as individual line items.
 6. Include a line item for close-out Work between Substantial Completion and Final Completion.
 7. If applicable, include a line item for allowances. For unit cost allowances, give quantities measured from the Contract Documents multiplied by the unit cost.
 8. When required by Owner, include separate line items for "separately funded Work."

END OF SECTION 01 29 73

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Preconstruction Meeting;
2. Progress Meetings; and
3. Other meetings, as requested by Owner.

1.02 PRECONSTRUCTION MEETING

A. Meeting Location: Owner will schedule a meeting prior to the start of construction. The purpose of this meeting is to review Contract administration requirements and mobilization procedures. Attendance is required for the following:

1. Architect/Engineer and design Subconsultants;
2. Contractor's Superintendent and Project Manager;
3. Representative of major Subcontractors, as appropriate;
4. Others, as appropriate.

B. Owner's Designated Representative shall:

1. Preside over and conduct meeting.
2. Record, reproduce, and distribute copies of minutes within 7 Days of the meeting to all meeting participants.

C. Agenda for the meeting will include at a minimum:

1. The Work;
2. Progress Schedule, including Work sequence, phasing, and occupancy requirements;
3. Communications chain and persons authorized to direct changes;
4. Use of the Project site;
5. Special Project procedures;
6. Procedures and processing:
 - a. Application for Payments and Schedule of Values;
 - b. Contract Change Proposals (CCP), Work Directive (WD);
 - c. Change Orders (CO);

- d. Requests for Information (RFI);
- e. Submittals; and
- f. Others as appropriate.
- 7. Project Record;
- 8. Construction facilities, controls, and construction aids;
- 9. Temporary utilities;
- 10. Security procedures;
- 11. Safety and first-aid procedures;
- 12. Environmental Health and Safety;
- 13. Housekeeping procedures;
- 14. AHJ representative(s) and inspection procedures;
- 15. Utility shutdowns;
- 16. Parking;
- 17. Existing conditions;
- 18. Subcontractor list;
- 19. Emergency phone and keys to site;
- 20. Progress meeting scheduling;
- 21. Shipment and deliveries; and
- 22. Other(s) as appropriate.

1.03 PROGRESS MEETINGS

- A. Progress meetings will occur as required.
- B. Meeting Location: Contractor's Project field office, unless otherwise agreed.
- C. Attendance: Representatives attending meetings must be qualified and authorized to act on behalf of their firms. Attendance shall include:
 - 1. Architect/Engineer and Subconsultants, as appropriate;
 - 2. Owner's Designated Representatives;
 - 3. Contractor's Superintendent and Project Manager;
 - 4. Subcontractors, as appropriate;
 - 5. Suppliers, as appropriate; and
 - 6. Others, as appropriate.
- D. Owner's Designated Representative shall:

1. Administer progress and other specially scheduled meetings;
 2. Record, reproduce, and distribute copies of minutes within 6 Days of meeting to all meeting participants; and
- E. Contractor shall, at each meeting, provide each meeting attendant with:
1. Short-interval (look-ahead) schedule coordinated with the Progress Schedule;
 2. Updated Progress Schedule, if appropriate;
 3. Updated submittal log and schedules;
 4. Updated RFI log;
 5. Issues Log;
 6. Quality Control Log; and
 7. Any applicable tracking mechanisms.
- F. Agenda for these meetings will include at a minimum:
1. Project safety;
 2. Review and approval of minutes from previous meeting;
 3. Review Work progress since previous meeting;
 4. Review plans for progress for subsequent Work period and short-interval (look-ahead) schedule;
 5. Review Progress Schedule;
 6. Present corrective measures and procedures to regain Progress Schedule, as applicable;
 7. Present field observations, problems, and conflicts;
 8. Discuss RFIs;
 9. Review quality control;
 10. Review submittal log and schedules and present methods to expedite as required;
 11. Review off-site fabrication;
 12. Review delivery schedules;
 13. Review coordination issues;
 14. Review proposed changes for:
 - a. Effect on Progress Schedule and on completion date.
 - b. Effect on any other contracts of the Project.
 15. Review Issues Log;

16. Review draft Application for Payment (at end of month);
17. Review Project Record; and
18. Review any other issues.

1.04 OTHER MEETINGS

- A. Owner may call additional Project meetings as appropriate.
- B. Meetings as required by other sections.
- C. Format and agenda of these meetings will follow that of Progress Meetings unless Owner determines otherwise.

END OF SECTION 01 31 19

PART 1 GENERAL

1.01 GENERAL COMMUNICATION

- A. Subcontractors: Informal communication between Owner, Owner's consultants, and other Subcontractors is permitted. If written clarification or direction is required to resolve questions, transmit questions in writing using a Request for Information (RFI) through the Contractor to Owner.
- B. In case of an EMERGENCY, dial 9-1-1 if appropriate; otherwise, contact Owner's Designated Representative. If he or she is not available contact Facilities Services, Capital at 509-335-9000.

1.02 CORRESPONDENCE

- A. Address all correspondence to Owner's Designated Representative.
- B. Contractor shall copy Architect/Engineer on all correspondence to and from Owner.
- C. Include Project title and Owner Project number on all correspondence.

1.03 REQUEST FOR INFORMATION

- A. When field conditions or Contract Document require clarification, a written Request for Information (RFI) must be submitted per the following:
 - 1. Identify the nature and location of each clarification/verification using a RFI form and provide at least the following information:
 - a. Project name and number;
 - b. Date;
 - c. Date response requested;
 - d. RFI number;
 - e. Subject;
 - f. Initiator of the question;
 - g. Indication of costs;
 - h. Indication of schedule impact;
 - i. Location on site; Contract Drawing reference;
 - j. Contract Specification section and paragraph reference;
 - k. Descriptive text;
 - l. Recommended solution(s); and
 - m. Space for reply on same page as questions.

- B. Each RFI must be limited to a single issue, but shall reference other related RFI's.
- C. Route and copy RFIs in same manner as correspondence.
- D. Allow a minimum of 14 Days for Owner response to RFI.

1.04 NONCONFORMANCE REPORT

- A. Reference Document: Owner Nonconformance Report (NCR).
- B. Procedure: If Contractor proceeds to install deficient Work or fails to correct Work that in the opinion of Owner fails to conform to the Contract Documents, an NCR may be issued. Upon receipt of a NCR, Contractor shall take immediate action to correct nonconforming Work. Correction of nonconforming Work will be reviewed at progress meetings.

1.05 COORDINATION

- A. Special Coordination: Contractor shall:
 - 1. Special coordination requirements: Project includes other disciplines and Specialty Trades for such support work as hoistway venting, HVAC, Life Safety, Alarm, Communications, and Electrical.
 - 2. Special user department requirements: WSU users of Abelson will require the manual operation of the elevator for transporting material and supplies that can only be moved by elevator during the shutdown.
 - 3. Utility restrictions: WSU water supply requires a backflow preventer approved by WSU Facilities.
 - 4. Escorts in sensitive areas, sign-in procedures, and/or additional badges?: ID Badges are required on Pullman Campus.
 - 5. Loading dock restrictions – the loading dock is to remain open at all times. The loading dock can be used for load/unload only.
 - 6. Material/equipment staging areas – Material/equipment staging area can be located at the elevator being modernized.
 - 7. Access routes – Contractor may use the stairwell that leads to the ground floor from the loading dock area.
- B. General Coordination: Contractor shall:
 - 1. Coordinate with Work of other sections to ensure that all fixtures, devices, switches, outlets, ducts, pipes, and similar items can be installed as shown without modifications to framing. Provide all blockouts, raceways

and similar framing, as required;

2. Coordinate the Work and not delegate responsibility for coordination to any Subcontractor. Contractor must make available to each Subcontractor, prior to the execution of each Subcontract, copies of the Contract Documents to which the Subcontractor will be bound. Subcontractor will similarly make copies of the Contract Documents available to their respective lower-tier Subcontractors. Contractor must provide Owner copies of the written agreements between Contractor and any Subcontractor upon request;
3. Anticipate interrelationship of all Subcontractors and their relationship with the total Work;
4. Resolve differences or disputes between Subcontractors and materials suppliers concerning coordination, interference, or extent of Work between sections;
5. Be in charge of and responsible for the Work and the Project site, including directing and scheduling all Work; and
6. Cooperate with Separate Contractors. Work by others may be occurring within the building or at locations adjacent or near to the Project site. Contractor must cooperate with all such work.

C. Mechanical and Electrical Coordination: Contractor shall:

1. Resolve all "tight", restricted, or inaccessible areas involving Work of various disciplines in advance of installation.
2. If necessary, and before Work proceeds in these areas, prepare coordination drawings for review showing all Work in "tight", restricted, or inaccessible areas.
3. Provide coordination drawings necessary to resolve "tight", restricted, or inaccessible areas, at no increase in Contract Sum.

D. Job Site Field Measurements and Templates: Contractor shall:

1. Obtain field measurements required for accurate fabrication and installation of Work. Exact measurements are Contractor's responsibility.
2. Furnish or obtain templates, patterns, and setting instructions as required for installation of all Work. Contractor shall verify in field, as needed.

E. Contractor Badging:

1. All employees of Contractor and Subcontractors, vendors, or consultants retained by Contractor must obtain a Facilities Services Contractor Identification (ID) badge if they will be performing Work on the Pullman campus of Washington State University.
 - a. ID badges issued for prior Facilities Services projects are valid provided the employee/employer information is still correct and the

ID badge has not expired.

2. Facilities Services will issue the Contractor an authorization memorandum necessary to obtain ID badges. Contractor will be responsible for providing copies of the authorization letter to appropriate Subcontractors, consultants, and vendors for use in procuring ID badges for their employees.
3. ID badges will be issued by the Cougar Card Center located on the ground floor of the Compton Union Building (CUB). Employees are required to appear in person so pictures and signatures may be obtained.
 - a. To receive an ID badge, each employee will be required to present a copy of the authorization letter issued by Facilities Services, a form of picture identification, the name of their current employer and a payment of \$10.00.
 - b. The maximum effective period for an ID badge is 24 months.
 - c. When ID badges expire, if they are lost or stolen, or if the individual changes employers, the ID badge is no longer valid and the employee is required to obtain a new ID badge through the standard authorization process.
4. A valid ID badge must be worn by all employees in full view above the waist at all times when working at the Pullman campus of Washington State University.
 - a. Contractor shall enforce Owner's ID badge policy at all times at the Project site.
5. Subject to Owner review and approval, Contractor may acquire and maintain a limited number of temporary ID badges from Owner to utilize for short duration visits by employees for whom repeat visits are not anticipated. Contractor shall maintain a log indicating the date, time issued/returned, employee name, and employer for all temporary badges. The temporary ID badges shall display "Facilities Services Contractor, Temporary Badge", Contractor's name, and a number unique to that particular temporary ID badge.
6. Contractor ID badges will not function as Cougar Cards. Individuals may obtain a Cougar Card as a "community member" but those cards will not be considered an acceptable substitute for the requirement to obtain and display an ID badge.
7. ID badge expenses:
 - a. On projects with a Guaranteed Maximum Price (GMP) the expense for ID badges may be considered a Cost of the Work.
 - b. On fixed price contracts, Contractor shall include any and all expenses related to ID badges in its bid, including the actual cost of each badge. These costs will be included in the Contract Sum and not separately reimbursable.

END OF SECTION 01 31 23

PART 1 GENERAL

1.01 SUMMARY

- A. This Section specifies the administrative and procedural requirements to comply with the requirements of the General Conditions regarding preparation of Contractor's Progress Schedules, monthly update to the Progress Schedules, and other schedules as specified herein. The purposes of these schedules and reports are to:
 - 1. Ensure adequate planning and execution of the Work by Contractor;
 - 2. Establish a standard against which progress of the Work can be tracked;
 - 3. Assist in monitoring progress;
 - 4. Evaluate the impact of any changes to the Contract; and
 - 5. Support the basis for progress payments.
- B. All schedule submittals including updated Progress Schedules will be reviewed by Owner for compliance with Contract terms and the needs of the University. Review of any schedule does not constitute approval or acceptance of Contractor's construction means, methods, or sequencing, or an assessment by Owner of Contractor's ability to complete the Work within the Contract Time.

1.02 WORK INCLUDED

- A. Contractor shall submit a preliminary Progress Schedule, as required by the Pre-Construction Submittal Requirements of Section 01 33 00.
- B. Contractor shall prepare and submit Progress Schedules and reports as required by this Section. NOTE: Processing and payment of the second Application for Payment is contingent upon receipt, review, and subsequent acceptance of the updated Progress Schedule.
- C. Contractor shall participate in monthly scheduling meetings and provide updated Progress Schedules as required by this Section.
- D. Contractor shall perform Contemporaneous Period Analysis (CPA) of any delays associated with the critical path schedule as required by this Section.
- E. Contractor shall provide weekly Short-Interval (look-ahead) schedules as required by this Section.
- F. Contractor shall submit a Submittal Schedule as required by this Section.

1.03 PRELIMINARY PROGRESS SCHEDULE

- A. Contractor shall submit a preliminary Progress Schedule as part of the Pre-

Construction Submittal Requirements in Section 01 33 00 - Submittals. The schedule shall include activity description, activity start and end dates. The schedule shall emphasize milestone dates and date of Substantial Completion. Schedule shall clearly identify the critical path schedule elements.

- B. Progress Schedule shall be in Bar Chart format.
- C. Schedule activities longer than 14 days shall be sufficiently detailed.
- D. Participate in schedule update meetings and provide updated Progress Schedules.

1.04 CONTRACTOR'S PROGRESS SCHEDULE

- A. Within three calendar days of receiving WSU comments on the preliminary Progress (Bar Chart) Schedule, the Contractor shall prepare and submit a detailed Progress (Bar Chart) Schedule. This schedule shall be the Contractor's as-planned schedule and shall be used to plan, organize, and execute the Work, record and report actual performance and progress through updates, as well as show how the Contractor plans to complete all remaining Work. The accepted Contractor's Progress (Bar Chart) Schedule and subsequent updates shall be the basis for consideration and analysis of requests for time extensions.
- B. Updates:
 - 1. The Contractor is required to prepare and submit an updated Progress (Bar Chart) Schedule as agreed upon at the Pre-construction Meeting.
 - 2. The Contractor and Owner's Designated Representative will review the updated schedule and will discuss any differences or issues raised. Decisions made and agreed to by all parties are binding. However, no contracted completion dates will be modified except by an approved Contract Change Proposal and subsequent Change Order.
 - 3. Timely submission of updates is of significant and crucial importance to the management of this Project. Lack of or late receipt of updates diminishes their value to the Project. Therefore, at the Owner's Designated Representative discretion, partial payment may be withheld for a late update as may be determined by the Owner's Designated Representative in consideration of the value of the update at the time of receipt, the circumstances of the late submittal, and the level of progress achieved on the Project.
- C. The Contractor shall submit the Progress Schedule, consisting of the reports and diagrams as specified by this subsection, in the following formats quantities:
 - 1. Electronic PDF file of all reports, schedules, etc.
 - 2. Native electronic copy of the CPM Progress Schedule.
- D. Float: Contractor is not entitled to any adjustment in the Contract Time or the Contract Sum, or to any additional payment or equitable adjustment of any sort,

by reason of the loss or the use of any float time, including time between Contractor's anticipated completion date and the end of the Contract Time, whether or not the float time is described as such on the Progress Schedule.

- E. Qualifications: Contractor shall submit the resume(s) of the person(s) designated as responsible for schedules and reports (the Contractor's scheduler) Prior to commencing construction activities. Contractor's scheduler shall have demonstrable capability to plan, coordinate, execute, and monitor a CPM schedule as required for this Project. Owner's Designated Representative will approve or disapprove the Contractor's proposed scheduler. In the event of disapproval, a new scheduler shall be proposed within 7 Days and be subject to the same consideration criteria as noted above.

1.05 MONTHLY UPDATES

- A. Contractor shall prepare and submit updated Progress Schedules and participate in schedule update meetings with the Owner each month. Participation in the meeting and submission of the monthly update is a condition precedent for payment of the line item value for scheduling Work.
 - 1. Updated monthly schedule submittals:
 - a. A PDF electronic version of complete Project schedule showing the critical path accompanied by a narrative of any deviations from the previous month.
 - b. Electronic schedule file in native format.
 - c. Short-interval schedules or look-ahead schedules shall not be an acceptable submittal.
- B. Contractor shall prepare an update of the current Progress Schedule each month to reflect Work progress achieved since the previous update. Progress updating shall be performed without changes to the schedule logic or the original duration of activities. Monthly progress updating is required and necessary prior to performing a Contemporaneous Period Analysis of any change to the calculated completion date from the prior update.
- C. Contractor may, in a second report, incorporate any logic and duration changes that represent revised planning. All such changes must be clearly identified and submitted for acceptance.
- D. The Progress Schedule must clearly identify the current Substantial and Final Completion dates.
- E. Contractor shall account for all adverse weather days and similar excusable noncompensable delays. By whatever method Contractor chooses to account for such delays and events, a narrative description and CPA of the accounting shall be included with the narrative report.
- F. Monthly schedule update meetings:
 - 1. Monthly schedule update meetings shall be held at Contractor's Project

field office one week prior to the due date of Contractor's monthly Application for Payment, unless otherwise agreed.

2. The Contractor shall provide updated Project schedule submittals.
3. The Contractor shall also provide a narrative report including:
 - a. A description of the Work accomplished during the preceding period;
 - b. A discussion of the Work that had been scheduled to be performed during the previous period but was not, and explain why it was not performed; and
 - c. A discussion of the Work scheduled for the upcoming period noting any issues or events that could impact this Work. If Contractor intends to make logic or original activity duration changes, the report must specifically identify such changes.
4. Contractor, Owner, and Architect/Engineer will review these reports and will discuss any differences or issues raised. No contractual completion dates will be modified except by approved Change Order.

- G. Timely submission of updates is of significant and crucial importance to the Project. Owner may withhold payment as per Section 01 29 00 Applications for Payment.

1.06 THE CONTEMPORANEOUS PERIOD ANALYSIS

- A. It is Owner's intent to resolve all issues affecting the Contract completion date in a timely, efficient and effective manner. To achieve this goal, and in addition to contractor's obligation to follow the contractual dispute resolution procedure, Contractor shall analyze any delays to the critical path or completion date by application of the Contemporaneous Period Analysis method. A CPA shall normally coincide with the monthly schedule update meetings.
- B. Assessment of impacts due to changes or other events, in accordance with the CPA method, must be based on the most recent accepted updated Progress Schedule. No logic or duration changes shall be made to updates until progress related data has been incorporated into the Progress Schedule and the Progress Schedule is updated to reflect actual progress for the period. All data shall be provided to Owner.
- C. Submission of an accurate and properly updated Progress Schedule and completion of the Contemporaneous Period Analysis are conditions precedent to the review and approval of any request for an extension in the Contract Time. Owner may assess liquidated damages, if any, regardless of the status of any requests for time extensions pending, until any such requests are resolved.
- D. The process for preparing and submitting a CPA is as follows:
 1. Contractor will notify Owner in writing of event(s) or occurrence(s) which constitute a delay of the critical path or completion date affecting progress

of the Work.

2. Contractor shall evaluate the event(s) or occurrence(s) and produce a narrative of the resulting delay describing the effect upon concurrent or logically connected subsequent activities.
 3. Consistent with the narrative, Contractor shall produce a subnet to graphically describe the event(s) or occurrence(s) and the effect upon the Progress Schedule.
 4. Contractor will recalculate the Progress Schedule and provide an updated PDF and Native Progress Schedule.
- E. The CPA will be reviewed at the monthly schedule update meeting or at a special meeting scheduled with Owner. At the CPA review meeting, Contractor shall present the CPA and respond to questions.
- F. Until and unless substantiated delay is accepted by Owner, the time effect shall not be incorporated into any monthly update. If accepted after a monthly update in which the event(s) or occurrence(s) took place, that monthly update may be recalculated, resubmitted and shall be included in an approved Change Order.

1.07 SHORT-INTERVAL SCHEDULE

- A. Prepare a weekly Short-Interval (look-ahead) Schedule based upon the Contractor's Work plan and the updated Progress Schedule.
- B. Format for the Short-Interval (look-ahead) Schedule shall be acceptable to Owner. The format shall include comment annotation as necessary.
- C. Content of the Short-Interval (look-ahead) Schedule shall include the Work planned for the next 3-week period and the Work that was performed in the previous week.
- D. Copies of the Short-Interval (look-ahead) Schedule shall be provided at the weekly progress meetings to be used as a basis for discussion of progress and of planned Work.

1.08 SUBMITTAL SCHEDULE

- A. Provide a Submittal Schedule within 10 Days of Owner's Acceptance of the Project Schedule per Section 01 33 00 - Submittals.

PART 2 PRODUCTS

2.01 SCHEDULING SOFTWARE

- A. Contractor shall utilize Microsoft Project or Primavera P6 unless otherwise agreed to by Owner.
- B. Contractor shall provide a licensed and royalty pre-paid copy of the mutually

agreed upon scheduling software. The selected software must be capable of performing target-to-current schedule comparisons, cost and resource loading functions and have the option of executing calculations in retained logic. Activities must be able to process lead and lag time relationships, start-to-finish or finish-to-finish relationships, and be capable of being hammocked, if required. The software must be registered with Owner and be provided in a format compatible with Owner's systems.

END OF SECTION 01 32 13

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction photography.
- B. Construction photography of Work-in-progress.

1.02 GENERAL

- A. Contractor shall provide photographs taken from locations coordinated with Owner.
- B. Photographer: Experienced in taking construction photography.
- C. Equipment: All photos shall be in digital format.
- D. Video images may be acceptable for certain operations. Confirm with Owner.

PART 2 PRODUCTS

2.01 PRECONSTRUCTION PHOTOGRAPHS

- A. Contractor shall provide electronic files containing photographs of the existing conditions at the site, surroundings, and haul routes per the Pre-Construction Submittal Requirements of Section 01 33 00. Coordinate with Owner the extent of the preconstruction photographic record that is required.

2.02 CONSTRUCTION PHOTOGRAPHS

- A. Contractor shall provide electronic files containing photographs of construction progress on a monthly basis.

2.03 PHOTOGRAPHIC SUBMITTALS

- A. Photographs shall be submitted each month during the Contract Time, or as otherwise agreed upon by Owner. The number of photographs shall be sufficient to document the site to the satisfaction of the Owner and Contractor.
- B. Photographs shall be representative of Project progress, showing all major Work and any critical concealed conditions.
- C. The files in each monthly photograph submittal must each be labeled with the Project name, Project number, and submittal date. Additionally, each photograph shall be dated, labeled, and accompanied by a brief description identifying the location and direction the photo was taken. Date stamp using month/date/year format.

PART 3 EXECUTION

3.01 PRECONSTRUCTION PHOTOGRAPHS

- A. Coordinate the scope of preconstruction photographic record survey with Owner.
- B. Take preconstruction photographs to identify and establish a baseline record of existing conditions.
- C. A preconstruction photographic record survey shall include, but not be limited to, all areas that may be impacted or damaged by construction phase activities.
- D. The extent or nature of the existing site and adjacent surroundings shall be thoroughly documented.

3.02 CONSTRUCTION PHOTOGRAPHS

- A. Contractor shall take construction photographs each month during construction of the Project.
- B. Contractor shall document concealed conditions (once exposed) that differ from expectations.
 - 1. It is critical that Contractor photographically document concealed conditions that may benefit Owner's future maintenance and operations activities. Take photographs (with a reference point) prior to cover or concealment. For example:
 - a. Underground pipe arrangements/valves/structures.
 - b. Under-slab utility rough-in.
 - c. Wall cavity utility routing.
 - d. Above-ceiling installation after ceiling support system installed, but prior to cover.
 - 2. The photograph record described above shall be considered minimum and shall not be deemed to limit the quantity or quality of the photographic record.

END OF SECTION 01 32 33

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes administrative and procedural requirements for submittals required for performance of the Work, including:
 - 1. Pre-Construction Submittal Requirements;
 - 2. Shop Drawings;
 - 3. Product data;
 - 4. Samples; and
 - 5. Mock-ups.

1.02 SUBMITTAL PROCEDURES

- A. Provide submittal schedule as required by Section 01 32 13 – Progress Schedule. The Submittal Schedule shall meet all of the requirements below.
- B. Coordination: Review of the submittals by Owner is not for the purpose of determining their accuracy and/or completeness, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of Contractor as required by the Contract Documents.
 - 1. Owner reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are provided.
 - 2. Allow at least 14 Days for review of each submittal by Owner. Complex or interrelated submittals, or the submission of multiple submittals at or near the same time, will require additional time. Provide a "priority list" when submitting multiple submittals at or near the same time. Submittal sequencing should coincide with the submittal schedule (see Section 01 32 13 – Progress Schedule).
- C. Submittal Preparation: Place a permanent label or title block on each submittal for identification.
 - 1. Include the following information on the label or title block:
 - a. Project name, Project number, and date;
 - b. Name and address of Owner;
 - c. Name and address of Contractor and submitting Subcontractor, if applicable;
 - d. Name and address of supplier and manufacturer, if applicable;
 - e. Number and title of appropriate Specification section; and
 - f. Drawing number and detail references, as appropriate.

2. Provide adequate space for action stamps to record review.
- D. Submittal Transmittal: Package submittals in manageable quantities and transmit to Owner and Architect/Engineer, if applicable, simultaneously. Submittals received from sources other than Contractor will be returned without action. By submitting submittals, Contractor represents to Owner that Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements, and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within each submittal with the requirements of the Work and of the Contract Documents.
1. Address one topic or related set of topics in each transmittal based upon Specification sections (i.e., mechanical items should not be submitted under same transmittal with electrical items).
 2. Clearly call out relevant information, deviations, and requests for data, including minor variations from the Contract Documents on both the transmittal and all copies of a submittal.
 3. Shop drawings, product data, samples, and mock-ups shall be submitted to Owner's Designated Representative for review/approval. The minimum number of submittals to be provided are:
 - a. Pre-Construction, Shop Drawings, Product Data: Electronic copies.
 - b. Samples: As required by the technical Specification section.
 - c. Mock-ups: As required by the technical Specification section.
 - d. Demonstrations: As required to facilitate installation and inspection.
 - e. Reference technical Specifications for additional submittal requirements.
 4. Owner may modify the required submittal quantities.
- E. Material and Color Submittal: Submit samples of actual colors and/or materials.
- F. Number submittals by Specification section number and revision letter.
- G. In the event of the need to "revise and resubmit" a submittal, resubmit same in acceptable form/content, clearly identifying deviations from the previous rejected submittal. Contractor shall also keep accurate records of the receipt, review, and delivery of all submittals and shall submit to Owner, as requested, status reports.
- H. Provide a final electronic copy of all approved submittals.

1.03 PRE-CONSTRUCTION SUBMITTAL REQUIREMENTS

- A. All Pre-Construction Submittals are required before onsite construction activities may commence. Contractor shall submit the following Pre-

Construction Submittals **within 15 days** of Notice to Proceed. Submittal review for these items only shall be supplied **within 14 days** of receipt by Owner.

1. Indoor Air Quality Management Plan
2. Site Safety and Health Plan (for information only)
3. Quality Control / Quality Assurance Plan
4. Waste Management Plan
5. Progress Schedule
6. Schedule of Values
7. Pre-Construction Photographs
8. Emergency Points of Contact
9. List of Subs and Suppliers
10. Demolition Plan
11. Asbestos Safety Plan
12. List of Long Lead Items

1.04 SHOP DRAWINGS

- A. Submit Shop Drawings drawn to accurate scale. Do not reproduce Contract Documents or copy standard information for use as Shop Drawings. Standard information prepared without specific references to the Project will not be accepted as a Shop Drawing.
- B. Shop Drawings Include: fabrication and installation drawings, setting diagrams, schedules, patterns, templates, and similar drawings. Include the following information:
 1. Dimensions;
 2. Products and materials;
 3. Compliance with specified standards;
 4. Coordination requirements;
 5. Notation of dimensions established by field measurements;
 6. Any deviation from Drawings or Specifications; and
 7. Date when review is requested to maintain Progress Schedule.
- C. Coordination Drawings:
 1. Contractor and Subcontractors shall prepare and submit coordinated Shop Drawings at a scale not less than 1/4" = 1'0". Clearly show how the Work is to be installed or constructed in relation to the Work of other Subcontractors. Required coordinated Shop Drawings shall include but not be limited to the following:
 - a. Contractor shall prepare a drawing indicating the reflected ceiling plan, beam soffit elevation, ceiling heights, roof openings, and other items to be installed.

- b. HVAC and controls Subcontractors shall prepare drawings indicating location, size, and elevation of ductwork, hangers, seismic bracing, grilles, registers, equipment, access (clear) areas to service equipment, and ceiling access doors.
 - c. Plumbing Subcontractor shall prepare drawings indicating location and elevation of piping, hangers, seismic bracing, valves, cleanouts, access doors, fixtures, and required access (clear) areas for service of fixtures.
 - d. Fire sprinkler Subcontractor shall prepare drawings indicating the layout of the complete sprinkler system including hangers, seismic bracing locations, and pipe runs including branch lines and riser diagrams. Indicate on a separate ceiling plan the location of sprinkler heads.
 - e. Electrical Subcontractor and fire alarm Subcontractor shall prepare drawings indicating the layout of fixtures, conduit runs 2" in diameter or greater, clearances, pull boxes, junction boxes, sound system speakers, cable trays and hangers, electrical equipment, panels, and access areas for equipment and panels.
2. Contractor shall meet with its Subcontractors to resolve any apparent conflicts in the coordinated Shop Drawings.
3. When these drawings have been coordinated to the satisfaction of Contractor and each applicable Subcontractor, Contractor and the applicable Subcontractor will sign and date a certification indicating that:
 - a. all related conditions have been reviewed;
 - b. no apparent conflicts exist;
 - c. the requirements of the Contract Documents have been complied with; and
 - d. all elements of a complete installation are included.
4. Maintain and submit all coordinated Shop Drawings as part of the Project Record (see Section 01 78 39 – Project Record).
5. Owner encourages Contractor to conduct its coordination effort through the use of digital models and Building Information Modeling (BIM) technology. If Owner requests, Contractor must produce submittals acceptable to Owner, but the submittals must satisfy the requirements identified above.

1.05 PRODUCT DATA

- A. Product data includes: Manufacturer's printed installation instructions, catalog cuts, standard color charts, rough-in diagrams and templates, standard wiring diagrams, and performance curves.
 1. Where product data must be specially prepared because standard printed data is not suitable, the submittal must be provided as a Shop

Drawing.

- B. Requirements: Mark each copy to show applicable options. Include the following information:
 - 1. Manufacturer's printed recommendations;
 - 2. Compliance with recognized trade-association standards;
 - 3. Compliance with recognized testing-agency standards;
 - 4. Application of testing-agency labels and seals;
 - 5. Notation of dimensions verified by field measurement;
 - 6. Notation of coordination requirements;
 - 7. Any deviation from Drawings or Specifications; and
 - 8. Date when review requested to maintain Progress Schedule.

1.06 SAMPLES AND MOCK-UPS

- A. Submit samples and mock-ups that are identical to the material or product proposed. Samples include partial sections of components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern.
 - 1. Package samples to facilitate review. Include the following:
 - a. Generic description of the sample;
 - b. Source;
 - c. Product name or name of manufacturer;
 - d. Compliance with recognized standards;
 - e. Availability and delivery time; and
 - f. Specification section.
- B. Requirements: Submit samples and mock-ups for review of kind, color, pattern, and texture for a comparison of these characteristics before actual installation.
 - 1. Where variation in color, pattern, texture or other characteristics are inherent in the material, submit not less than four units to show limits of variation.
- C. Submittals: Where samples are for selection of appearance from a range of standard choices, submit a full set of choices for the material or products.
- D. Maintain sets of approved samples and mock-ups at the Project site for quality comparisons throughout the course of construction.
- E. Demolish and remove all samples and mock-ups prior to Substantial Completion but not sooner than directed by Owner.

1.07 OWNER's ACTION

- A. Review: Except for submittals for information or a similar purpose, Owner will review each submittal, mark to indicate action taken, and return promptly.
- B. Owner approval of submittals does not supersede or alter Contract Document requirements.

END OF SECTION 01 33 00

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes the administrative and procedural requirements for any general alterations to be performed during the Project, including but not limited to products, transition and adjustments, cutting, patching, and repair and cleaning.

1.02 SUBMITTALS

- A. Contractor shall submit a written request in advance of cutting or alteration that impacts:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather-exposed or moisture-resistant elements.
 - 3. Efficiency, maintenance, or safety of any operational elements.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or a separate contractor.
- B. Contractor must include in its written request, when required:
 - 1. Identification of Project.
 - 2. Location and description of affected Work.
 - 3. Necessity for cutting or alteration.
 - 4. Description of proposed Work and products to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on Work of Owner or separate contractor.
 - 7. Written permission of affected separate contractor.
 - 8. Date and time Work will be executed.

1.03 QUALITY ASSURANCE

- A. Limits of Work:
 - 1. Contractor shall maintain existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and nonstructural roofing material) not indicated to be removed; do not cut such existing conditions beyond indicated limits.
 - 2. Contractor shall maintain existing interior nonstructural elements (interior walls, doors, floor coverings, and ceiling systems) not indicated to be removed; do not cut such existing conditions beyond indicated limits.
 - 3. Contractor shall maintain existing nonshell, nonstructural components (walls, flooring, and ceilings) not indicated to be removed; do not cut such existing conditions beyond indicated limits.

- B. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- C. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:
 - 1. Primary operational systems and equipment.
 - 2. Air or smoke barriers.
 - 3. Fire-suppression systems.
 - 4. Mechanical systems piping and ducts.
 - 5. Control systems.
 - 6. Communication systems.
 - 7. Conveying systems.
 - 8. Electrical wiring systems.
 - 9. All low voltage systems.
 - 10. Operating systems of special construction in Division 13.
 - 11. Other operating systems as appropriate.
- D. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended that result in increased maintenance or decreased operational life or void of warranty, or could adversely affect safety. Miscellaneous elements include the following:
 - 1. Water, moisture, or vapor barriers.
 - 2. Firestopping or fire barriers.
 - 3. Membranes and flashings.
 - 4. Exterior curtain-wall construction.
 - 5. Equipment supports.
 - 6. Piping, ductwork, vessels, and equipment.
 - 7. Noise and vibration-control elements and systems.
 - 8. Other miscellaneous systems as appropriate.
- E. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exterior conditions or in occupied spaces in a manner that would, in Owner's opinion, reduce the building's aesthetic qualities. Contractor shall remove and replace conditions that have been cut and patched in a visually unsatisfactory manner.

PART 2 PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK

- A. New Materials: Match existing products and Work when patching and extending Work.

- B. Type and Quality of Existing Products: Determine by inspection and testing products where necessary; refer to existing Work as a standard.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents related to that portion of the Work, as well as other information available to Contractor, take field measurements, and inspect any existing conditions, including elements subject to damage or movement during cutting and patching.
- B. After uncovering existing Work, inspect conditions affecting performance of Work.
- C. By beginning any cutting or patching, Contractor represents and warrants its acceptance of existing conditions.
- D. Contractor shall verify that demolition is complete and areas are ready for installation of new Work.

3.02 PREPARATION

- A. Contractor shall cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- B. Contractor shall remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, deteriorated masonry, concrete, and disturbed subgrade material. Replace materials as specified for finished Work.
- C. Contractor shall remove debris and abandoned items from area and from concealed spaces.
- D. Contractor shall prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.
- E. Contractor shall close openings in exterior surfaces to protect existing Work. Contractor shall insulate ductwork and piping to prevent moisture and condensation in exposed areas.
- F. Contractor shall provide temporary supports to ensure structural integrity of the Work. Provide devices and methods to protect Work from damage.

3.03 PERFORMANCE

- A. Contractor shall coordinate alterations and renovations to expedite completion of the Work.

- B. Remove, cut, and patch Work in a manner to minimize damage. Provide a means of restoring products and finishes to their original or specified condition.
- C. Refinish remaining existing surfaces in renovated rooms and spaces, to specified condition for each material, with a neat and clean transition to adjacent finishes.
- D. In addition to specified replacement of equipment and fixtures, restore existing plumbing, heating, ventilation, air conditioning, and electrical systems to full original operational condition.
- E. Install products as specified in individual sections.
- F. Remove samples of installed Work for testing when requested.
- G. Provide openings in the Work for penetration of mechanical and electrical Work.
- H. Cut rigid materials using the appropriate equipment and tool. Pneumatic tools not allowed without prior approval.
 - 1. Concrete Walls: Saw-cut walls using accurately located straight lines, unless directed otherwise. Minimize overcuts.
 - 2. Masonry Walls: Saw-cut along mortar joints, cutting block uniformly in accurately located straight lines, unless otherwise directed. Remove all mortar adhering to edges. Overcuts not allowed.
 - 3. Wood Framed Walls: Demolish plaster or gypsum wallboard, removing wall framing only as required. Cut wall finish materials in straight uniform lines.
 - 4. Concrete Floors: Saw-cut floors and remove. Core drill as required.
- I. Restore Work with new products in accordance with requirements of Contract Documents.
- J. Fit Work to existing pipes, sleeves, ducts, conduit, and other penetrations through surfaces, while maintaining assemblies.
- K. At penetrations of fire rated walls, partitions, ceilings, or floors, completely seal voids with firestopping material to full thickness of the penetrated element, while maintaining assemblies.
- L. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 01 35 16

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements pertaining to regulatory requirements.
- B. List of regulatory requirements.

1.02 CONTRACTOR RESPONSIBILITY

- A. Contractor is solely responsible for compliance with all codes, laws, or regulatory requirements.
- B. Inspections performed or not performed by the City of Pullman, Labor and Industries, Owner, Owner Designated Representative, or others who are under contract to Owner do not waive or change Contractor's obligations, nor do such inspections constitute approval or acceptance of portions of the Work.

1.03 CONTRACTOR REQUIREMENTS

- A. Contractor shall perform the Work in accordance with the requirements of governing agencies and applicable regulatory requirements, including those included in this Section and elsewhere in the Contract Documents. Contractor must comply with all applicable laws, building codes, regulations, and rules, including, when applicable, the Washington State University campus code.
- B. Contractor shall schedule and coordinate inspections and gain approvals required by the City of Pullman and other governing agencies in a timely manner and as required for Owner occupancy of the Project within the Contract Time.
- C. Contractor shall inform the City of Pullman Building and Fire Departments, Labor and Industries, and other governing agencies of changes in the Work affecting regulatory requirements in a timely manner.
- D. Contractor shall promptly forward to Owner all inspection reports, orders, permits, and other directives and correspondence received from the City of Pullman inspectors or other governing agencies having jurisdiction over the Work.
- E. Contractor shall promptly notify Owner when the Contract Documents appear to be in conflict with Regulatory Requirements.
- F. Contractor shall, at all times, use its best efforts and exercise its judgment as an experienced contractor to adopt and implement policies and practices designed to avoid work stoppages, slowdowns, disputes, or strikes where reasonably possible and practical under the circumstances, and shall, at all times, maintain Project-wide labor harmony.

1.04 REGULATORY REQUIREMENTS

- A. Authority Having Jurisdiction (AHJ) shall be the organization, office, or individual responsible for enforcing the requirements of the applicable code(s) or standard(s), and or for approving equipment, materials, installation(s), or procedure(s).
- B. Regulatory authorities establish minimum requirement levels. Where provisions of the Contract Documents and regulatory requirements differ or conflict, the more stringent requirement governs.
- C. Regulatory requirements added by other sections of the Contract Documents or otherwise applicable are binding upon the Work in accordance with the provisions of this Section. The regulatory-requirements list provided below is intended to assist Contractor in determining the regulatory requirements for the Project, but neither the inclusion nor omission of any item from the list shall be construed to relieve Contractor of obligations that otherwise exist under the law or the Contract.

1.05 LIST OF REGULATORY REQUIREMENTS

- A. International Building Code (IBC), current adopted edition.
- B. International Fire Code (IFC), current adopted edition.
- C. National Fire Protection Association (NFPA) Codes.
- D. American Society of Mechanical Engineers (ASME), ASME A17.1 Safety Code for Elevators and Escalators, current adopted edition.
- E. American Society of Mechanical Engineers (ASME), ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts, current adopted edition.
- F. State of Washington, WAC-51-50-1101, Accessibility, as adopted by the State of Washington.
- G. International Code Council (ICC)/American National Standards Institute (ANSI) A117.1 Accessible and Usable Buildings and Facilities, current adopted edition.
- H. State of Washington, WAC Chapters 173, 246, and 296, as applicable.
- I. U.S. Environmental Protection Agency 40 CFR, as applicable.
- J. U.S. Transportation Department Title 49, Parts Pertaining to Transportation of Hazardous Materials.
- K. U.S. Nuclear Regulatory Commission Title 10, Parts Pertaining To Radioactive Materials Management.
- L. Washington State Ventilation and Indoor Air Quality Code, WAC 51-13.
- M. Washington State Energy Code, WAC 51-11C. Shortened

- N. Mechanical Work: International Mechanical Code (IMC), current adopted edition.
- O. Plumbing Work: Uniform Plumbing Code (UPC) as amended and adopted by the State of Washington, in the Washington Administrative Code (WAC).
- P. Federal Emergency Management Agency (FEMA) requirements for floodway/floodplain development.
- Q. Electrical Work:
 - 1. NFPA 70, National Electrical Code (NEC), most recent adopted edition.
 - 2. Underwriters' Laboratories (UL).
 - 3. National Electrical Manufacturer's Association (NEMA).
 - 4. National Electric Safety Code (NESC).

1.06 PERMITS REQUIRED

- A. Contractor shall obtain and pay for all required building permits, including any renewals. Contractor shall identify costs for permits on the Schedule of Values for permits obtained.
- B. All trade permits (e.g. electrical, pressure vessel, elevator, etc.) must be included in each Subcontractor bid.
- C. Owner obtains permits for the following facilities and activities.
 - 1. U.S. Army Corps of Engineers:
 - a. Wetlands (404).
 - 2. Permits and/or Approvals from the DOE or local environmental authority:
 - a. Stormwater from Construction Sites (Notice of Intent).
 - b. Wastewater Discharge Facilities.
 - c. Well Construction (including Well Abandonment).
 - d. Water Rights.
 - e. Notice of Construction (Air Pollution Sources).
 - f. SEPA.
 - g. Floodway/Floodplain development.

END OF SECTION 01 41 00

PART 1 GENERAL

1.01 SUMMARY

- A. Conduct portions of the Work requiring special procedures due to hazardous materials and conditions in accordance with regulatory standards and guidance provided in this Section.

1.02 SUBMITTALS

- A. Contractor shall deliver a current copy of its site specific Health and Safety Plan to the Owner per the Pre-Construction Submittal Requirements of Section 01 33 00. The submittal must include each Subcontractor's site specific Health and Safety Plan. Submittal to Owner is for information only, not for review, acceptance, or approval of the Health and Safety Plan, nor for analysis of content or completeness.

1.03 QUALIFICATIONS OF HEALTH AND SAFETY PERSONNEL

- A. Contractor shall employ a competent person for each hazardous construction task in accordance with the requirements of WAC 296-155.
- B. Contractor shall submit to Owner the names of its employees performing duties as competent persons, as well as the names of Subcontractor employees performing duties as competent persons.

1.04 HAZARDOUS MATERIALS MANAGEMENT

- A. Dangerous Waste Management:
 - 1. Contractor agrees and acknowledges that:
 - a. Contractor has direct and exclusive control over the Work and operations at the Project site and is responsible for any Contractor generated, created, or disturbed Washington State dangerous waste and its collection, labeling, accumulation, transportation, and disposal. Owner's EH&S department will provide assistance to Contractor upon request, and will coordinate transportation and disposal of Project-generated Washington State dangerous waste.
 - b. Contractor must provide Owner immediate notification of any pre-existing unanticipated Washington State dangerous waste or site contamination.
 - 2. Contractor is responsible for securing its own waste generator identification number, and Contractor shall sign all manifests associated with the Contractor-generated waste.
 - a. Contractor shall obtain an EPA/State ID number in accordance with WAC 173-303-360 before conducting activities generating chemical waste designated as Washington State dangerous waste.

- b. Contractor shall cancel the EPA/State ID number when:
 - 1) All activities generating or managing waste have ceased;
 - 2) All regulated wastes have been removed from the Project site under proper manifests, and all site contamination is remediated; and
 - 3) All annual dangerous-waste reporting requirements are complete.
 - c. Contractor may call the Washington State Department of Ecology (DOE) to request a reporting package for early submittal.
 - d. Contractor shall furnish to Owner's EH&S Department, Pullman, WA, within 3 Days from submittal or receipt, copies of the following documents:
 - 1) Form 2 Notification of Dangerous Waste Activities;
 - 2) All signed Uniform Hazardous Waste Manifests (original copy when shipping wastes and copy returned from the treatment, storage, disposal, or recycling facility), Land Disposal Restriction Notification forms, Certificates of Recycling/Disposal/Destruction, and Exception Reports;
 - 3) All Annual Reports; and
 - 4) All correspondence from the DOE.
 - 3. Owner remains responsible for Washington State dangerous waste and site contamination: (1) pre-existing Contractor's activities at the site, (2) not listed in the Contract Documents, and (3) not disturbed by Contractor through improper construction activities.
 - 4. For waste identified in contract document and for unanticipated Washington State dangerous waste or site contamination discovered during the course of the Work on the site, Contractor shall:
 - a. Collect, containerize, and accumulate all Washington State dangerous waste or site contamination in accordance with applicable Federal, State, and local regulations.
 - b. Coordinate all transportation and disposal activities through Owner's EH&S department, who will utilize the Washington State Hazardous Waste Disposal Services contract or equivalent pre-approved contractor. Owner's disposal contractor shall complete all applicable dangerous waste shipping papers including all Uniform Hazardous Waste Manifests, Land Disposal Restriction Notification forms, profiles and barrel packing lists.
- B. Hazardous Materials Spills and Releases:**
- 1. Contractor and Subcontractor(s) shall immediately report all hazardous materials spills at the Project site to Owner. If a hazardous material spill occurs at a Project site in Whitman County, and if any individual may be affected by the spill, Contractor and/or Subcontractor(s) must immediately

report the spill to Whitcom (emergency dispatch). In other counties, Contractor and Subcontractor(s) must report spills to the appropriate emergency response agency in that area.

2. Contractor shall be responsible for spill containment, cleanup, decontamination, post-cleanup monitoring, disposal of any wastes generated from cleanup activities, and generation of any reports required by regulatory agencies and/or regulations including, but not limited to, WAC 173-303 and WAC 173-340.

C. Spill Prevention Control and Countermeasures:

1. Owner's EH&S department is responsible for Owner's SPCC Plan. Any of Contractor's on-site activities involving the handling and/or storage of materials meeting the definition of oil per 40 CFR 112 in containers and/or equipment with a capacity greater than 42 gallons must be included in the Owner's SPCC Plan. Contractor shall provide Owner's EH&S department with an inventory of this equipment or containers at least 14 Days prior to the equipment or containers being brought to the Project site.
2. Contractor shall provide and utilize secondary containment for containers and tanks of oil with a capacity greater than 42 gallons. Owner may waive this requirement in its sole discretion upon Contractor's request after Owner reviews Contractor's written explanation as to why secondary containment is unnecessary for a particular container or tank.

D. Asbestos:

1. All Contractor employees involved in excavation or demolition shall be asbestos awareness trained. Contractor shall submit to Owner the name of Contractor's competent trainer, the names of each of Contractor's trained personnel, and the date of each training. Contractor's submittal must also state that the training was conducted for asbestos awareness for the Work.
2. All asbestos abatement Work shall be performed by persons trained in Washington State-approved courses and certified by the State of Washington.
3. All asbestos abatement Work performed shall be overseen by a consultant hired by the Owner to ensure the Work meets regulatory standards and Owner requirements.
4. All asbestos cement pipe Work shall be performed by persons trained in an asbestos cement pipe procedures course whose content is reviewed and approved by the Washington State Department of Labor and Industries, per WAC 296-62-07722(3)(ii)(C).
5. If suspected asbestos-containing material is discovered during Contractor's execution of the Work, and abatement of the material is not a requirement of the Contract, Contractor shall suspend any Work that affects the material and immediately notify Owner. Contractor shall safeguard the area to prevent entry until certified personnel determine

whether the material is non-asbestos containing or the material is abated, at which time the Work in that area may resume.

E. Lead:

1. Owner shall inform Contractor of lead-containing coatings and materials that the Contractor may encounter while performing the Work. These materials or coatings may release lead into the air, soil, or water, or may be a source of contamination due to skin contact. Owner shall provide general data about the percentage of lead content of each suspected lead-containing material or coating and/or provide Contractor with data showing the amount of lead per surface area.
2. Contractor is responsible for protecting its employees from lead exposure, as required by Washington law.
3. Contractor shall manage all paint chips, building components, soil, and/or other material considered by Owner to be dangerous waste according to the Dangerous Waste Management paragraph.

F. Polychlorinated Biphenyls:

1. Owner may survey oil-filled equipment prior to commencement of construction. This equipment includes, but is not limited to, transformers, electrical switches, hydraulic elevators, emergency generators, capacitors and light ballasts. Owner's survey shall usually determine if the equipment is filled with oil containing polychlorinated biphenyl (PCB). Owner shall remove, or arrange for the removal of, any equipment that contains oil in concentrations qualifying the equipment as dangerous waste per WAC 173-303.
2. If oil-filled equipment is discovered during Contractor's execution of the Work, Contractor shall suspend any Work that may affect the equipment and immediately notify Owner. Owner shall test the equipment and determine the appropriate management method for the equipment and the oil it contains.

G. Mercury:

1. Owner may survey all equipment suspected of containing mercury prior to commencement of construction. This equipment includes, but is not limited to, switches and thermostats. Owner's survey shall determine if the equipment contains mercury. Owner shall remove, or arrange for the removal of, any such equipment.
2. If mercury-containing equipment is discovered during Contractor's execution of the Work, Contractor shall suspend any Work that may affect the equipment and immediately notify Owner. Owner shall test the equipment and determine the appropriate management method for the equipment and the mercury it contains.

H. Hazardous Materials or Equipment:

1. Fixed equipment such as fume hoods, safety cabinets, and vacuum systems, and related ductwork, fans, and appurtenances, may contain or be contaminated with hazardous materials. Owner may test this equipment to determine what, if any, hazards are present. If equipment contains a hazard, or if the equipment itself is a dangerous waste, Owner shall inform Contractor of the nature of the hazard including any information necessary for Contractor to protect its workers. If the equipment is a dangerous waste, Contractor shall dispose of, or make arrangements for the disposal of, the equipment per the above Dangerous Waste Management paragraph.

I. Underground Storage Tanks (USTs):

1. Removal of USTs shall be performed in accordance with DOE regulations. Removal of existing USTs shall be performed by a DOE-certified UST removal company following the submittal of required forms. Copies of forms must be provided to Owner's EH&S department at the same time they are submitted to DOE.
2. Installation of any UST must be done by DOE-certified UST installers. The installation shall be permitted by DOE following the submittal of completed UST installation forms. Copies of forms must be provided to Owner at the same time they are submitted to DOE.
3. Retrofits and upgrades of existing USTs must be completed by DOE certified companies. Records of the retrofit or upgrade must be submitted to DOE following the retrofit or upgrade. Copies of such records must be provided to Owner at the same time they are submitted to DOE.
4. If a UST is discovered during Contractor's execution of the Work, Contractor shall suspend any Work that may affect the UST and immediately notify Owner. Owner will determine if UST must be sampled and/or removed. If necessary, Owner shall engage a certified company to remove UST.

J. Department of Homeland Security (DHS) Chemicals of Interest (COI)

1. Contractor and Subcontractors shall report any COI to Owner as required by the DHS. Contractor may contact Owner's Representative in conjunction with the University's EH&S Department for the specific means of reporting.

1.05 AIR POLLUTION

- A. Contractor shall comply with all provisions of the Owner's Air Operating Permit, WAC 173-400 and WAC 173-401 requirements as applicable.
- B. Contractor shall control pollutants, such as diesel emissions, chemical emissions, and dust generated by the Project, so that pollutants do not adversely impact the Project site or the surrounding-area air quality.

- C. Contractor shall submit to Owner within 30 Days of the Notice to Proceed a list of any stationary air emission-generating equipment included in the Work, such as: fuel-powered electrical generators, internal combustion engines, boilers, paint booths, CFC-containing equipment, or other regulated emission sources. Contractor shall assist Owner in the preparation of necessary permit applications, and Owner shall obtain necessary permits. Contractor shall abide by any conditions or requirements of permits.
- D. Per WAC 173-400, Contractor shall mitigate all fugitive emissions (such as dust, vehicle exhausts, and other emissions that do not pass through a stack, chimney, or vent) generated by the Work. Contractor shall mitigate dust at the Project site throughout the entire duration of the Work. Dust mitigation may include application of specific chemical compounds approved by Owner, or may be accomplished with intermittent watering and sprinkling at such a frequency as will satisfactorily settle dust (excluding paved surfaces). Paved surfaces shall be cleaned mechanically without the discharge of water or chemicals to storm drains and/or surface waters. Under no circumstances shall Contractor permit dust mitigation cause soil erosion or pollution of surface waters.
- E. No materials shall be burned without required permits. If permitted burning is done, odors shall be minimized in accordance with the Owner's Air Operating Permit.
- F. CFCs (chlorofluorocarbons) or HCFCs (hydrochlorofluorocarbons) are not permitted as refrigerants in new or renovation projects. New permanently installed refrigeration equipment, such as chillers, temperature controlled chambers, air conditioning equipment, compressors, etc., must contain HFC (hydrofluorocarbon) refrigerants only (i.e., R-134A, R-404A, or R-507). At the completion of the Project, Contractor must provide detailed documentation to Owner about the refrigeration equipment installed, including identifying markings, capacity, and type of refrigerant. Refrigerant must be installed only by persons certified to do so.
- G. Indoor Air Quality:
 - 1. Owner shall notify Contractor of the location of fresh air supply intakes for buildings in the immediate area of the Work, and of fresh air supply intakes for buildings that may be affected by emissions from Contractor operations.
 - 2. Contractor shall notify Owner 3 Days prior to commencing Work in which Contractor must operate vehicles or equipment in areas where fresh air supply intakes are located.
 - 3. Contractor shall notify Owner 3 Days prior to commencing Work in which Contractor will be using solvents or other volatile chemicals, or processes which emit fumes, smoke, or strong odors that may affect fresh air supply intakes, or may enter Owner's buildings through doorways or windows.
 - 4. Contractor shall not allow its activities that emit vapors, fumes, smoke or strong odors to negatively affect fresh air supply intakes.

5. If air releases of hazardous chemicals must occur, Contractor shall submit no later than 30 Days after the Notice to Proceed a chemical release plan detailing how such incidents may adversely affect Owner. Such a plan shall also specify protection to be provided to the employees of Owner and Contractor actions required to minimize chemical overexposure.
6. During welding activity, Contractor shall confine fumes to the Project site, and the fumes must not adversely affect Owner's employees or students.

1.06 PUBLIC HEALTH

A. Solid Waste Disposal:

1. Contractor shall legally dispose of or recycle all solid waste at an off-site location. Contractor shall not burn, dump, or bury waste materials, debris, or rubbish on Owner property. Contractor shall clean the Project site at the end of each work shift. Contractor is liable for any and all damage resulting from improper waste handling and disposal (see Section 07 74 19 - Construction Waste Management).

B. Environmental Noise:

1. Per WAC 173-60, and applicable local requirements, Contractor shall not exceed maximum permissible environmental noise levels for the duration of the Work.

C. General Sanitation:

1. Per WAC 246-203, Contractor shall supply adequate water for drinking and hand washing purposes. The use of common drinking cups or towels is prohibited. For hand washing purposes, Contractor shall supply hot running water, soap, disposable towels, and a waste receptacle.

D. Drinking Water Protection:

1. Per WAC 246-290 and 246-291, Contractor shall protect all public water supplies. No portion of a public water system containing potable water shall be put into service nor shall service be resumed until the facility has been effectively disinfected and a satisfactory bacteriological sample has been obtained from a DOE-certified laboratory. Results of sampling shall be sent to Owner. The procedure used for disinfection shall conform to current standards of the American Water Works Association.
2. A minimum sanitary control area around all wells shall be maintained at all times. The sanitary control area shall extend at least 100 feet from any well. No source of contamination may be constructed, stored, disposed or applied within the sanitary control area.

3. If wells are being constructed or abandoned, Owner shall procure the appropriate water rights and construction permits per WAC 173-160. Owner shall provide copies of these documents to Contractor. Wells shall be constructed/abandoned properly by a licensed well driller. Contractor shall submit a plan to Owner detailing how all disinfection shall be accomplished.
4. Backflow Prevention:
 - a. Any connection made by Contractor to Owner's drinking water system, including connection to a fire hydrant, must be made through a backflow prevention assembly approved by a Washington State certified cross connection control specialist (CCS) engaged by Owner and inspected and tested by a Washington State certified backflow assembly tester (BAT).
 - b. Contractor shall label all non-potable water outlets, in a manner acceptable to the Owner, "Non-potable Water / Do Not Drink".

1.07 OCCUPATIONAL HAZARD MANAGEMENT

A. Chemical Hazard Communication:

1. If any hazardous chemicals will be used in the Work or present at the Project site, copies of applicable Material Safety Data Sheets (MSDS) shall be made immediately available to Owner prior to use by Contractor and during any use of the hazardous chemicals in the Work.
2. If the use or presence of hazardous chemicals at the Project site may affect the health of individuals outside the Project site, Contractor shall submit a written plan to Owner at least 30 Days prior to such use or presence detailing how Owner can avoid exposure to the products. Contractor shall submit MSDS / SDS to Owner for any hazardous chemical to which persons outside the project site may be exposed. The exposure avoidance plan shall also specify actions that should be taken if inadvertent exposure occurs. Owner shall provide Contractor with a written plan detailing how Contractor employees can avoid exposure to hazardous chemicals used by Owner that may impact the Project site, and shall specify actions which should be taken if inadvertent exposure occurs. Owner shall submit MSDS / SDS to Contractor for any hazardous chemical to which persons inside the project site may be exposed.

B. Lock-Out/Tag-Out:

1. When Owner and Contractor are to be engaged in coordinated activities requiring the control of hazardous energy, Owner and Contractor shall inform each other of their respective lock-out or tag-out procedures.

C. Confined Space:

1. When Contractor employees are to enter permit-required confined spaces, Owner shall:

- a. Inform Contractor that the Project site contains permit required spaces and that permit-space entry is allowed only through compliance with a confined-space program meeting WAC 296-809.
- b. Inform Contractor of hazards that have been identified.
- c. Coordinate entry operations with Contractor when both Owner and Contractor personnel will be working in or near permit spaces.
- d. Debrief Contractor at the conclusion of the entry operations regarding any hazards confronted or created in permit spaces during entry operations.

END OF SECTION 01 41 19

PART 1 GENERAL

1.01 SUMMARY

- A. Contractor shall perform all Work in a skillful and workmanlike manner. Materials and equipment furnished by Contract and any Subcontractor(s) must be of good quality and new unless the Contract Documents require or permit otherwise. Materials shall conform to the manufacturer's standards in effect at the date of execution of the Contractor and shall be installed in accordance with the manufacturer's instructions, specifications, and directions. Contractor shall, if requested by Owner, furnish satisfactory evidence regarding the kind and quality of any materials identifying thereon the source, and warranting their quality and compliance with the Contract Documents.
- B. Section includes:
 - 1. Contractor's Quality Control Program;
 - 2. Field samples;
 - 3. Mock-ups;
 - 4. Manufacturer's instructions;
 - 5. Manufacturer's field services;
 - 6. Testing laboratory services; and
 - 7. Contractor tests and inspections.

1.02 QUALITY CONTROL PROGRAM SUBMITTALS

- A. Contractor shall submit a written Quality Control Program for the Project per the Pre-Construction Submittal Requirements of Section 01 33 00. This submittal shall include but not be limited to the following:
 - 1. An overview of Contractor's Quality Control Program.
 - 2. Identification and resume of Contractor's on-site Quality Control Manager (QCM).
 - 3. A description of the activities, record keeping, and correspondence that the QCM will perform and be accountable for throughout the duration of the Project.
 - 4. A description of the quality control meetings to be conducted, sample inspection check lists (i.e., samples of actual inspection check list forms that will be submitted to Owner when scheduling inspections), and Subcontractors' quality control representatives. All forms that Contractor intends to use in its Quality Control Program shall be part of the submittal.
 - 5. A description of the QCM activities when inspections fail to verify compliance with the Contract Documents.
 - a. These activities are to include, as a minimum, follow-up with

- applicable Subcontractors, correction and/or completion of Work required for re-inspection, and the re-inspection.
- b. Contractor shall submit its weekly Non-Compliance Logs at least 2 Days prior to each Progress Meeting.
- 6. A description of the QCM activities to provide the required notifications for inspections.
- 7. A description of record keeping and information turn-over to Owner as a component of the Operating and Maintenance data (i.e. factory representative's start-up reports and permission to energize, verification of correct voltage and phasing to motors, etc.).

1.03 CONTRACTOR'S QUALITY CONTROL PROGRAM

- A. Contractor shall establish and maintain a written Quality Control Program which shall be issued by Contractor to Subcontractors performing Work on the Project and utilized to verify that the execution of the Work is consistent with the requirements of the Contract Documents.
- B. The Quality Control Program shall include, but not be limited to the following:
 - 1. Preparatory Phase:
 - a. Prior to beginning Work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. Contractor shall:
 - b. Review of each paragraph of applicable specifications, reference codes, and standards. Make a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field at the preparatory inspection. Maintain these copies in the field, available for use by Owner's Designated Representative until final acceptance of the work.
 - c. Review the Drawings.
 - d. Check to assure that all materials and/or equipment have been tested, submitted, and approved.
 - e. Review provisions that have been made to provide required control inspection and testing.
 - f. Examine the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
 - g. Perform a physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
 - h. Review appropriate accident safety procedures.
 - i. Discuss procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

- j. Check to ensure that the portion of the plan for the work to be performed has been accepted by the Owner's Designated Representative.
 - k. Schedule, manage and record the minutes of each preparatory meeting.
 - l. Review all RFIs associated with the Work.
2. Initial Phase:
- a. At the beginning of the Work, Contractor shall:
 - b. Check work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
 - c. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing. Resolve all differences and deficiencies.
 - d. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
 - e. Check safety to include compliance with and upgrading of the Safety Plan. Review with each worker. Particular attention should be given to high hazard work.
 - f. Prepare and attach to the daily CQC report separate minutes of this phase.
 - g. Repeat the initial phase any time acceptable specified quality standards are not being met.
3. Follow Up Phase:
- a. Perform daily checks to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the Work. The checks shall be made a matter of record in the QC documentation. Conduct final follow-up checks and correct deficiencies prior to the start of additional features of work which may be affected by the deficient work. Do not build upon nor conceal non-conforming work.
- C. Contractor's Quality Control Program shall be independent of any inspections and testing performed by Owner or by any independent testing and inspection agencies hired by Owner.
- D. Within the Quality Control Program, Contractor shall have available on the jobsite at all times a written report of quality control activities. At a minimum, the report shall note Project site quality control inspections, performance of scheduled tests and follow-up testing, other required inspections, deficiency log, and examinations of workmanship and quality.
- E. Test results shall identify applicable Contract (including Specification) requirements, the test or analysis procedures used, and the actual test results. A statement shall be included that the item tested or analyzed conforms or fails to conform to the Contract Documents. Each report shall be conspicuously

stamped on the cover sheet "CONFORMS" or "DOES NOT CONFORM" as the case may be. All test reports shall be signed by a testing laboratory representative authorized to sign certified test reports. Copies of all test reports shall be available on the jobsite at all times.

- F. If the Quality Control Program is found to be defective and Contractor does not promptly correct the deficiency, Owner may:
 - 1. Withhold payment until satisfactory corrective action has been taken, or
 - 2. Issue a stop work order until satisfactory corrective action has been taken.
- G. Pre-Inspections: Contractor shall pre-inspect Work that requires normal, special, and additional inspections as indicated in the Contract Documents.

1.04 FIELD SAMPLES

- A. Field samples are defined as the partial installation of selected materials at the Project site for Owner's review and acceptance of visual features and workmanship. Generally, accepted field samples are incorporated into the Work.
- B. Contractor shall provide field samples as required by the Contract Documents at location acceptable to Owner.
- C. Perform Work in accordance with the Contract Documents.
- D. Approved samples will serve as an acceptable standard of quality and workmanship.
- E. Maintain samples until completion of relevant Work.
- F. Upon completion of relevant Work or when directed by Owner, demolish and remove samples from Project site unless sample is accepted as part of completed Work.

1.05 MOCK-UPS

- A. Contractor shall provide mock-ups as required by the Contract Documents. Provide additional mock-ups, as required by Owner, until approval is obtained.
- B. Do not proceed with subsequent Work until approval of the mock-up is obtained.
- C. The approved mock-up shall be the standard of workmanship and materials for the Work that is represented by the mock-up.
- D. Maintain mock-up in approved condition, until directed otherwise by Owner.
- E. Unless specified otherwise, remove mock-up at completion of the Work or when directed by Owner.

- F. Unless specified or approved otherwise, mock-ups shall be completed and approved prior to the pre-installation meeting at which the Work represented by the mock-up will be discussed.
- G. Notify Owner a minimum of 7 Days prior to requesting mock-up approval.

1.06 MANUFACTURERS' INSTRUCTIONS

- A. Contractor shall comply with manufacturers' instructions in full detail, including each step in sequence. Do not omit preparatory steps or installation procedures unless specifically modified or exempted by Contract Documents.
- B. Should instructions conflict with Contract Documents, Contractor shall request clarification before proceeding.

1.07 MANUFACTURERS' FIELD SERVICES

- A. When specified, Contractor must require product manufacturer to furnish a qualified representative to observe field conditions and quality of workmanship, and to provide recommendations, certifications, and other specified services.
- B. Representative shall submit written report to Owner listing observations and recommendations.

1.08 TESTING LABORATORY SERVICES

- A. Owner will arrange for services of an independent Testing Laboratory to inspect and test the Work to verify compliance with Contract Documents.
- B. Contractor's Responsibilities:
 - 1. Cooperate with Testing Laboratory personnel, and furnish access, tools, samples, certifications, test reports, design mixes, equipment, storage, and assistance as requested by the Testing Laboratory.
 - 2. Notify Owner and Testing Laboratory a minimum of 7 Days in advance of all required tests and 48 hours in advance of all required inspections. When tests or inspections cannot be performed, through fault of Contractor, Contractor shall reimburse Owner for costs incurred by Owner.
 - 3. Contractor shall remove and replace Work found to not comply with Contract Documents.
 - 4. If initial tests and inspections indicate deficient work, Contractor shall reimburse Owner for costs of all subsequent tests and inspections related to such deficiency.
 - 5. All damage to Work as a result of normal testing operations shall be repaired by Contractor to match surrounding surfaces.
 - 6. Schedule testing and inspection so that work of testing and inspection personnel will be as continuous and brief as possible.

7. Contractor shall reimburse Owner for travel and lodging expenses incurred for testing and inspection services performed outside a radius of 100 miles of the Project site.

1.09 CONTRACTOR TESTS AND INSPECTIONS

- A. Inspection and testing performed exclusively for Contractor's convenience shall be the Contractor's sole responsibility.
- B. Earthwork Compaction Testing Requirements:
 1. Owner will engage the services of a Testing Laboratory to perform all soil and structural fill compaction testing. Compactions of any fill material shall be equal to or exceed the specified percentage of maximum dry density as defined by ASTM test procedure D1557 (modified proctor). Obtaining such specified compaction performance is the sole responsibility of Contractor.
 2. During any of Contractor's operations, Owner reserves the right to perform compaction tests for its own information only. At Owner's discretion, copies of such tests may be made available to Contractor. The taking of any such tests by Owner in no way relieves Contractor from testing to assure itself of compliance with the Contract Documents.
- C. Approved Structural Steel Fabricators:
 1. Contractor shall pay for any required structural steel fabrication special inspections.
- D. Cast-in-Place Concrete Strength Testing Requirements:
 1. Concrete test cylinders will be made by Owner or Owner's Testing Laboratory. Contractor shall be responsible for proper care of cast cylinders while on the Project site (with respect to temperature, humidity and protection).
 2. Contractor is also responsible for timely transportation to the laboratory in Spokane (or closer) on a schedule that will permit adequate laboratory curing before testing.
 3. Contractor shall notify the Owner at least 48 hours before any concrete pour to allow time for observation.
 4. Frequency and location of tests are to be determined. As a minimum, four test cylinders will be made for each day's pour or for every hundred cubic yards, whichever is greater.
 5. The results of Owner's tests will be made available to Contractor.
 6. The quality of all concrete is to be the sole responsibility of Contractor. If Contractor feels that additional testing is required to assure continued quality control, the frequency, testing, and payment therefore is Contractor's responsibility.

E. All Other Work Inspection and Testing Requirements:

1. Contractor shall, at no additional cost to Owner, provide all inspections and tests required to assure full compliance with the Contract Documents. Unless specifically required, Contractor is not required to submit copies of such test results to Owner. Contractor, however, shall maintain copies of all testing and inspection reports at the Project site for inspection and copying by Owner.
2. The performance of testing or inspection by Owner or Owner's Testing Laboratory does not relieve Contractor from responsibility for meeting all requirements of the Contract Documents.

END OF SECTION 01 45 00

PART 1 GENERAL

1.01 SUMMARY

- A. General: Owner will select and employ an independent testing agency, engineering service, or a special inspector to conduct the tests and inspections to be provided by Owner. Inspections that are normally associated with obtaining State approval (e.g., electrical work as specified in Division 26, etc.) shall be provided and paid for by Contractor. Contractor shall comply with all applicable building codes and provide all testing services required by the Contract Documents unless specifically identified as Owner's responsibility.
- B. Owner's testing agency shall prepare test reports, logs and certificates applicable to the Work for which Owner will provide testing and shall deliver the specified number of copies to the designated parties. If any inspection or testing reveals failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for Owner's services and expenses, shall be at Contractor's expense.

1.02 DESCRIPTION

- A. Definition: For the purpose of this Section, all references made herein to testing laboratory, testing agency, or special inspector shall refer to as the tests or inspections conducted by a special inspector provided by Owner.

1.03 QUALITY ASSURANCE

- A. Qualifications: Contractor's inspection personnel must be approved by Owner and possess certain qualifications as stated in this Section. The testing agency shall comply with all requirements of ASTM E329.
 - 1. The inspector for waterproofing and roofing shall have specialized technical knowledge and experience specific to waterproofing and roofing.
 - 2. The testing agency for concrete testing and inspection services should be an agency other than the agency employed by Contractor for the purpose of establishing concrete mix designs, etc.
 - 3. Geotechnical inspection will be performed by a licensed geotechnical consulting firm.

1.04 DUTIES OF OWNER'S TESTING AGENCY

- A. General: Testing agencies shall conduct testing and inspection services, interpret them, evaluate the results for compliance with the Contract Documents, and report the findings to the Owner, Contractor, and local building authority, as applicable. Testing and inspection services shall be performed in accordance with applicable ASTM standard methods or other specified procedures.

- B. Testing: Materials to be tested are those so specified and others as Owner or authorities having jurisdiction over the Project may direct.
- C. Inspection: Inspections, continuous and special, shall be performed by the inspectors as required by the Contract Documents and authorities having jurisdiction.
- D. Rejected Work: Inspectors shall have the right to recommend rejection of materials and workmanship that is defective. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the Project site without charge to Owner. If Contractor does not correct rejected work within a reasonable time, Owner may elect to correct the work and charge the expense to Contractor.
- E. Inspectors are not authorized to do the following:
 - 1. Release, revoke, waive, alter, or enlarge on requirements of the Contract Documents;
 - 2. Approve or accept any portion of the Work, except as specified for soil conditions (i.e. bearing capacities, etc.);
 - 3. Perform any duties of Contractor; or
 - 4. Stop Work.
- F. Should the Owner elect at any time before Final Acceptance to make an examination of Work already completed by removing or tearing out the same, Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such Work is found to be defective in any respect, Contractor shall be responsible for the cost of such examinations and of satisfactory reconstruction. If such Work is found to meet the requirements of the Contract, however, Owner shall be responsible for the cost of such examinations and of satisfactory reconstruction.

1.05 PAYMENTS

- A. Owner shall pay for the cost of initial testing and inspection, except as otherwise specified in the Contract Documents. Initial tests and inspections are defined as the first tests and inspections as hereinafter specified.
- B. In the event any test or inspection reveals Work not in compliance with the Contract Documents, Contractor shall pay for or be backcharged for all costs of re-testing and/or re-inspection.
- C. Additional tests and inspections not herein specified but requested by Owner shall be paid for by Owner, unless the results of such tests or inspections reveal Work not in compliance with the Contract Documents, in which case Contractor shall pay for or be backcharged for all costs of testing, re-testing, re-inspection, and any related Owner costs.

- D. Costs for additional tests or inspections required because of any change in materials or change in the source of supply from that specified shall be paid by or backcharged to Contractor.
- E. Contractor is responsible for all work required to correct any deficiencies.
- F. Contractor is responsible for the cost of any testing required for the convenience of Contractor in the scheduling and performance of the Work.
- G. Contractor is responsible for the cost to verify testing done without prior notice, with improper supervision, or contrary to construction practice, and for testing of materials for which mill reports are required but not furnished.
- H. Contractor is responsible for the cost of any testing that is required to be performed by Contractor by the Contract Documents.

1.06 TESTS AND INSPECTION REPORTS

- A. Copies of Test and Inspection Reports: Copies of test and inspection reports will be distributed at weekly intervals. Such reports shall include all tests performed, regardless of whether such tests indicate that material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Records of special sampling operations shall also be reported. Test and inspection reports shall be distributed electronically as requested by Owner.
- B. Test and inspection reports shall be distributed as follows:
 - 1. Elevator Consultant

1.07 CONTRACTOR'S RESPONSIBILITIES

- A. Coordination: Contractor shall initiate and coordinate all required tests and inspections, including conforming with requirements of applicable public agencies and authorities. Inspection of the Work does not relieve Contractor of any obligation under the Contract. The Owner's Designated Representative shall have authority to reject Work that is not in compliance with the Contract Documents.
- B. Access: Inspectors shall at all times have free access to the Work, wherever the Work is in preparation. Contractor shall at all times provide and maintain proper facilities and safe access for such inspection. Contractor shall also cooperate with testing personnel and furnish access, tools, samples, certifications, test reports, design mixes, equipment, storage, and requested assistance.
- C. Storage Facilities: Contractor shall furnish adequate storage facilities for the sole use of the testing laboratory for safe storage of specimens that must remain on the site.
- D. Data: Furnish records, drawings, certificates and similar data, including Shop Drawings and Change Orders, as may be required by the testing and inspection

personnel to confirm compliance with the Contract Documents.

- E. Notice: Contractor shall furnish notice to Owner and inspector at least 48 hours in advance of all required tests and inspections, unless otherwise specified.
- F. Defective Work: Contractor shall remove and replace any Work found defective by Owner or not complying with the Contract Documents at no additional cost or Contract Time. Where testing personnel take cores or cut-outs to verify compliance, repair prior to acceptance. Where defective Work requires redesign, any redesign costs shall be paid for by Contractor.
- G. Cancellations: Contractor shall give sufficient advance notice to the inspector to allow in the event of any cancellation or rescheduling of a previously scheduled test or inspection. Any charges due to insufficient advance notice of cancellations or delay shall be paid by or backcharged to Contractor.

1.08 TEST FAILURES

- A. Where a sample fails to pass a required test, Owner may permit re-testing of the sampled material. In such cases, two samples shall be tested and the material shall be rejected if either of the two subsequent samples fail.

1.09 REPORTING TEST FAILURES

- A. Immediately upon inspector's determination of a test failure, inspector shall notify Owner. On the same day, inspector shall send written test results to those named on the distribution list above.

1.10 REMOVAL OF MATERIALS

- A. Unless otherwise directed, materials not conforming to the requirements of the Contract Documents shall be promptly removed from the Project site and properly disposed of without additional expense to Owner.

END OF SECTION 01 45 23

PART 1 GENERAL

1.01 SUMMARY

- A. Contractor shall be evaluated on performance throughout the course of the contract to provide past performance documentation for future projects.
- B. Section includes:
 - 1. Program Objectives;
 - 2. Performance Categories and Assessment;
 - 3. Evaluation Reports;
 - 4. Notice, Review and Appeal.

1.02 PROGRAM OBJECTIVES

- A. The Contract Performance Evaluation Program is intended to improve contractor selection given the following primary objectives:
 - 1. Assist the Owner in evaluating the contractor's qualifications and proven ability to successfully perform future contracts when past performance has been previously documented;
 - 2. Provide the University objective data relating to Contractor responsibility;
 - 3. Provide contractors with a means of enhancing their qualifications and reputation by receiving recognition for exceptional performance;
 - 4. Encourage better working relationships between the University and the Contractor and to provide feedback to the contractor during and after the contract period;

1.03 PERFORMANCE CATEGORIES AND ASSESSMENT

- A. Contractor shall be evaluated based upon the following categories:
 - 1. Schedule and Time Management;
 - 2. Quality Management;
 - 3. Communication Effectiveness;
 - 4. Management Approach;
 - 5. Code and Compliance; and
 - 6. Cost.
- B. Each of the above categories will be assessed by multiple key project stakeholders and provided one of the following performance levels based upon objective and cumulative data:

1. Outstanding (5): Contractor has exceeded the majority of all of the significant contract criteria and has met or exceeded the Schedule, Quality, Communications, Management, Code Compliance and Cost requirements of the contract. The contractor was extremely or completely knowledgeable of the contract requirements and applicable laws and regulations. A very consistent high level of cooperation, project management, and job site control appreciably contributed to an unusually good result.
2. Very Good (4): Contractor has exceeded many of the significant contract criteria and has met or exceeded some of the Schedule, Quality, Communications, Management, Code Compliance, and Cost requirements of the contract. The contractor was knowledgeable of the contract requirements and applicable laws and regulations. Was generally cooperative and performed their work with minimal prompting. Their performance results were very good.
3. Satisfactory (3): Contractor has satisfactorily met the overall contract criteria and has met the overall Schedule, Quality, Communications, Code Compliance and Cost requirement of the contract. The contractor occasionally had to be prompted or reminded of the contract requirements, but overall the project was acceptable, producing an acceptable result.
4. Marginal (2): Contractor may have met many, but not all, of the contract criteria and failed to meet one or more of the Schedule, Quality, Communications, Code Compliance or Cost performance requirements of the contract. Even though the project may have been accepted, the contractor's performance, as evaluated, was marginal overall. The contractor frequently had to be prompted or reminded of the contract requirements; overall the project was less than satisfactory.
5. Unsatisfactory (1): Contractor failed to meet many or most of the contract criteria and failed to meet the overall Schedule, Quality, Communications, Code Compliance and Cost performance requirements of the contract. While the project may have been accepted by the owner, the effort expended in prompting the contractor to perform was excessive. The contractor's poor or uncooperative performance created serious unnecessary and avoidable difficulties in achieving contract completion.

1.04 EVALUATION REPORTS

- A. At the midpoint of project completion, Owner shall provide contractor with a draft Contract Evaluation Report based upon the current performance during the contract. This shall provide the Contractor an opportunity improve performance levels during the contract, and provide an opportunity for Contractor-Owner communication and working relationship.
- B. A final Contract Performance Evaluation Report will be completed upon contract completion and shall become the official report of record.

1. A Summary Contract Performance Evaluation will be provided to the Contractor within 30 calendar days after Final Completion.
 2. Final Contract Performance Evaluation Reports will remain on record for a minimum of 5 years from date issued.
- C. Upon receipt of the Summary Contract Performance Evaluation, Contractor shall review the report and may request a debrief conference within 21 calendar days of receipt.
- D. If after the debrief, Contractor would like to dispute the evaluation findings the Contractor shall submit in writing, the specific reasons for disagreement and include the basis for their appeal within 14 calendar days following the debrief.
1. Upon receipt of appeal, Owner shall convene a review with the Assistant Vice President, Facilities Services, Capital to consider the objectivity, accuracy, completeness and fairness of the Contract Performance Evaluation.
 2. The Contractor shall be notified and issued a final determination within 30 calendar days of receipt of the appeal.

END OF SECTION 01 45 34

PART 1 GENERAL

1.01 TEMPORARY UTILITIES

- A. Owner may furnish to Contractor temporary Owner-owned utilities when available and upon Owner written approval. Owner reserves the right to restrict the use of its utilities if, in its opinion, Contractor fails to adequately conserve utilities or to use utilities appropriately. When using Owner-owned utilities, Contractor is to make metered connections to the nearest available service and disconnect same when no longer needed.
- B. If Owner-owned utilities are not available at the Project site, or if Owner restricts use of Owner-owned utilities, Contractor shall obtain required services from commercial sources or public utilities, and Contractor is responsible to pay for all utility costs.
- C. Contractor shall field verify the availability of utility services provided by Owner and coordinate the Work accordingly.
- D. In remodeling projects where portions of the building are to remain in service, Contractor shall be responsible for coordinating the Work to maintain utility services to the occupied portions of the building.

1.02 TEMPORARY ELECTRICAL SERVICE

- A. Contractor shall provide all services required for construction operations and may connect to existing services when available upon Owner approval. .
- B. Contractor shall provide lighting for construction operations.
- C. Contractor may use existing lighting when available and adequate.
- D. Contractor shall maintain site lighting throughout the duration of the Work.

1.03 HEAT AND VENTILATION

- A. Contractor shall provide heat and ventilation as required to maintain specified conditions for construction operations and to protect materials and finishes from damage due to temperature or humidity.
- B. After a building is substantially enclosed, the permanent heating system or a temporary hook-up of equipment from the permanent system may be used for temporary heat provided that the equipment is properly installed by the responsible electrical and mechanical Subcontractors and available for supplying temporary heat. Owner shall be the sole judge of the adequacy of the building enclosure for temporary heating or cooling purposes.
- C. Contractor shall arrange with the electrical and mechanical Subcontractors installing said systems and equipment for the use, operation, and maintenance of

the systems. Contractor shall pay for all connections and attendants for temporary heating, including necessary accessories such as temporary (construction) air filters to protect the air distribution systems from contamination.

- D. Contractor shall provide a dust free air distribution system and correct all damage to this system caused by the Work.
- E. In existing facilities, Contractor shall coordinate use of the existing systems with Owner. Contractor shall extend and supplement with temporary units as required to maintain specified conditions for construction operations.
- F. Use of electric resistance type heating systems for temporary heat is prohibited.
- G. The warranty period for any permanent equipment used during construction will not commence until Contractor achieves Substantial Completion.

1.04 TEMPORARY WATER SERVICE

- A. Unless available from an Owner-owned utility, Contractor shall provide service required for construction operations. At all times, Contractor shall utilize backflow/cross-connection devices, certified by Owner, to safeguard water supply.
- B. For Work in existing facilities, Contractor shall connect to existing services when approved by Owner and extend branch piping with outlets so that water is available for use by all persons associated with the Work.
- C. Provide drinking water from a safe source for all those associated with the Work.

1.05 SANITARY FACILITIES

- A. Use of permanent and/or existing Owner's facilities will be allowed as long as proper cleanliness is maintained. If, in the opinion of the Owner, restrooms are not being properly maintained, Contractor will be required to provide its own sanitary facilities at its own expense.
- B. Owner will designate any restrooms that can be used by Contractor personnel.

1.06 BARRIERS

- A. Contractor shall provide barriers as required to prevent public entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- B. When temporary fencing is indicated by the Drawings, or if fencing is provided at Contractor's option, enclosures shall be constructed of 6 feet high commercial grade chain link with vehicular and personnel gates, as required.

1.07 ENCLOSURES

- A. Contractor shall provide temporary weather-tight closures of openings to provide acceptable working conditions, protect materials, facilitate temporary heating, and prevent entry of unauthorized persons. Provide doors with self-closing hardware and locks.
- B. Contractor shall provide temporary roofing when so indicated by the Drawings or when made necessary by the Project requirements.
- C. Contractor shall provide temporary dust-proof partitions when required to confine dust and moisture to the immediate Work area.
- D. Contractor shall provide temporary noise-proof partitions when required to confine noise to the immediate Work area.

1.08 PROTECTION OF EXISTING FACILITIES

- A. Utility Tunnel Protection: Contractor shall provide adequate planking across any tunnels to distribute loads and prevent damage. If necessary, Contractor shall provide temporary shoring inside tunnel areas.
- B. Low Overhead Clearance: Contractor shall be fully responsible for addressing all vehicular limitations caused by low overhead restrictions throughout campus. Route all traffic to avoid damage to overhead structures. Review proposed routing with Owner prior to commencement of construction.
- C. Tree and Plant Protection: Contractor shall protect trees and other plants not scheduled for removal; maintain protection until Project completion.
 - 1. In the event that a tree or plant is damaged as a result of the Work that, in the opinion of Owner, requires replacement, Contractor shall be responsible for such replacement.
 - 2. If at any time Contractor judges that the protection of plant materials designated to be saved is incompatible with Work required, or if operations necessarily threaten the health of any plant material, Contractor shall immediately notify Owner and cease Work affecting the area until a written agreement is reached concerning acceptable procedure.

1.09 SECURITY

- A. Contractor shall provide security to protect the Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, and theft. Coordinate with Owner's security program.
- B. During construction, all openings to Owner's utility tunnel system must be protected against unauthorized entry. Contractor shall provide closures, approved by Owner, including locked doors or hatches at any openings created

by the Work.

1.10 PROTECTION OF INSTALLED WORK

- A. Contractor shall provide temporary protection for installed products. Control traffic in immediate area to minimize damage.
- B. Contractor shall provide protective coverings for walls, projections elevator cabs, jambs, sills, and soffits of openings. Protect finished floors and stairs from traffic, movement of heavy objects, and storage.
- C. Contractor shall prohibit traffic and storage on waterproofed and roofed surfaces and on lawns and landscaped areas.

1.11 CLEANING DURING CONSTRUCTION

- A. Contractor shall clean the site each day during construction and shall prevent the accumulation of waste materials and rubbish.
- B. Contractor shall clean interior areas prior to the start of finish Work and maintain areas free of dust and other contaminants during finishing operations.

1.12 OFF-SITE CLEAN UP

- A. Contractor shall continuously keep sidewalks, lawns, parking areas, and streets clear of construction materials, debris, gravel, rock, and dirt related to the Project.

1.13 LIFTING DEVICES AND HOISTING FACILITIES

- A. Contractor shall provide cranes, hoists, towers, and other lifting devices necessary for the proper and efficient movement of materials.

1.14 MECHANICAL AND ELECTRICAL SYSTEM SHUT-DOWNS

- A. Any shut-down of mechanical or electrical systems affecting Owner's operations shall be scheduled by Contractor during off-hours. Contractor shall submit a written shut-down request providing at least 14 Days advance notice. Any shut-down must be coordinated with and approved by Owner.

1.15 CONSTRUCTION PARKING

- A. Contractor's employees may park only in accordance with campus traffic and parking regulations and pay all required fees.
- B. When working in Pullman's central campus, Contractor's vehicular use will be limited to the following:
 - 1. Delivery of materials to and from Project site;
 - 2. Single vehicle for use by Project supervisor of each major Contractor

(four total vehicles maximum); and

3. Workers' vehicles shall not be allowed to park in the central mall.

1.16 NOISE CONTROL

- A. Any construction related noise that interferes or is likely to interfere with normal use of adjacent space(s) shall be scheduled and approved by Owner.
- B. Contractor shall restrict any construction related noise to the hours approved by Owner and in accordance with the state and local noise ordinance.
- C. Owner may approve Contractor working extended hours. Request any extended hours of operation with Owner.

1.17 TRAFFIC OBSTRUCTIONS

- A. Contractor shall submit a written traffic control plan for all traffic obstructions, either pedestrian or vehicular, for approval by Owner, per the Pre-Construction Submittal Requirements of Section 01 33 00.
- B. In some cases, it may be necessary to develop special routes for large or unwieldy deliveries that could interfere with pedestrian movement, especially at peak times.
- C. Contractor shall avoid deliveries or equipment operations that block street traffic during peak times.
- D. Pedestrian Obstructions: Any equipment on sidewalks or other pedestrian ways shall be barricaded. Barricades shall include a horizontal member at a maximum of two feet above the walking surface.

1.18 REMOVAL OF TEMPORARY FACILITIES

- A. Contractor shall remove temporary materials, equipment, services, and construction facilities prior to Substantial Completion inspection.
- B. Contractor shall clean and repair damage caused by installation or use of temporary facilities.
- C. Contractor shall restore existing facilities used during construction to specified or original condition.

END OF SECTION 01 50 00

PART 1 GENERAL

1.01 PRODUCTS

- A. Products include material, equipment, and systems.
- B. Comply with Specifications and referenced standards as minimum requirements.
- C. Components required to be supplied in quantity within a specification section shall be the same, and shall be interchangeable.
- D. All materials shall be new unless specifically noted otherwise.

1.02 TRANSPORTATION AND HANDLING

- A. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- C. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

1.03 STORAGE AND PROTECTION

- A. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- B. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.
- C. Store loose granular materials on solid surfaces in a well-drained area; prevent mixing with foreign matter.
- D. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.

1.04 VARIATION FROM SPECIFIED PRODUCTS

- A. Subsequent to Bid Opening/Proposal - Approved Equivalents:
 - 1. Requests for approved equivalents will only be considered when approved equivalent statements, used in reference to product

specifications, are specifically provided for within individual Specification sections.

2. The terms "or an approved equivalent", "approved equivalent", or similar statements, when used herein in connection with manufacturers' products, shall be understood to mean products that are equally effective and suitable for their intended use; based on the judgment of the Owner, whose decision shall be final.
3. Written requests for consideration by the Owner of approved equivalents may be submitted throughout the Project.
4. Time extensions and additional costs resulting from use of approved equivalent products will not be considered.

B. No Substitutions:

1. The terms "No Substitutions", "Alternative Products not Acceptable", or similar statements used in reference to product specifications, shall mean that only the specified product will meet the needs of the University and that no other products will be considered at any time before or during the Project.

C. Requirements and Procedures for Product Variations:

1. The Contract is based on the standards of quality established in the Contract Documents.
2. Substitution or approved equivalent revisions shall be made only with the prior written acceptance of the Owner.
3. All requests for substitutions or approved equivalents must be on the proposer's letterhead and shall be accompanied by complete specifications, samples, records of performance, certified copies of tests by impartial and recognized laboratories, and such other information as the Owner may request to prove the merit of the proposed revisions.
4. The Contractor assumes the responsibility for capacity, dimensions, clearance, etc., of the named manufacturer's particular item to assure that the revision meets the requirements.
5. The Contractor shall assume the cost of any redesign, in the form of changes to the Drawings, or for the Work of any other trades, or any other costs required to properly incorporate any revision associated with substitutions or use of approved equivalent products.
6. Final decisions as to the quality and suitability of proposed revisions will rest solely with the Owner and will be based on proof submitted.
7. When the Owner approves a substitution or approved equivalent proposed by the Contractor, it is with the understanding that the Contractor certifies that the article or material is equivalent to or better than that specified.

END OF SECTION 01 60 00

PART 1 GENERAL

1.01 PURPOSE

- A. Provide for an orderly, timely, and efficient completion of the Work for Owner.

1.02 SUBSTANTIAL COMPLETION

- A. Requirements for Substantial Completion: Contractor shall comply with all requirements for Substantial Completion identified in the General Conditions and other Contract Documents. Prior to Substantial Completion, Contractor must have constructed the Work in substantial accordance with the Contract Documents, and:
1. Certificate of Occupancy received from the AHJ.
 2. All elements of the Work must be operational and in good working order and condition, except for incidental punchlist Work;
 3. The fire and life safety systems, if any, must be tested and accepted;
 4. Any elevators must be operational, functioning, and in good working order and condition, and be fully approved for use;
 5. All mechanical, electrical, plumbing, telecommunications, security, and access control systems must operate and function in good working order and condition, including commissioning;
 6. The finish portion of the Work must be complete including but not limited to paint, trim, doors, partitions, cabinetry, floor coverings, ceilings, wall finish, and other finish surfaces, except for incidental punchlist Work;
 7. All roadway improvements, paving, sidewalks, parking areas, other street improvements, lighting, landscaping and irrigation must be complete;
 8. Utilities must be complete, connected, and operating normally;
 9. Contractor must have removed all construction facilities, temporary controls, and construction debris;
 10. Contractor must have completed training Owner's personnel on all operating instructions and submitted training DVDs; and
 11. Final cleaning.
- B. Prior to Substantial Completion Contractor shall request in writing that Owner grant Substantial Completion. Accompanying the request Contractor submit the following:
1. A list of all items remaining to be completed or corrected;
 2. Signed originals from authorities having jurisdiction of all certificates of compliance and final approval, as applicable;
 3. All system software files required by the Contract Documents, including but not limited to lighting and environmental controls;

4. Revised Draft Operation & Maintenance manuals; and
 5. Draft Project Record.
- C. Upon satisfactory completion of the requirements for Substantial Completion, Owner shall prepare and forward to Contractor a letter of Substantial Completion. The letter will identify the date of Substantial Completion and include a punch list identifying all remaining incomplete Work. Contract warranties shall begin as of the date of Substantial Completion.

1.03 FINAL COMPLETION

- A. Requirements for Final Completion: Upon receipt of Contractor's written Notice that Contractor has inspected and completed punch list items and that the Work is ready for final inspection and acceptance, Owner will promptly make such inspection accompanied by Contractor. If Owner determines that some or all of the punch list items are not complete, Contractor shall be responsible to Owner for all costs, including re-inspection fees, for any subsequent inspection to determine completion of the punch list. When Owner finds all punch list items complete and the Work and Contract fully performed, Owner shall establish the date of Final Completion. Owner is not required to establish Final Completion until the following are complete:
1. Complete all requirements listed in the Contract Documents for Substantial Completion of the Work;
 2. Complete all remaining punch list items and remaining Work, and obtain approval by Owner that all Work is complete;
 3. Obtain permanent occupancy permits (if only a temporary occupancy permit was issued at Substantial Completion);
 4. Submit Project Record, any final property survey, and final Operation and Maintenance manuals (if not previously submitted) required by the Contract Documents;
 5. Deliver any required tools, spare parts, extra stock of material and similar physical items to Owner as required by the Contract Documents;
 6. Complete cleaning after completion of punch list;
 7. Submit executed warranties;
 8. Complete any required sustainability documentation for which Contractor is responsible;
 9. Submit a final comprehensive list of all Subcontractors of all tiers and suppliers for the Project; and
 10. Submit certification that materials used in the Work are "asbestos-free" and that all requirements of governing jurisdictions related to the Project have been addressed.
 11. Final Project Record.

- B. Upon satisfactory completion of the requirements for Final Completion, Contractor shall submit a final Application for Payment.

1.04 FINAL ACCEPTANCE

- A. Requirements for Final Acceptance: Final Acceptance shall be established by Owner in writing. Owner shall not be obligated to accept the Project as complete before Final Completion has occurred and Contractor has submitted the following:
 - 1. An affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which Owner or Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, except for any claims that are specifically identified on the affidavit (Affidavit of Payment of Debts and Claims, AIA form G706 or equivalent).
 - 2. A certificate or written statement evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 Days' prior written Notice has been given to Owner.
 - 3. Receipt of consent of surety, if any, to final payment (AIA form G707 or equivalent).
 - 4. If required by Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by. If a Subcontractor refuses to furnish a release or waiver required by Owner, Contractor may furnish a bond satisfactory to Owner to indemnify Owner against such lien. If such lien remains unsatisfied after payments are made, Contractor shall refund to Owner all money that Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.
 - 5. Provide copy to Owner of all "Affidavits of Wages Paid". Pursuant to RCW 39.12.040, an "Affidavit of Wages Paid" from Contractor and from each Subcontractor certified by the Industrial Statistician of the Washington State Department of Labor and Industries, with the fees paid by Contractor or Subcontractor.
- B. Contingent upon completion of all Affidavits of Wages Paid, the "Notice of Completion of Public Works Contract" form may be completed by Owner.

1.05 RETAINAGE

- A. Retainage must be held at least 45 Days following Final Acceptance. If there are either unpaid taxes or fees, or unsatisfied claims of lien against the retained percentage, disbursement of retainage funds will be made in accordance with Washington law.
- B. The retainage will be held and applied by Owner as a trust fund in the manner

required by RCW 60.28. Release of the retainage will be processed in the ordinary course of business following Final Acceptance of the Work by Owner, provided no notice of lien has been given as provided in RCW 60.28, no claims have been brought to the attention of Owner, Owner has no claims under the Contract, and the requirements below have been met.

- C. Owner shall not release retainage until the following requirements have been satisfied.
1. "Certificate of Payment of State Excise Taxes by Public Works Contractor": Following receipt of Owner's notice of completion and after determining that all taxes, increase and penalties due from Contractor have been paid, the Department of Revenue will issue this certificate to Owner.
 2. "Certificate of Payment of Contributions, Penalties and Interest on Public work Contract": Upon receiving a copy of Owner's notice of completion and after determining that Contractor is in compliance with the provisions of the Employment Security Act, the Employment Security Department will issue this certificate to Owner.
 3. "Certificate of Release": Upon receipt of Contractor's request for release and verification from its records that required premiums have been paid by Contractor and each Subcontractor, the Department of Labor and Industries will issue a statement to that effect.

END OF SECTION 01 70 00

PART 1 GENERAL

1.01 SUMMARY

- A. This Section describes the waste management and recycle management criteria for debris and solid waste generated as part of the Work.
- B. Contractor shall be responsible for sorting, segregating, and placing designated waste materials into containers provided by Owner. Contractor shall be responsible for segregating and disposing all unacceptable and dangerous wastes as defined below.
- C. Owner shall be responsible for furnishing waste collection containers, servicing those containers, and disposing solid waste from the Project, with the exception of unacceptable and dangerous waste.
- D. Waste that is disposed of by Contractor shall be in accordance with all applicable local, state, and federal regulations, including WAC 173-350, Solid Waste Handling Standards, and WAC 173-303, Dangerous Waste Regulations.

1.02 DEFINITIONS

- A. Construction Waste: Waste resulting from the Work.
- B. Dangerous Waste: Solid waste designated in WAC 173-303 and/or 40 CFR. As used in this Section, the words "dangerous waste" will refer to the full universe of wastes regulated by WAC 173-303 and 40 CFR.
- C. Demolition Waste: Largely inert waste, resulting from the selective demolition of buildings, roads and other man-made structures such as cured concrete, asphaltic compounds, brick and masonry, ceramic, glass, steel, and aluminum, and non-inert materials such as clean wood, composition roofing and roofing paper, and minor amounts of metal. Plaster (i.e., sheetrock or plaster board) or any other material, other than clean wood, that is likely to produce gases or leachate during its decomposition process and asbestos waste are not considered to be demolition waste.
- D. Land Clearing Waste: Natural vegetation and clean soils from clearing and grubbing land for development such as stumps, brush, weeds, tree branches, tree bark, mud, dirt, sod and rocks.
- E. Recycle/Recycling: The process of separating waste materials for remanufacturing or reprocessing into usable or marketable materials. Examples of recycling include separating wood off-cuts for recycling by a wood processor into paper pulp, or separating cardboard, plastic, beverage containers, or miscellaneous metals for recycling.
- F. Reuse: To use a construction waste material again in roughly its same form. Materials can be reused on-site or on other projects off-site. Examples of reuse include removing a hardwood floor and reinstalling it in a new project, or using

soil from one site as fill on another site.

- G. Salvage: To remove a construction waste material or equipment from an existing building for reuse on-site or reuse on other projects off-site. Items to be salvaged shall be designated by Owner for removal and delivery to Owner.
- H. Unacceptable Waste: All waste not authorized for disposal by Owner. This includes any waste that is now or hereafter defined by federal law or by the governing jurisdiction as radioactive, dangerous, hazardous or extremely hazardous waste, unsanitary waste, and vehicle tires in excess or those permitted to be disposed of by the laws of the governing jurisdiction. It does not include any waste destined for salvage, recycling, or general demolition.
- I. Waste: All solid waste generated within the limits of the Project, or extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable and recyclable materials, masonry, and concrete.
- J. Waste Management Plan: A Project-specific plan for the salvage, collection, transportation, recycling, and disposal of the waste generated at the Project site. A waste management plan includes procedures for separating, storing, and transporting waste and includes methods to assure proper implementation of the plan.

1.03 WASTE MANAGEMENT PLAN

- A. Draft Waste Management Plan: Per the Pre-Construction Submittal Requirements of Section 01 33 00, Contractor shall submit to Owner a Draft Waste Management Plan. The Draft Plan shall contain the following:
 - 1. List of materials to be salvaged, materials to be recycled, and materials to be disposed of as solid waste, and dangerous waste.
 - 2. General material handling methods, including segregation and sorting, and placing solid waste into designated containers, on-site storage, and any special procedures for removing and protecting materials.
 - 3. Plan for communicating salvage and recycling requirements on the Project.
 - 4. Dangerous waste identification, accumulation, and disposal management procedures.
 - 5. Materials to be sorted, salvaged, and recycled:
 - a. At a minimum, the following types of materials shall be sorted and included for recycling:
 - 1) All metals (from banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze);
 - 2) Beverage containers;

- 3) Cardboard (from supplies and packaging);
 - 4) Clean wood (all unpainted, untreated wood scrap including pallets and engineered wood);
 - 5) Mixed office paper (including blue prints);
 - 6) Film plastic (from shrink wrap and other packaging, and sheeting used as protection or erosion control); and
 - 7) Plate glass.
- b. With the exception of unacceptable waste, all materials not designated for salvage or recycle per Paragraph 1.03(A)(5) above, may be co-mingled and disposed of as waste.
- B. Dangerous Waste Management:
1. Contractor is responsible for all dangerous waste generated during the Project shall be identified, accumulated and disposed in accordance with WAC 173-303. Contractor generated dangerous waste must be shipped for disposal within 90 Days of generation.
 2. Contractor may accumulate dangerous waste in accordance with WAC 173-303 and Washington Department of Ecology Technical Information Memorandum 94-120, Satellite Accumulation. If Contractor accumulates dangerous waste in volume greater than 55 gallons or acutely hazardous waste in a volume greater than one quart, Contractor shall establish and operate a "90-Day" accumulation area in accordance with WAC 173-303.
 3. Contractor shall dispose dangerous waste only through vendor(s) approved by Owner. Contractor shall arrange all dangerous waste shipments. Utilization of the vendor and facilities included in the State of Washington Hazardous Waste Disposal contract is authorized. Any other proposed vendor(s) and/or facilities are subject to audit by Owner, prior to utilization. Contractor shall pay for said audits. Contractor shall coordinate with Owner's Environmental Health & Safety (EH&S) Department for transportation and disposal of all Project generated dangerous waste. EH&S will sign all Uniform Hazardous Waste Manifests.
- C. Final Waste Management Plan: Once Owner has reviewed the draft Waste Management Plan and responded with comments or corrections, Contractor shall submit a final plan within 14 Days.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.01 WASTE CONTAINMENT

- A. Owner will provide and service containers for all wastes, with the exception of unacceptable waste. This service is at no cost to Contractor.

- B. Contractor shall provide separate waste containers for and properly dispose of all unacceptable waste, including dangerous waste, in accordance with applicable law.

3.02 CONTAMINATION OF WASTE

- A. Contractor shall take extraordinary care to ensure construction wastes are properly sorted, segregated, and placed within the correct containers.
- B. Should any waste containers designated for salvage, recycle, or general disposal be cross-contaminated with dangerous or unacceptable waste, Contractor shall pay all costs of legally disposing the contaminated waste.
- C. Co-mingling of waste:
 - 1. Should designated recycle or salvage containers become cross contaminated with other than unacceptable wastes, the Contract Sum shall be reduced at a rate of \$500.00 per cubic yard size of container. (i.e. a partially full, co-mingled 3 yard container would result in a charge to Contractor of \$1,500.00).
- D. Project progress meetings shall include review of construction waste management as an agenda item.

END OF SECTION 01 74 19

PART 1 GENERAL

1.01 PURPOSE

- A. Contractor shall submit advance/draft electronic of Operation & Maintenance manuals (O&Ms) at or immediately following the 80% Application for Payment. Subsequent Applications for Payment will not be processed until an advance/draft copy of the O&Ms has been submitted for review.
- B. Contractor shall submit a final draft of O&Ms on or before Substantial Completion and provide training of Owner's staff in the operation and maintenance of the facility.

1.02 PROCEDURES

- A. Together with a request for Substantial Completion, Contractor shall provide one revised draft electronic version of O&Ms.
- B. To achieve Final Completion, Contractor shall submit :
 - 1. Two final copies of O&Ms;
 - 2. A text-searchable PDF electronic file of the O&Ms;
 - 3. Separate Test & Balance Reports and Telecommunications Test Reports in an independent three ring binder;
 - 4. A text-searchable PDF electronic file of the Test & Balance Reports and Telecommunications Test Reports.

PART 2 PRODUCTS

2.01 O&M MANUAL MATERIALS

- A. Contractor shall submit O&Ms in heavy-duty, three-hole, screw-post, black vinyl-covered binders similar to those made by Arts & Crafts Book Bindery, 618 E. 2nd Avenue, Spokane, WA, (509) 747-3818.
- B. Cover and spine to be composed and laid out per the cover page template on the last page of this Section. The cover and spine lettering shall be gold-colored embossed.
- C. The maximum thickness for each manual shall be 3". Multiple manual sets shall be organized by:
 - 1. General,
 - 2. Vertical Transportation,
 - 3. Mechanical,
 - 4. Electrical, and

- 5. Other (Special Equipment; Elevators)
- D. Paper shall be 8 1/2" x 11", 20 lb. white paper. Divisions within volumes are to be accomplished and annotated with permanently imprinted tabs (insertable indexes are not permitted) which indicate Specification Section numbers only.
- E. Copies must be legible. Facsimile transmission copies are not acceptable. Original equipment manufacturer (OEM) printed material is preferred.

PART 3 EXECUTION

3.01 PRODUCTION

- A. O&Ms are to be as follows:
 - 1. Table of Contents – a listing of the contents of all volumes. This table of contents shall be inserted at the beginning of each volume in the set.
 - a. Identify Contractor, include name, address, phone and fax number, and provide a contact name.
 - 2. Subcontractor List – a list or spreadsheet, organized by Specification Section, of all suppliers and Subcontractors of all tiers who performed Work on the Project. Include the name, address, phone and fax number of Subcontractor or supplier, the Specification Section, and the description of the Work. When Subcontractors perform Work of more than one Specification Section, provide a separate listing of each Specification Section. This listing shall be at the beginning of volume #1 only.
 - a. Written certification from Contractor attesting that no asbestos containing products have been incorporated into the Work.
 - 3. Warranty List – a list or spreadsheet containing Contractor's one-year correction period obligation and all extended (greater than one-year) warranties, organized by Specification Section that indicates:
 - a. Item Description (include here special warranty numbers or codes),
 - b. Length of warranty,
 - c. Specification Section, and
 - d. Contractor's contact information, followed by physical copies of the Contractor's one-year correction period obligation and all extended warranties. Note that 1-year warranties from Subcontractors are not to be bound into each volume of the O&Ms. This warranty list and attendant warranties shall be at the beginning of volume #1 only, immediately following the asbestos certification.
 - 4. Provide data as outlined in each specification section.

- B. Original equipment manufacturer (OEM) information is required to be a part of all equipment information within the O&Ms.
- C. Shop Drawings and product data initially submitted for acceptance are generally not acceptable for O&M use (one notable exception is snow melting cable layout drawing – a manufacturer detailed item). Routine Project components such as asphalt, concrete, pipe, fittings, conduit, etc., are not to be included in O&Ms.

END OF SECTION 01 78 23
(O&M cover and spine data on next page)

Facility #0816, Food Science/Human Nutrition Building

Food Science Human Nutrition Elevator Modernization 2021

General O&M Manual

Vol. X of Y

(Spine and Cover)

1.01 PURPOSE AND PROCEDURE

- A. Contractor shall submit draft Project Record drawings on or before Substantial Completion. Requests for Substantial Completion will not be considered if submission of Project Record drawings has not occurred.
- B. Contractor shall submit final Project Record drawings before Final Completion may be achieved.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Project Record drawings are to be red-line markings on original Drawings which clearly indicate the as-built dimensions (both horizontally and vertically) for all installed Work.
- B. Identify on Project Record drawings all underground utilities encountered during the Work. Locate these utilities both horizontally and vertically and tie the dimension string(s) back to permanent and visible structures.
- C. Clearly label each sheet with the words "PROJECT RECORD DRAWINGS."
- D. Do not affix requests for information (RFIs), change proposals (CCPs) or architectural supplemental instructions (ASIs) to the Project Record drawings. If all or part of a Drawing has been modified, it is acceptable to affix the revised layout over top of the original. However, all dimensions that have been modified are to be red-lined or yellow highlighted.
- E. Copies must be legible.

PART 3 EXECUTION

3.01 PRODUCTION

- A. During construction, Project Record information will be reviewed not less than monthly concurrent with the monthly review of the draft Application for Payment.

END OF SECTION 01 78 39

PART 1 GENERAL

1.01 DESCRIPTION

- A. Owner has set the following indoor air quality requirements for site operations on the Project, within the limits of the Progress Schedule, Contract Sum, and available materials, equipment, products, and services. These include:
 - 1. Protect workers on the site from air quality problems during construction.
 - 2. Prevent indoor air quality problems in the completed facility.
 - 3. Prevent indoor air quality problems in adjacent facilities.
- B. To achieve these requirements, Contractor shall develop an "Indoor Air Quality (IAQ) Management Plan" for this Project.
- C. Comply with current LEED Reference Guide.

1.02 IAQ MANAGEMENT PLAN MANAGER

- A. Contractor shall identify an IAQ Management Plan Manager who will be responsible to monitor construction activities to ensure that the requirements of the IAQ Management Plan are met. The IAQ Manager may also be the Contractor's Quality Control Manager. The IAQ Manager will be responsible for the following:
 - 1. Draft and submit the IAQ Management Plan to Owner for acceptance.
 - 2. Document IAQ Management Plan progress on a weekly basis.
 - 3. Conduct meetings as required with all participants in the construction process to communicate the IAQ procedures and understand the importance of the requirements of the IAQ Management Plan. If necessary, post signs to ensure workers' safety.
 - 4. Identify IAQ problems and institute remedial action as necessary.
 - 5. Be present at regular Progress Meetings, as appropriate, and be responsible for providing a monthly written status report as it relates to IAQ for the Project and be prepared to discuss construction related IAQ procedures currently in effect.

1.03 IAQ MANAGEMENT PLAN

- A. Draft IAQ Management Plan: Submit a Draft IAQ Management Plan within 14 Days after Notice to Proceed, which contains preliminary descriptions of the following procedures for which Contractor is responsible (initial installation, verification that element(s) are in place, daily inspection and upkeep, and removal):
 - 1. List of indoor air quality protective measures to be instituted at Project

- site, including HVAC system protection during construction and any other control measure applicable to the Project;
 2. A plan and schedule for inspection and maintenance of indoor air quality measures;
 3. Installation sequencing for porous materials, including paint;
 4. Measures to be employed to protect ducts and stored on-site or installed absorptive materials from moisture damage;
 5. Type of filtration media used during construction;
 6. Cleanup of contaminated components after construction
- B. The Draft IAQ Management Plan shall meet or exceed the minimum requirements of the current Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines.
- C. Final IAQ Management Plan: After review and comment on the "Draft IAQ Management Plan," Contractor shall submit a "Final IAQ Management Plan" that includes the finalized written procedures for above noted elements. This final plan shall address all review comments noted on the draft submittal and be submitted prior to the commencement of construction.

PART 2 PRODUCTS – NOT USED

PART 3 EXECUTION

3.01 IAQ MANAGEMENT PLAN IMPLEMENTATION

- A. Contractor shall implement and maintain the approved IAQ Management Plan for the duration of the Project and update procedures at any time due to unanticipated building conditions. Contractor shall:
1. Use temporary filtration media during construction to protect HVAC at each return air grille; filtration media shall have a Minimum Efficiency Reporting Value (MERV) of 8 as determined by ASHRAE 52.2 - 1999. Isolate the return side of the HVAC system from the surrounding environment as much as possible. Return side shall have the heaviest Work areas dampered off and all return system openings sealed with plastic. Return side shall be shut down and sealed whenever possible.
 2. Avoid the use of products, materials and operations that would cause IAQ problems or concerns.
 3. Protect the ventilation system components (equipment and ductwork) from contamination, and provide cleaning of the ventilation components, including ductwork exposed to contamination during construction. Protect during transit and installation.

4. Provide ventilation as may be necessary to protect workers' health and avoid the accumulation of volatile compounds, dust and other harmful airborne contamination.
 5. Provide weekly reports and photographs of construction IAQ management measures such as protection of ducts and stored or installed absorptive materials. In each report, describe and illustrate IAQ measures (installation, effectiveness, upkeep, etc.) during construction along with a description of the SMACNA approach employed.
 6. Provide data sheets of filtration media used during construction and installed prior to building occupancy.
 7. During installation of carpet, resilient flooring, paints, furnishings, and other VOC emitting products, provide supplemental (spot) ventilation for at least 72 hours after Work is completed and describe these activities in the weekly reports.
- B. Contractor shall conduct regular inspection and maintenance of indoor air quality measures, including ventilation system protection and ventilation rate.
- C. Contractor shall use low-toxic cleaning supplies for surfaces and equipment.
- D. When dry sanding for gypsum board assemblies, Contractor shall provide the following protection:
1. Isolate the space;
 2. Provide plastic sheet separation during sanding;
 3. Close and seal all air system devices and ductwork; and
 4. Sequence the Work to avoid contamination of other spaces with gypsum dust.

3.02 VENTILATION OF CONSTRUCTION FUMES

- A. When hazardous chemicals, mineral-spirit based paints, adhesives, or other similar materials are used, the Contractor shall exhaust toxic, noxious, or odor producing fumes from the building in a manner approved by Owner. Contractor's method of exhaust shall ensure the safety of building occupants and pedestrians in and around the Project site. All supply and return air ductwork within the construction area shall be capped air-tight to prevent distribution of fumes.

3.03 COMPLETION PROCEDURES

- A. Remove all IAQ measures as well as signs, framing, and supports at completion of Project.

END OF SECTION 01 81 19

1.01 SECTION 14 29 00

PART 1 – GENERAL

1.1 SUMMARY

- A. Extent of elevator work is indicated in the schedules, and provisions as specified herein, and is non-inclusive of all possible requirements for a complete, proper, code compliant and fully functional installation.
- B. All work shall comply with all applicable National and State codes and procedures. Work shall comply with Current Code requirements for ASME A 17.1 and Washington State Elevator Code, 296-96 WAC and other Applicable Codes, and in the event of conflicts between these standards, the more stringent standard shall prevail.
 - 1. American National Standards Institute, Safety Code for Elevators and Escalators (ASME/ANSI A17.1-2004)
 - 2. Guide for Inspection of Elevators, Escalators & Moving Walks (ASME A17.2-2012)
 - 3. International Building Code (IBC 2000)
 - 4. American National Standard Specification for Buildings and Facilities Providing Accessibility and Usability for Physically Handicapped People, (CABO/ANSI A17.1).
 - 5. ADAAG – Americans with Disabilities Act Accessibility Guidelines
 - 6. Seismic provisions as required by ASME A17.1-2017, Section 8.4.
 - a. OSHPOD Regulations and criteria for Hospital guidelines and structural criteria as may be applicable.
 - 7. National Electrical Code 2002, NFPA No. 70.
 - 8. ANSI/ASTM - Steel Sheet, Zinc Coated (Galvanized) by the A446 Hot-Dip Process, Structural (Physical) Quality.
 - 9. ANSI/ASTM - Aluminum and Aluminum-Alloy Extruded Bar, Rod, B221 - Wire, Shape and Tube.
 - 10. ANSI/AWS - Structural Welding Code, Steel D1.1
 - 11. ANSI/IEEE – National Electrical Safety Code
 - 12. ANSI/NFPA-80 - Fire Doors and Windows
 - 13. ANSI/UL 10B – Fire Tests of Door Assemblies

- 14. APA – American Plywood Association
 - 15. ASTM A36 – Structural Steel
 - 16. ASTM A167 – Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
 - 17. FS TT-P-641 - Primer Coating, Zinc Dust/Zinc Oxide (for Galvanized Surfaces)
 - 18. FS TT-P-645 - Primer, Paint, Zinc Chromate, Alkyd Type.
 - 19. Life Safety Code, NFPA No. 101
 - 20. OSHA - Occupational Safety and Health Administration
- C. Improve operation and serviceability in the Ableson and Food Science Buildings.
- D. Provide equipment designed to work as a common unit and as described within these specifications.
- E. Project includes other disciplines & Specialty Trades for such support work as hoistway venting, HVAC, Life Safety, Alarm, Communications, and Electrical. This list is non-inclusive of all functions necessary for a proper, complete and code compliant project. The Specialty Trades work to be installed in advance of the elevator contractor to start work to speed the final acceptance of the elevator and integrated building systems intended for the elevator project
- F. All equipment not reused is to be disposed of by all of the contractors, unless specifically identified in the following documents for salvage by the University .
- G. On site storage is limited and approval of storage area will be required in writing by the University .

1.2 WORK INCLUDED

- A. All engineering, equipment, labor, and permits required to satisfactorily complete elevator modernization required by Contract Documents.
- B. Cartage and Hoisting: All required staging, hoisting and movement to, on and from the site including new equipment, reused equipment, or dismantling and removal of existing equipment. Proper disposal of all materials and oil shall be

documented in writing and become part of the close out documents for the University .

1. The elevators shall be upgraded in the most timely and efficient manner to reduce down time and hardship to the occupants.
2. Provide hoistway, pit, machine room and landings safety barricades as required. Barricades at a work floor shall be 7' high and totally enclose the work area.
3. All cutting and patching for elevator fixtures installation shall be the responsibility of the elevator contractor.
4. Equipment shall be new unless specifically identified as Reuse, Retain or Refurbish.
5. All work that requires cutting, welding, or noise that will interrupt the Ableson and Food Science Buildings facility activities must be performed at scheduled hours and approved by the University and Consultant. The base bid shall include all required overtime and related expenses.

C. Related building WORK BY OTHERS: General Contractor and elevator contractors and all subs to be identified by the bidder.

1. When sprinklers are provided in the hoistway, all electrical equipment, located less than 4'-0" above the pit floor shall be identified as NEMA 4 for use in wet locations.
2. Hoistway venting – Provide venting - net 3 Sq. Ft. per code.
3. HVAC Ventilation. Provide new Split Unit AC and related ductwork or modify existing system to maintain year round minimum temperature of 55° F, maximum 90° F in machine room.
4. Provide Class "ABC" fire extinguisher.
5. Make upgrades to smoke and heat detection system, sprinklers, life safety, and electrical systems necessary to meet code requirements including; but not limited to added wiring and related modules located in the machine room for Flashing Fireman's Hat, Shunt Trip Operation, Firefighters' Operation,

Phase 1 & 2 with Main and Alternate Floor Recall inputs. Input Modules and wiring terminations are to be located on machine room wall in approved location in close proximity to the new elevator controller.

6. Machine room, and pit, Retain existing circuits and refurbish lighting fixtures with LED Strip Lighting fixtures by Lithonia or approved equal, and provide upgraded circuit with GFCI convenience outlets in pit and machine room. Lighting fixtures are to be provided in pit and top of hoistway. Single pole switches for lighting shall at top of hoistway and in pit. The required foot candles are: 19FC in machine room and 10FC in all areas of the pit. Lighting is to be guarded. Provide dedicated circuits per Code. Food science to be provided with split circuit for machine room lighting and also access pathway ladder.
7. Provide shunt trip operation per code as required to automatically disconnect power to affected elevator drive unit and controller prior to activation of machine room fire sprinkler system, and / or hoistway fire sprinkler system located in the machine room. Also provide a manual reset means that shall be located outside machine room.
8. Retain existing three-phase mainline copper power feeders to terminals of each elevator controller in the machine room with protected, lockable "open," disconnect. Reconfigure and upgrade disconnect switch as may be needed for NEC code and operations. Permanently identify source of power.
 - a. Provide 110 Volt lockable disconnect switch for elevator branch lighting circuit in machine room.
 - b. Provide 110 Volt circuits and conduits as needed to smoke containment devices for elevator lobbies, per approved design locations.
9. Retain and refurbish: Emergency telephone line to elevator machine room. Terminate UL Label wiring in a 4 square box mounted adjacent to the elevator controllers for each elevator.
10. Provide Emergency Communications devices per applicable codes for direct communication between Main Landing, Machine Room, Elevator cab and other locations as may be determined applicable by AHJ.

11. Building Alarm System: Retain and refurbish fire alarm initiating devices in elevator lobbies, for each group of elevators and machine room to initiate firefighters' return feature. Provide a device at top of hoistway if sprinkled. Provide alarm initiating signal and wiring from hoistway or machine room connection point to and modules located in machine room on the wall for connection to elevator controller terminals. Modify system to provide approved interface with Smoke Containment System for each elevator entrance when required by code..
12. Smoke Curtains: Provide new- Smoke Guard or code approved smoke doors at landing entrances or equal devices to be added at landing entrances for all floors to contain smoke elevator per code. (1 device per entrance frame)
13. Remove all extraneous equipment and unrelated conduits from hoistways and machine room where possible.
14. Provide safety bevels on hoistway ledges where they are 4 Inches or greater.

1.3 DEFINITIONS

- A. Terms used are defined in the latest edition of the Safety Code for Elevators and Escalators, ASME A17.1 and latest as approved by the Washington State Elevator Code.
- B. Referenced codes from above Washington State adopted code.
- C. Specifications – Those portions of the Contract Documents consisting of the written requirements and criteria for materials, equipment, performance, construction systems and workmanship as applied to the work and elevator modernization.
- D. Construction Schedule –The schedule for the construction of the Project showing the time for start to complete of tasks or work, planned sequence for performing the work, the Contractors resource loading curve and interrelationship between the activities of the General Contractor's work, by other Trades, Consultant and the University .

- F. Warranty – Legally enforced assurance, for the specified duration of time from final acceptance of all units by the University , of quality or performance of materials and/or equipment.
- G. Refurbish – Retained Equipment - components - To make like new.

1.4 QUALITY ASSURANCE

- A. Approved Elevator Contractors:
 - 1. Otis Elevator
 - 2. ThyssenKrupp Elevator
 - 3. Schindler Elevator
 - 4. Mitsubishi Elevator
 - 5. KONE
 - 6. Approved Local Contractor
- C. Comply with the latest editions of all Regulatory Agencies and Codes.
- D. Safety Code for Elevators and Escalators, ASME A17.1, Inspectors' Manual, ASME A17.2.1, Elevator and Escalator Electrical Equipment, ASME A17.5, National Electrical Code, NFP A 70, Americans with Disabilities Act (ADA), Washington State Department of labor and Industries, Pullman Fire Department, Requirements of Building Code and all other Codes, Ordinances and Laws within the governing jurisdiction, Life Safety Code, and Washington State.
- E. Warranty
 - 1. Warranty all materials and workmanship of the installation and specification documents. Correct defective materials or workmanship which develops within ONE (1) year from date of University s' final acceptance of all work to satisfaction of University and Consultant at no additional cost, unless due to improper use or care by University . Perform regular preventive maintenance (on schedule stated below under WARRANTY MAINTENANCE) in accordance with terms and conditions indicated in the Preventive Maintenance Instructions and University s Maintenance Control Plan. (MCP)
 - a. Interim Maintenance: The successful bidder will take over the regular maintenance of all the subject elevators at the time of award of this contract

and Interim maintenance shall continue until completion of the last elevator, and acceptance by the WA L&I , and University 's final acceptance of all the installed equipment.

2. Defective is defined to include, but not limited to; operation or control system failures, car performance below required minimum, excessive wear, unusual deterioration or aging of materials or finishes, unsafe conditions, workmanship, the need for excessive maintenance, abnormal noise or vibration, and similar unsatisfactory as may determined by the Consultant.
3. Retained Equipment - All retained and/or refurbished components, parts, and materials shall be cleaned, examined, checked, modified, repaired, replace gaskets, or replaced, so each component and its parts are in LIKE NEW operating condition. All elevator equipment to receive a new coat of paint and be compatible for integration with new systems. Schedule of colors to be determined in submittals. All retained equipment shall be covered under the warranty. No proration of equipment or parts will be accepted.

F. Installer Qualifications

1. Acceptable Installers shall be regularly engaged in the following: designing, engineering, installing, and servicing elevators of the type and character herein specified, and have a history of successful production acceptable to the University. As part of the bid evaluation process, the apparent low bidder and the apparent second low bidder, must submit the name of the elevator company and or sub contractors they elect to use to actually perform the elevator work as specified, within five business days of the bid opening, and the elevator company must submit the following items:
2. Evidence that the elevator company has been, as a company, regularly engaged in designing, engineering, installing and servicing the type of elevators reflected in the modernization program and specifications for this project.
3. Acceptable installers shall have a staffed service office located in 50 mile area of the installation site.

4. Evidence the elevator company has full time service mechanics and a supervisor on the servicing the Pullman Washington general area. The contractor has been in business with a record of revenue producing comparable projects continually for a minimum of five years prior to this project's bid date.
5. Evidence the selected elevator company can respond to service calls within Sixty (60) minutes or less when the call is for passenger entrapment or major elevator safety problems on a seven day per week 24-hour per day basis.
6. The service call respondent will be a licensed elevator journeyperson or equivalent qualified employee of the installer. Installation and service employees and supervisor qualifications and resumes shall be submitted to the University representative upon contract award for approval and updated when any personnel changes are made before they start work on site. Service and construction personnel to apply for, and receive access badges by facility before working on site.
- 7 Utilize an adequate number of skilled work persons thoroughly trained and experienced in the necessary crafts to meet the construction schedule.

G. Document Review and Site Verification

1. Contractor must review Contract Documents and site conditions for compatibility with proposed products prior to submittal of proposals & quotations. This is to discover and resolve conflicts or lack of definition which may create problems. Tour site and review existing structure, electrical and mechanical provisions for compatibility with Contractor's products. University will not pay for change orders for structural, mechanical, electrical, or other systems required to accommodate Contractor's equipment.

H. Permit, Test and Inspection

1. The contractor will obtain and pay for permit, license, and inspection fee necessary to complete installation. Pay for re-inspections due to Contractors' negligence to complete required work and/or installation or coordinate with other Trades to complete installation for final acceptance and testing.

2. Perform test required by Code Authority (AHJ) in accordance with procedure described in ASME A17.2 Guide for Inspection of Elevators, Escalators, and Moving Walks in the presence of Authorized Representative.
3. Supply adequate skilled personnel and all tools and equipment for testing and final review by Consultant.

I. Submittals

1. The contractor will within twenty one calendar days after award of contract and before beginning equipment fabrication, submit shop drawings and proposed materials for review and approvals. Allow twenty one calendar days for response to initial submittal. Submittal to in two stages and compete. One submittal for fixtures and engineered drawings and one for miscellaneous materials.
2. Existing equipment Layout: No design change is contemplated for component locations of the plan for the pit, hoistway and machine room except as indicating equipment arrangements, details of car enclosures, and car / hall signal fixtures except as may be noted. Provide a new gearless AC machine and sheave assembly. Hollister Whitney, Torin, Imperial or approved equal for one overhead machine and one basement traction machine.
3. Power Confirmation Information: Include motor horsepower, code letter, starting current, full-load running current, BTU output and demand factor, reaction loads, etc. shall be submitted with product information and related drawings.
4. Project manuals: Three sets containing project schedule, installation tasks, individual task time estimates, equipment description, equipment installation instructions, equipment maintenance information, safety manuals, submittals and drawings. One set to be maintained onsite.
5. The wiring diagrams, technical manuals, and any diagnostic tools (and operating and access codes) incidental to the installation become the sole property of the University and are not subject to any manufacturer's restrictions.

6. Provide three (3) sets of maintenance instructions, check lists, recommended lubricants, parts manuals, etc. to permit maintenance of the newly installed equipment. Include recommended list of spare parts, including those items needed to support the new microprocessors and solid-state speed control units.

J. Warranty Maintenance

1. Provide full service preventative maintenance by journeyperson elevator construction mechanics and aides in the regular employment of the elevator installer on a twice per month basis from the final acceptance of the complete installation. Warranty service will commence once all units have been accepted and turned over to the University.
2. Maintenance: Provide preventive maintenance and 24-hour emergency callback service for one year commencing on date of final acceptance by University . Systematically examine, adjust, clean, and lubricate all equipment. Repair or replace defective parts using parts produced by the Contractor of installed equipment. Maintain elevator machine room, hoistway, and pit in clean condition. Use competent personnel, acceptable to the University , supervised and employed by Contractor. The installer will respond within sixty minutes in an emergency and within two hours in a non-emergency situation. Exclude only repair/replacement due to misuse, abuse, or neglect caused by other than installer's personnel.
 - a) Interim maintenance will be provided from date of notice to proceed until completion of the elevator.

PART 2 – PRODUCTS

SECTION 14 29 00 - ELECTRIC TRACTION ELEVATOR MODERNIZATION

PART 2 – EQUIPMENT

2.0 GENERAL REQUIREMENTS

CODE AUTHORITY - ELEVATOR MODERNIZATION.

ASME A17.1 Washington State Department of Licenses and Inspections
Department of Labor and Industry
Occupational Safety and Health Administration

- 2.0.1 All equipment and products are to be of the non-proprietary manufactured type. Any proprietary type of equipment will not be accepted. Acceptable electric Traction controller manufacturers include:
Smart Rise Engineering, Sacramento, CA
Elevator Controls, Sacramento, CA
MCE, Rancho Cordova, CA
Traction Machines include:
Torin
Imperial
Hollister Whitney

- 2.02 SUMMARY SCOPE:
FULLY MODERNIZE & UPGRADE

- 2.0.3 ABLESON ELEVATOR Bldg. B 032 OUTLINE SPECIFICATION
TRACTION PASSENGER ELEVATOR

NUMBER:	Passenger No. 1
PERMIT-	State # B32-05440PC
CAPACITY:	RETAIN EXISTING: 4000 #
LANDINGS- STOPS:	8 LANDINGS - 8 FRONT
SPEED:	RETAIN EXISTING: 200 FPM
TRAVEL:	RETAIN EXISTING:
MACHINE ROOM:	RETAIN EXISTING: BASEMENT B-9

MACHINE: PROVIDE NEW BASEMENT TRACTION ENGINEERED GEARLESS AC MACHINE AND DEFLECTOR SHEAVE ASSEMBLY.

MACHINE MOTOR & VVVF DRIVE: PROVIDE NEW: VVVF AC GEARLESS MACHINE AND AC DRIVE.

POWER: REUSE EXISTING: LINE VOLTAGE 480 VAC 60 AMP CONFIRM LINE VOLTAGE IN FIELD.

DISCONNECT: PROVIDE NEW FUSED DISCONNECT - SIZE WIRING AND FUSES TO ACCOMMODATE NEW VVVF DRIVE. SUPPLY STEPDOWN TRANSFORMER IF NEEDED FOR MACHINE.

CAR LIGHTS: PROVIDE SEPARATE 110 VOLT 20 AMP CIRCUIT WITH LOCKABLE SWITCH FOR CAR LIGHTS. LOCATE SWITCH AND BOX ON SIDE OF CONTROLLER

MACHINE BRAKE: PROVIDE NEW

UNINTENDED MOTION: PROVIDE NEW:

SHEAVES: PROVIDE NEW: OVERHEAD SHEAVES

HOIST CABLES: PROVIDE NEW: WIRE ROPE W/ DRY SHACKLES.

GOVERNOR PROVIDE NEW:

GOV. TAIL SHEAVE PROVIDE NEW:

GOV. CABLE: PROVIDE NEW:

CONTROLLER: PROVIDE NEW: CONTROL SYSTEM- NON PROPRIETARY – SELECTIVE COLLECTIVE MICROPROCESSOR-BASED OPERATION CONTROL - FLOOR MOUNTED NEMA 1 HINGED CABINET- FRONT ACCESS ONLY. PROVIDE BTU RATING ON MOTOR, DRIVE, AND CONTROLLER.

CONTROLLER: CABINET NEMA 1 ENCLOSURE OR AS NOTED -TO BE FLOOR MOUNTED TYPE, WITH HINGED COVER AND ADEQUATE VENTILATION TO DISSIPATE HEAT. PROPERLY TERMINATE WIRES TO IDENTIFIED TERMINAL BLOCK STUDS FOR SERIAL LINK FIXTURES. IDENTIFYING

SYMBOLS OR LETTERS IDENTICAL TO THOSE NOTED ON WIRING DIAGRAMS AND PERMANENTLY MARKED ADJACENT TO EACH COMPONENT ON THE CONTROLLER. MICROPROCESSOR BASED DIGITAL CONTROL SYSTEM WITH DISTRIBUTED LOGIC AND SERIAL LINK SIGNALS. PROVIDE EMBEDDED SOFTWARE FOR INTEGRATED DISPLAY SYSTEMS - LIFT NET REMOTE MONITORING FOR INTEGRATION INTO FACILITIES IT PLATFORM.

WIRING: PROVIDE NEW: TRAVELING CABLES INCLUDING SEPARATE TECHNOLOGY CABLE FOR CCTV, COMMUNICATIONS AND FUTURE VIDEO MESSDAGING DISPLAYS WITH MINIMUM OF 12 SHIELDED PAIRS AND CAT 5 MEANS BY DRAKA OR EQUAL, CAR AND HOIST WAY WIRING INCLUDING ALL DOOR INTERLOCKS, SLOWDOWNS AND LIMIT SWITCHES.

LANDING SYSTEM: PROVIDE NEW: APPROVED DIGITAL ENCODER TYPE ABSOLUTE POSITIONING AND LANDING SYSTEM SOLID-STATE, OPTICAL READER, HATCH TAPE, OR MOVING CROSSHEAD TYPE, ELECTRICALLY OR MECHANICALLY COUPLED, ABSOLUTE POSITIONING TO ELEVATOR CAR AND INTERFACED WITH CONTROLLER.

LOAD WEIGHING: PROVIDE NEW: CAR LOAD WEIGHING DEVICE TO REMOVE CAR FROM SERVICE IF LOAD EXCEEDS THE CAPACITY LIMIT. PROVIDE AUDIBLE AND VISUAL SIGNAL IN ELEVATOR TO WARN PASSENGERS TO EXIT CAR TO REDUCE LOAD.

SEISMIC: PROVIDE STRUCTURAL ENGINEERING WITH STAMPED DRAWINGS BY WASHINGTON STATE REGISTERED PROFESSIONAL ENGINEER, P.E. FOR NEW MACHINE, CONTROLLER, CHOKE AND TRANSFORMER MOUNTING, AND OTHER ITEMS, AS MAY BE DETERMINED BY THE MANUFACTURER NECESSARY FOR COMPLETE INSTALLATION OF EQUIPMENT. RETAIN AND MODIFY to

provide for Dual RING & STRING FOR COUNTERWEIGHT AND RAIL DISPLACEMENT. PROVIDE NEW SEISMIC SWITCH IN MACHINE ROOM.

PROVIDE NEW GUIDE RAILS AND BRACKETS WHERE 7 # RAILS EXIST ON CAR AND / OR COUNTERWEIGHTS.

CLEAR OVERHEAD:	RETAIN EXISTING
PIT:	RETAIN AND REFURBISH PAINT BUFFERS & PIT STRUCTURES AND FLOOR .
BUFFERS:	RETAIN AND REFURBISH OR PROVIDE NEW IF BUFFERS DO NOT HAVE CODE DATA PLATES AND RATINGS.
COUNTERWEIGHT PAN	PROVIDE COUNTERWEIGHT PAN WITH VISION PANEL TO MONITOR COUNTERWEIGHT BUFFER AND CABLE STRETCH.
PIT LADDER:	PROVIDE NEW LADDER WITH ADJACENT PIT LIGHT SWITCH AND STOP SWITCH - PAINT LADDER SAFETY YELLOW
PIT ELECTRICAL	REFURBISH RECONFIGURE AND UPGRADE WITH GFI OUTLETS AND LITHONIA LED STRIP LIGHTING WALL MOUNTED ABOVE 48", AND SWITCHES.
ENTRANCES:	RETAIN EXISTING:
PROVIDE ALTERNATE PRICING:	QUOTE FOR NEW STAINLESS STEEL CLADDING ON ENTRANCE FRAMES.
HALL & CAR DOORS:	RETAIN EXISTING DOOR PANELS AND PROVIDE NEW- PROVIDE NEW CODE APPROVED GIBS AND

RELATED DOOR HANGERS, ROLLERS AND SITE GUARDS.

PROVIDE ALTERNATE PRICING: QUOTE FOR NEW UL LABEL DOOR PANELS, HOISTWAY DOORS STEEL STAINLESS STEEL # 4 BRUSHED SATIN. PROVIDE NEW: CAR AND HALL DOORS WITH GAL DOOR HANGERS SHEAVES RELATING, CABLES AND GIBS, Z BRACKETS, INTERLOCKS, WIRING AND DOOR CLOSER.

ENTRANCE SIZE: RETAIN EXISTING:

ENTRANCE FRAME TYPE: 2 SPEED SIDE OPENING:

DOOR OPERATION: PROVIDE NEW: GAL OR ECI OR APPROVED EQUAL LINEAR, DIGITAL HIGH -SPEED, HEAVY-DUTY, DOOR OPERATOR (MINIMUM OPENING SPEED 2-1/2 F.P.S.- CLOSING SPEED 0.75 PFS) CLOSED LOOP OPERATION. PROVIDE KINETIC ENERGY CALCULATIONS ON DOOR OPERATOR.

DOOR HARDWARE: PROVIDE DOOR NEW DOOR ROLLERS, GIBS AND DOOR HARDWARE- CAPABLE OF SUSTAINING 1100 LB. LATERAL FORCE.

DOOR PROTECTION: PROVIDE NEW: JANUS 3D INFRARED, OPTICAL FULL HEIGHT SCREEN DEVICE LED RED & GREEN ILLUMINATION FOR DOOR OPENING AND CLOSING WITH DIFFERENTIAL TIMING FEATURE, AND AUDIBLE NUDGING SIGNAL, VOICE ANNOUNCEMENT.

GUIDE RAILS: RETAIN EXISTING: AND REFURBISH PLANED STEEL RAIL BRACKETS. PROVIDE NEW BRACKETS, FISH

PLATES AND SLIDING RAIL CLIPS AS MAY BE DETERMINED NECESSARY FOR SEISMIC REQUIREMENTS. PROVIDE NEW GUIDE 15# RAILS AND BRACKETS WHERE 7 # RAILS EXIST ON CAR AND / OR COUNTERWEIGHTS.

GOVERNOR:

PROVIDE NEW:

SEISMIC:

PROVIDE NEW SEISIIC SWITCH AND CAR OPERATION PER CODE

CAR SAFETY:

RETAIN EXISTING: CLEAN AND LUBRICATE SHOES AND REFURBISH

COUNTERWEIGHT:

RETAIN EXISTING AND ADD FILLER WEIGHTS AS NEEDED TO PROPERLY STATIC AND ELECTRICALLY BALANCE CAR AND COUNTERWEIGHT. PAINT COUNTERWEIGHT FRAME SAFETY YELLOW.

ELEVATOR CAB:

FINISHES – PROVIDE NEW STAINLESS STEEL PANELS AND REVEALS, VENTILATION AND FLOORING – PENDING CAB FINISH DESIGN PER APPROVED SUBMITTAL.

HANDRAILS:

RETAIN EXISTING: ADA ROUND HANDRAILS.

PLATFORM CAB SIZE:

RETAIN EXISTING:

RETAIN EXISTING:

REFURBISH FRONT WALL, RETURN, AND TRANSOM

CAR OPERATING PANELS

(COP):

PROVIDE NEW: DESIGN APPLIED, HINGED CAR COP FIXTURES. PROVIDE ADDITIONAL COP FOR SPECIAL NEEDS ACCESS; PROVIDE ADDITIONAL

WHEELCHAIR ACCESS OPERATING PANEL ON SIDE OR REAR WALL OF CAB. DESIGN PANEL TO PREVENT PASSENGERS FROM LEANING AGAINST PANEL AND CAUSING FLOOR BUTTONS TO BE PRESSED. LOCATE COP ON STRIKE JAB RETURN WALL ABOVE HANDRAIL. SEE PHOTO ATTACHMENT.

FIXTURE SUBMITTAL:

PROVIDE NEW: HALL SURFACE MOUNTED ADA COMPLIANT SERIAL LINK FIXTURES NOT TO EXCEED 1-3/8 INCH PROJECTION FROM WALL. (ALL DEVICES TO UTILIZE SERIAL LINK COMMUNICATIONS - LED TFD DISPLAY for ILLUMINATION SIGNALS FOR CALL ACKNOWLEDGMENT, NUMERALS AND DIRECTION ARROWS, MAD, INNOVATION OR APPROVED EQUAL fixtures. ALL DEVICE FACE PLATES TO BE MOUNTED WITH STAINLESS STEEL TORX X HEAD MACHINE SCREWS – SPANNER HEAD SCREWS NOT ACCEPTABLE.

FIXTURES - SIGNALS:

PROVIDE NEW: SURFACE MOUNTED ADA COMPLIANT SERIAL LINK FIXTURES NOT TO EXCEED 1-3/8" INCH PROJECTION FROM WALL. (ALL DEVICES TO UTILIZE SERIAL LINK COMMUNICATIONS - LED ILLUMINATION SIGNALS FOR CALL ACKNOWLEDGMENT, NUMERALS AND DIRECTION ARROWS, OR APPROVED EQUAL. ALL DEVICE FACE PLATES TO BE MOUNTED WITH STAINLESS STEEL TORX HEAD MACHINE SCREWS – SPANNER HEAD SCREWS NOT ACCEPTABLE.

**PUSH BUTTONS AND
HALL LANTERN**

SIGNAL LIGHTS: PROVIDE NEW: APPROVED SURFACE MOUNTED FIXTURES NOT TO EXCEED 1-3/8" PROJECTION FROM WALL. - DESIGNER SERIES CAR AND CORRIDOR VANDAL RESISTANT CAR PUSHBUTTONS, SINGLE RISER.

PROVIDE ENGRAVED FIRE SIGNAGE AND OPERATING INSTRUCTIONS ON HALL PUSH BUTTON FACE PLATES.

HALL PUSHBUTTONS: PROVIDE NEW: APPROVED LED TFD DISPLAY WITH DIGITAL LED POSITION INDICATOR AND DIRECTION ARROWS IN BUTTON FACE PLATE. PROVIDE LED ILLUMINATION OF PUSH BUTTONS

KEY SCHEDULE: GAL MANUFACTURING

Fire Recall FEKO	Stop	Independent	Inspection	H-W-Access	Fan	Light	Panel	TBD
GROUP 3	GROUP 2	MEDICO GROUP 2	GROUP 1	GROUP 1	GROUP 2	GROUP 2	GROUP 2	

CAR POSITION INDICATORS: PROVIDE NEW APPROVED LED TFD PI DISPLAY IN CAR OPERATING PANEL AND ALL LANDING PUSH BUTTON STATIONS. PROVIDE PROGRAMMABLE VOICE ANNOUNCEMENT FOR CAR PI AND LANDING WITH, MESSAGING, ADJUSTABLE VOLUME AND OFF ON BUTTON ON CAR COP WITH BRAILLE.

MAIN LANDING- PROVIDE DIGITAL LED TFD CAR PI WITH DIRECTION ARROWS OVER MAIN LANDING ENTRANCE FRAME

CAR RIDING LANTERN: PROVIDE NEW FLUSH MOUNTED, VANDAL RESISTANT CONTROL - ELECTRONIC CHIME WITH

ADJUSTABLE VOLUME OR TONE (TWICE FOR DOWN DIRECTION) LOCATE CAR LANTERN FIXTURE IN ENTRANCE COLUMN. FIXTURE TO INCORPORATE LED DISPLAY.

COMMUNICATION SYSTEM: PROVIDE NEW SELF-DIALING PHONE, WITH HANDS FREE OPERATION AND VISUAL CALL ACKNOWLEDGMENT LED, AND SHIELDED WIRING FROM 4 SQUARE BOX MOUNTED ADJACENT TO CAR CONTROLLER IN ELEVATOR MACHINE ROOM. INCORPORATE TELEPHONE INSTRUMENT INTO CAR OPERATING PANEL.

INTERCOM: PROVIDE TWO WAY COMMUNICATION FROM MAIN LANDING LOBBY TO ELEVATOR CAB, MACHINE ROOM AND BUILDING FIRE CONTROL PANEL FOR EMERGENCY EVACUATION.

ADDITIONAL NEW FEATURES:

RETAIN AND REFURBISH WITH NEW ROLLERS CAR AND COUNTERWEIGHT ROLLER GUIDES.

ALL HOIST WAY WIRING, SWITCHES AND SENSORS.

CAR TOP INSPECTION STATION

EMERGENCY CAR LED LIGHTING - BATTERY PACK WITH TEST SWITCH LOCATED IN COP ATTENDANT CABINET.

EMERGENCY OPERATION CA CCR, TITLE 8, RULE 3041 FIREMAN'S SERVICE PHASE 1& 2 WITH ALTERNATE FLOOR RECALL.

DISABLED ACCESS ACCOMMODATIONS PER A.D.A. REQUIREMENTS - **WHITE MARKINGS ON BLACK BACKGROUND ON ENTRANCE JAMBS AND CAR OPERATING PANEL** (NO STICK-ON OR RIVETED PLATES); PROVIDE CAST PLATES AS MANUFACTURED BY ENTRADA, SCS,TRUXES, VISIONMARK, OR APPROVED EQUIVALENT

HEAVY DUTY DUAL HINGED LOCKING CAR OPERATING PANELS.

HOIST WAY ACCESS SWITCHES LOCATED AT TOP AND BOTTOM LANDINGS - REUSE KEY LOCATIONS WITH NEW LOCK SETS PER SCHEDULE OF KEYS

INDEPENDENT SERVICE FEATURE

PLATFORM SOUND ISOLATION

SEISMIC RAIL BRACKETS AND BACKING (AS REQUIRED)
SEISMIC DESIGNS AND OPERATION

MOUNT ALL FIXTURE FACE PLATES WITH TAMPER-RESISTANT TORX HEAD STAINLESS SCREWS - **DO NOT USE SPANNER TYPE SCREWS.**

CAB FURNITURE PADS W/ HANGERS and cab wall buttons.

INTERMIM MAINTENANCE AWARD THRU DURATION OF CONSTRCUTION PHASE OF PROJECT.

12-MONTH WARRANTY FOR PARTS AND LABOR – 12
MONTHS MAINTENANCE BY CONTRACTOR WITH
24-HOUR CALL-BACK SERVICE

SOUND POWERED CAR EMERGENCY TELEPHONE
JACKS AND PAGING SPEAKERS AS PER LOCAL
CODES.

WIRING DIAGRAMS, OPERATING INSTRUCTIONS,
AND PARTS ORDERING INFORMATION

PROVIDE AUXILIARY LED CAR LIGHTING MOUNTED
INSIDE EXISTING FIXTURES ON CAR CANOPY WITH
SEPARATE LIGHT SWITCH IN SERVICE CABINET.

INTEGRATED DISPLAY SYSTEMS LIFT NET REMOTE
ELEVATOR MONITORING SYSTEM FOR FACILITIES:

NO VISIBLE COMPANY NAME OR LOGO

CAB FINSHES AND DESIGN ALLOWANCE \$ 35,000.00
INCLUDE IN BID PRICE WITH PROPOSED DESINGN
AND ISLAND CEILING AND LED LIGHTING.

TWO SPEED VENTILATION FAN MOUNTED ON TOP OF
CAR.

WIRING DIAGRAMS, OPERATING INSTRUCTIONS,
AND PARTS ORDERING INFORMATION

LITHONIA (OR APPROVED EQUAL) LIGHTING
FIXTURES AT TOP OF HOIST WAY WITH single pole
SWITCH for top of hoistway and pit LIGHTING.

SAFETY CAR TOP RAILING IF MEASUREMENTS
REQUIRE.

203.1 FOOD SCIENCE ELEVATOR Bldg. 816
OVERHEAD TRACTION ELEVATOR

NUMBER: PASSENGER NO. 1

PERMIT- Elev. No, 1 Permit # B816 - 06830PC

CAPACITY: RETAIN EXISTING: 4000 #

LANDINGS- STOPS: 6 LANDINGS - 6 FRONT

SPEED: RETAIN EXISTING: 200 FPM

TRAVEL: RETAIN EXISTING:

MACHINE ROOM: RETAIN EXISTING: ROOM 400 MR

MACHINE: PROVIDE NEW ENGINEERED OVERHEAD TRACTION
GEARLESS AC MACHINE AND DEFLECTOR SHEAVE
ASSEMBLY

MACHINE MOTOR
& VVVF DRIVE: PROVIDE NEW: VVVF AC GEARLESS MACHINE AND AC
DRIVE.

POWER: REUSE EXISTING: LINE VOLTAGE 480 VAC 60 AMP
CONFIRM LINE VOLTAGE IN FIELD. SUPPLY DISCONNECT:
PROVIDE NEW FUSED DISCONNECT - SIZE WIRING AND
FUSES TO ACCOMMODATE NEW VVVF DRIVE. STEPDOWN
TRANSFORMER IF NEEDED FOR MACHINE.

CAR LIGHTS: PROVIDE SEPARATE 110 VOLT 20 AMP CIRCUIT WITH LOCKABLE SWITCH FOR CAR LIGHTS. LOCATE SWITCH AND BOX ON SIDE OF CONTROLLER.

MACHINE BRAKE: PROVIDE NEW

UNINTENDED MOTION: PROVIDE NEW:

SHEAVES: PROVIDE NEW: SHEAVES

HOIST CABLES: PROVIDE NEW: WIRE ROPE W/ DRY SHACKLES.

GOVERNOR PROVIDE NEW:

GOV. TAIL SHEAVE PROVIDE NEW:

GOV. CABLE: PROVIDE NEW:

CONTROLLER: PROVIDE NEW: CONTROL SYSTEM- NON PROPRIETARY – SELECTIVE COLLECTIVE MICROPROCESSOR-BASED OPERATION CONTROL - FLOOR MOUNTED NEMA 1 HINGED CABINET- FRONT ACCESS ONLY. PROVIDE BTU RATING ON MOTOR, DRIVE, AND CONTROLLER.

CONTROLLER: CABINET NEMA 1 ENCLOSURE OR AS NOTED -TO BE FLOOR MOUNTED TYPE, WITH HINGED COVER AND ADEQUATE VENTILATION TO DISSIPATE HEAT. TERMINATE WIRES TO IDENTIFIED TERMINAL BLOCK STUDS FOR SERIAL LINK FIXTURES. IDENTIFYING SYMBOLS OR LETTERS IDENTICAL TO THOSE NOTED ON WIRING DIAGRAMS AND PERMANENTLY MARKED ADJACENT TO EACH COMPONENT ON THE CONTROLLER. MICROPROCESSOR BASED DIGITAL CONTROL SYSTEM WITH DISTRIBUTED LOGIC AND SERIAL LINK SIGNALS.

PROVIDE EMBEDDED SOFTWARE FOR INTEGRATED DISPLAY SYSTEMS-LIFT NET REMOTE MONITORING FOR INTEGRATION INTO FACILITIES IT PLATFORM.

WIRING: PROVIDE NEW: TRAVELING CABLES INCLUDING SEPARATE TECHNOLOGY CABLE FOR CCTV, COMMUNICATIONS AND FUTURE VIDEO MESSAGING DISPLAYS WITH MINIMUM OF 12 SHIELDED PAIRS AND CAT 5 MEANS BY DRAKA OR EQUAL, CAR AND HOIST WAY WIRING INCLUDING ALL INTERLOCKS, SLOWDOWNS AND LIMIT SWITCHES.

LANDING SYSTEM: PROVIDE NEW: APPROVED DIGITAL ENCODER TYPE ABSOLUTE POSITIONING AND LANDING SYSTEM SOLID-STATE, OPTICAL READER, HATCH TAPE, OR MOVING CROSSHEAD TYPE, ELECTRICALLY OR MECHANICALLY COUPLED, ABSOLUTE POSITIONING TO ELEVATOR CAR AND INTERFACED WITH CONTROLLER.

LOAD WEIGHING: PROVIDE NEW: CAR LOAD WEIGHING DEVICE TO REMOVE CAR FROM SERVICE IF LOAD EXCEEDS THE CAPACITY LIMIT. PROVIDE AUDIBLE AND VISUAL SIGNAL IN ELEVATOR TO WARN PASSENGERS TO EXIT CAR TO REDUCE LOAD.

SEISMIC: PROVIDE STRUCTURAL ENGINEERING WITH STAMPED DRAWINGS BY WASHINGTON STATE REGISTERED PROFESSIONAL ENGINEER, P.E. FOR NEW MACHINE, CONTROLLER, CHOKE AND TRANSFORMER MOUNTING, AND OTHER ITEMS, AS MAY BE DETERMINED BY THE MANUFACTURER NECESSARY FOR complete INSTALLATION OF EQUIPMENT. RETAIN AND MODIFY to provide for Dual RING & STRING FOR COUNTERWEIGHT AND RAIL DISPLACEMENT. PROVIDE NEW SEISMIC SWITCH IN MACHINE ROOM.

PROVIDE NEW GUIDE RAILS AND BRACKETS WHERE 7 #
RAILS EXIST ON CAR AND / OR COUNTERWEIGHTS.

CLEAR OVERHEAD: RETAIN EXISTING

PIT: RETAIN AND REFURBISH

BUFFERS: RETAIN AND REFURBISH OR PROVIDE NEW IF
BUFFERS DO NOT HAVE CODE DATA PLATES AND
RATINGS.

COUNTERWEIGHT PAN PROVIDE NEW COUNTERWEIGHT PAN WITH VISION
PANEL TO MONITOR COUNTERWEIGHT BUFFER AND
CABLE STRETCH.

PIT LADDER: PROVIDE NEW LADDER WITH ADJACENT PIT LIGHT
SWITCH AND STOP SWITCH - PAINT LADDER SAFETY
YELLOW

PIT ELECTRICAL REFURBISH RECONFIGURE AND UPGRADE WITH GFI
OUTLETS AND LITHONIA LED STRIP LIGHTING WALL
MOUNTED ABOVE 48", AND SWITCHES.

ENTRANCES: RETAIN EXISTING:

PROVIDE ALTERNATE PRICING QUOTE FOR NEW
STAINLESS STEEL CLADDING ON ENTRANCE
FRAMES.

HALL & CAR DOORS: RETAIN EXISTING DOOR PANELS AND PROVIDE NEW
DOOR ROLLERS, CODE APPROVED GIBS AND
RELATED DOOR HANGERS, ROLLERS AND SITE
GUARDS.

PROVIDE ALTERNATE PRICING: QUOTE FOR NEW UL LABEL DOOR PANELS, HOISTWAY DOORS STEEL STAINLESS STEEL # 4 BRUSHED SATIN. PROVIDE NEW: CAR AND HALL DOORS WITH GAL DOOR HANGERS SHEAVES RELATING, CABLES AND GIBS, Z BRACKETS, INTERLOCKS, WIRING AND DOOR CLOSER.

ENTRANCE SIZE: RETAIN EXISTING:

ENTRANCE FRAME TYPE: SINGLE SPEED CENTER OPENING

DOOR OPERATION: PROVIDE NEW: GAL or ECI OR APPROVED EQUAL LINEAR, DIGITAL HIGH -SPEED, HEAVY-DUTY, DOOR OPERATOR (MINIMUM OPENING SPEED 2-1/2 F.P.S.- Closing Speed 0.75 PFS) CLOSED LOOP OPERATION.

DOOR HARDWARE: PROVIDE NEW: CAR AND HALL DOORS PROVIDE DOOR GIBS AND DOOR HARDWARE- CAPABLE OF SUSTAINING 1100 LB. LATERAL FORCE.

DOOR PROTECTION: PROVIDE NEW: JANUS 3D INFRARED, OPTICAL FULL HEIGHT SCREEN DEVICE LED RED & GREEN ILLUMINATION FOR DOOR OPENING AND CLOSING WITH DIFFERENTIAL TIMING FEATURE, AND AUDIBLE NUDGING SIGNAL, VOICE ANNOUNCEMENT.

GUIDE RAILS: RETAIN EXISTING: AND REFURBISH PLANED STEEL RAIL BRACKETS. PROVIDE NEW BRACKETS, FISH PLATES AND SLIDING RAIL CLIPS AS MAY BE DETERMINED NECESSARY FOR SEISMIC REQUIREMENTS. PROVIDE NEW GUIDE 15# RAILS

AND BRACKETS WHERE 7 # RAILS EXIST ON CAR
AND / OR COUNTERWEIGHTS.

GOVERNOR:

PROVIDE NEW:

SEISMIC:

PROVIDE NEW SEISIIC SWITCH AND CAR OPERATION
PER CODE

CAR SAFETY:

RETAIN EXISTING: CLEAN AND LUBRICATE SHOES
AND REFURBISH

COUNTERWEIGHT:

RETAIN EXISTING AND ADD FILLER WEIGHTS AS
NEEDED TO PROPERLY STATIC AND ELECTRICALLY
BALANCE CAR AND COUNTERWEIGHT. PAINT
COUNTERWEIGHT FRAME SAFETY YELLOW.

ELEVATOR CAB:

FINISHES – PROVIDE NEW STAINLESS STEEL
PANELS AND REVEALS, VENTILATION AND
FLOORING – FINISH & DESIGN PER APPROVED
SUBMITTAL.

HANDRAILS:

Retain Existing: ADA ROUND HANDRAILS.

PLATFORM CAB SIZE:

RETAIN EXISTING:

RETAIN EXISTING:

REFURBISH FRONT WALL, RETURN, AND TRANSOM

CAR OPERATING PANELS
(COP):

PROVIDE NEW: DESIGN APPLIED, HINGED CAR COP
FIXTURES. PROVIDE ADDITIONAL COP FOR SPECIAL
NEEDS ACCESS; PROVIDE ADDITIONAL
WHEELCHAIR ACCESS OPERATING PANEL ON SIDE
OR REAR WALL OF CAB. DESIGN PANEL TO PREVENT
PASSENGERS FROM LEANING AGAINST PANEL AND

CAUSING FLOOR BUTTONS TO BE PRESSED.
LOCATE COP ON STRIKE JAB SIDE RETURN WALL
ABOVE HANDRAIL. SEE PHOTO ATTACHMENT.

FIXTURE SUBMITTAL:

PROVIDE NEW: HALL LANTERNS AND PUCH BUTTON
FIXTURES - SURFACE MOUNTED ADA COMPLIANT
SERIAL LINK FIXTURES NOT TO EXCEED 1-3/8 INCH
PROJECTION FROM WALL. (ALL DEVICES TO UTILIZE
SERIAL LINK COMMUNICATIONS - LED TFD DISPLAY
for ILLUMINATION SIGNALS FOR CALL
ACKNOWLEDGMENT, NUMERALS AND DIRECTION
ARROWS, MAD, INNOVATION OR APPROVED EQUAL
fixtures. ALL DEVICE FACE PLATES TO BE MOUNTED
WITH STAINLESS STEEL TORX X HEAD MACHINE
SCREWS – SPANNER HEAD SCREWS NOT
ACCEPTABLE.

FIXTURES - SIGNALS:

PROVIDE NEW: SURFACE MOUNTED ADA
COMPLIANT SERIAL LINK FIXTURES NOT TO EXCEED
1-3/8" INCH PROJECTION FROM WALL. (ALL DEVICES
TO UTILIZE SERIAL LINK COMMUNICATIONS - LED
ILLUMINATION SIGNALS FOR CALL
ACKNOWLEDGMENT, NUMERALS AND DIRECTION
ARROWS, OR APPROVED EQUAL. ALL DEVICE FACE
PLATES TO BE MOUNTED WITH STAINLESS STEEL
TORX HEAD MACHINE SCREWS – SPANNER HEAD
SCREWS NOT ACCEPTABLE.

**PUSH BUTTONS AND
HALL LANTERN
SIGNAL LIGHTS:**

PROVIDE NEW: APPROVED SURFACE MOUNTED
FIXTURES NOT TO EXCEED 1-3/8" PROJECTION
FROM WALL. - DESIGNER SERIES CAR AND
CORRIDOR VANDAL RESISTANT CAR PUSHBUTTONS,

SINGLE RISER.

PROVIDE ENGRAVED FIRE SIGNAGE AND OPERATING INSTRUCTIONS ON HALL PUSH BUTTON FACE PLATES.

HALL PUSHBUTTONS:

PROVIDE NEW: APPROVED LED TFD DISPLAY WITH DIGITAL LED POSITION INDICATOR AND DIRECTION ARROWS IN BUTTON FACE PLATE. PROVIDE LED ILLUMINATION OF PUSH BUTTONS

KEY SCHEDULE:

GAL MANUFACTURING

Fire Recall	Stop	Independent	Inspection	H-W-	Fan	Light	Panel	TBD
GROUP 3	GROUP 2	MEDICO GROUP 2	GROUP 1	GROUP 1	GROUP 2	GROUP 2	GROUP 2	

CAR POSITION INDICATORS:

PROVIDE NEW APPROVED LED TFD DISPLAY IN CAR OPERATING PANEL. PROVIDE PROGRAMMABLE VOICE ANNOUNCEMENT FOR CAR PI AND LANDING WITH, MESSAGING, ADJUSTABLE VOLUME AND OFF ON BUTTON ON CAR COP WITH BRAILLE.

MAIN LANDING- PROVIDE DIGITAL LED TFD CAR PI WITH DIRECTION ARROWS OVER MAIN LANDING ENTRANCE FRAME

CAR RIDING LANTERN:

PROVIDE NEW FLUSH MOUNTED, VANDAL RESISTANT CONTROL - ELECTRONIC CHIME WITH ADJUSTABLE VOLUME OR TONE (TWICE FOR DOWN DIRECTION) LOCATE CAR LANTERN FIXTURE IN

ENTRANCE COLUMN. FIXTURE TO INCORPORATE LED DISPLAY.

COMMUNICATION SYSTEM: PROVIDE NEW SELF-DIALING PHONE, WITH HANDS FREE OPERATION AND VISUAL CALL ACKNOWLEDGMENT LED, AND SHIELDED WIRING FROM 4 SQUARE BOX MOUNTED ADJACENT TO CAR CONTROLLER IN ELEVATOR MACHINE ROOM. INCORPORATE TELEPHONE INSTRUMENT INTO CAR OPERATING PANEL.

INTERCOM: PROVIDE TWO WAY COMMUNICATION FROM MAIN LANDING LOBBY TO ELEVATOR CAB, MACHINE ROOM AND BUILDING FIRE CONTROL PANEL FOR EMERGENCY EVACUATION.

ADDITIONAL NEW FEATURES:

RETAIN AND REFURBISH WITH NEW ROLLERS CAR AND COUNTERWEIGHT ROLLER GUIDES.

ALL HOIST WAY WIRING, SWITCHES AND SENSORS.

CAR TOP INSPECTION STATION

EMERGENCY CAR LED LIGHTING - BATTERY PACK WITH TEST SWITCH LOCATED IN COP ATTENDANT CABINET.

EMERGENCY OPERATION CA CCR, TITLE 8, RULE 3041 FIREMAN'S SERVICE PHASE 1& 2 WITH ALTERNATE FLOOR RECALL.

DISABLED ACCESS ACCOMMODATIONS PER A.D.A. REQUIREMENTS - **WHITE MARKINGS ON BLACK BACKGROUND ON ENTRANCE JAMBS AND CAR OPERATING PANEL** (NO STICK-ON OR RIVETED PLATES); PROVIDE CAST PLATES AS MANUFACTURED BY ENTRADA, SCS, TRUXES, VISIONMARK, OR APPROVED EQUIVALENT

HEAVY DUTY DUAL HINGED LOCKING CAR OPERATING PANELS.

HOIST WAY ACCESS SWITCHES LOCATED AT TOP AND BOTTOM LANDINGS - REUSE KEY LOCATIONS WITH NEW LOCK SETS PER SCHEDULE OF KEYS

INDEPENDENT SERVICE FEATURE

PLATFORM SOUND ISOLATION

SEISMIC RAIL BRACKETS AND BACKING (AS REQUIRED)

SEISMIC DESIGNS AND OPERATION

MOUNT ALL FIXTURE FACE PLATES WITH TAMPER-RESISTANT TORX HEAD STAINLESS SCREWS - **DO NOT USE SPANNER TYPE SCREWS.**

CAB FURNITURE PADS W/ HANGERS and cab wall buttons.

INTERIM MAINTENANCE AWARD THRU DURATION OF CONSTRUCTION PHASE OF PROJECT.

12-MONTH WARRANTY FOR PARTS AND LABOR – 12 MONTHS MAINTENANCE BY CONTRACTOR WITH 24-HOUR CALL-BACK SERVICE

SOUND POWERED CAR EMERGENCY TELEPHONE JACKS AND PAGING SPEAKERS AS PER LOCAL CODES.

WIRING DIAGRAMS, OPERATING INSTRUCTIONS, AND PARTS ORDERING INFORMATION

PROVIDE AUXILIARY LED CAR LIGHTING MOUNTED INSIDE EXISTING FIXTURES ON CAR CANOPY WITH SEPARATE LIGHT SWITCH IN SERVICE CABINET.

INTEGRATED DISPLAY SYSTEMS LIFT NET REMOTE ELEVATOR MONITORING SYSTEM FOR FACILITIES:

NO VISIBLE COMPANY NAME OR LOGO

CAB FINSHES AND DESIGN ALLOWANCE \$ 35,000.00
INCLUDE IN BID PRICE WITH PROPOSED DESIGN AND ISLAND CEILING AND LED LIGHTING.

TWO SPEED VENTILATION FAN MOUNTED ON TOP OF CAR.

WIRING DIAGRAMS, OPERATING INSTRUCTIONS, AND PARTS ORDERING INFORMATION

LITHONIA (OR APPROVED EQUAL) LIGHTING FIXTURES AT TOP OF HOIST WAY WITH single pole SWITCH for top of hoistway and pit LIGHTING.

CAR TOP RAILING IF REQUIRED BY CODE.

2.1 MATERIALS AND COMPONENTS

- A. General: Provide manufacturer's complete standard pre-engineered elevator systems which meet the requirements of this specification. Where components are not otherwise indicated, provide standard components, as required for a complete system.
- B. At a minimum, comply with the instructions for reuse, repair, and replacement in this specification.
- C. Where the specification advises that reuse or repair is appropriate and the installer determines that not to be possible, the installer is to provide the improvement at no cost to the University .
- D. The University recognizes that the acceptable installer may not manufacture all components of the elevator system. All elevator system components shall be manufactured by either the acceptable manufacturer or by companies specifically named herein. All suppliers of minor components not named herein are to be regularly engaged in the manufacture of elevator components.
- E. The University representative and Consultant will welcome and consider any "value engineering" options and/or alternates, which could be viable for space, operations and/or cost savings. Bids must incorporate the specifications bid as stated and accompany any alternate proposals

2.2 PERFORMANCE

- A. Car Speed: $\pm 5\%$ of contract Speed. Under any load conditions.
- B. Car Capacity: $\pm 5\%$ of rated load.
- C. Car Stopping: $\pm 1/4"$ under any load condition.

- D. Door Opening Time: Start of open to fully open measured in seconds:
 - a) Car : 2.0 / 2.5 seconds.
- E. Door Closing Time: Start to close to fully closed:
 - a) Car : 4.5 / 5.0 seconds.
- F. Floor-to-Floor Performance Time: Start of door closing until doors are $\frac{3}{4}$ open and stopped at the next floor under any loading condition or direction of travel based on a typical floor height of 14'-0".
 - a) Car: 10.0 seconds.
- G. Car Ride Quality: Car ride shall be smooth and quiet throughout starting, high speed, leveling, stopping and door operation. Not to exceed 20mg.
- H. Airborne Noise: Measured noise level of elevator equipment during operation shall not exceed 50 dBA in elevator lobbies and 60 dBA inside car under any condition including door operation and car ventilation exhaust blower on its highest speed.
- I. Vibration Control: All elevator equipment provided under this contract shall be mechanically isolated from the building structure and electrically isolated from the building power supply and to each other to minimize the possibility of objectionable noise and vibrations being transmitted to occupied areas of the building.
- J. Limit noise level in the machine room relating to elevator equipment and its operation to no more than 80 dBA.

2.3 OPERATION

- A. Operate car without attendant from pushbuttons in car and located at each floor. When car is available, automatically start car and dispatch it to floor corresponding to registered car or hall call. Once car starts, respond to registered calls in direction of travel and in the order the floors are reached. Illuminate appropriate pushbutton to indicate call registration. Extinguish light when call is answered.
- B. Independent Service: Provide controls for operation of car from its pushbuttons only. Close doors by constant pressure on desired destination floor button or door close button. Open the doors automatically upon arrival at a selected floor.

- C. Anti-Nuisance Feature: If load weight in car is not commensurate with number of registered car calls, cancel car calls. System shall employ a load weighing control device for activation of this feature. If load exceed capacity voice announcement to direct warning to excess passengers to disembark to allow elevator to leave landing.
- D. Firefighters' Service: Provide equipment and operation in accordance with Code requirements.
- E. Motor Control Drive: AC type: Variable Voltage Variable Frequency Regenerative Drive.
- F. Emergency Power System shall revert to normal power upon restoration of power and a brief time to allow systems to stabilize. Manual transfer switches in the machine room to allow the selection of normal or emergency power for each elevator.
- G. Door Operation: Automatically open doors when car arrives at floors. At expiration of normal dwell time, close doors.
- H. Standby Lighting and Alarm Bell: Car mounted battery unit with solid-state charger to operate alarm bell and car emergency lighting. Battery is to be rechargeable with minimum 5-year life expectancy. Include required transformer. Provide constant pressure test button in service compartment of car operating panel. Provide lighting integral with portion of normal car lighting system.
- I. Controllers shall be non-proprietary.

2.4 MACHINE ROOM EQUIPMENT

- A. Arrange equipment in existing machine room spaces and in accordance with code requirements.
- B. Machine. Provide new gearless AC machine and Sheave assembly
- C. Controller: New UL/CSA Labeled from the approved supplier. Non-Proprietary microprocessor based controls. Provide code required data tags. Equipment shall be provided with Electro Magnetic Interference (EMI) shielding within FCC guidelines.

- D. Wiring: CSA labeled copper conductors for factory wiring. Neatly route all wiring interconnections and securely attach wiring connections to studs or terminals. Use wire ties to neaten groupings of wires.
- E. Permanently mark components (relays, fuses, PC boards, etc.) with symbols shown on wiring diagrams.
- F. Unintended Motion: Provide New with hoist machine. Adjust and test.
- G. Hoist Ropes: Provide new hoist and governor ropes.
- H. Governors: Provide new to comply with current code and test.
- I. Provide new Guide rails and brackets where 7 # exist on car and / or counterweights.
- J. Sheaves: Deflector sheave. Sheaves shall be cleaned, grooves undercut if uneven and new bearings or sleeves installed and new lubrication.
- K. All elevator control equipment including their supports and fastenings to building in compliance with structural and seismic requirements and shall be mechanically and electrically isolated from the building structure and main line power feeders to minimize objectionable noise and vibration transmission to car, building structure, or adjacent occupied areas of building.
- L. Controller: New UL/CSA Labeled Non-Proprietary microprocessor based simplex Selective Collective controls. Provide code required data tag. Equipment shall be provided with Electro Magnetic Interference (EMI) shielding within FCC guidelines. Cabinet -To be floor mounted type, with removable cover and adequate ventilation to dissipate heat. Terminate wires to identified terminal block studs for serial link fixtures. Identifying symbols or letters identical to those on wiring diagrams permanently marked adjacent to each component on the controller. Microprocessor based digital control system with distributed logic and serial link signals. System to be capable of interfacing with remote monitoring, to provide elevator status, event and fault detection and interactive security features such as floor lock out, load weighing. Elevator Monitoring System to be interfaced with building system. Provide new LED TFD Display terminal for monitoring, to be located in Fire Control Room or Facility office. CCTV Camera system or remote control location.

- M. All equipment shall comply with current seismic code requirements.

2.5 HOISTWAY EQUIPMENT

- A. Guide Rails: Retain guide rails. Clean rails and brackets, remove any rust and repaint. Check the realign, adjust and tighten all rail and bracket fastenings for proper DBG and seismic requirements. Provide new Guide rails and brackets where 7 # rails exist on car and / or counterweights.
- B. Buffers for Car and Counterweights: Retain existing, provide code data tags and test, Paint Safety Yellow.
- C. Terminal Stopping: Provide new normal and final devices.
- D. Safeties: Retain existing, clean, adjust, lubricate, test and reseal.
- E. Electrical Wiring and Wiring Connections: New
 - 1. Conductors and Connections: Copper throughout with individual wires coded and connections landed on identified studs or terminal blocks. Use no splices or similar connections in wiring except at terminal blocks, control compartments, or junction boxes. Provide 10% spare conductors throughout. Run spare wires from car connection points to individual elevator controllers in the machine room. Provide 6 pairs of spare UL shielded communication wires in addition to those required to connect specified items. Tag spares in machine room. Provide fire phone jack wiring from the hoistway to machine room terminal.
 - 2. Conduit: Painted or galvanized steel conduit, EMT or raceway. Conduit size: 1/2" minimum. Flexible heavy-duty service cord may be used between fixed car wiring and car door switches for door protective devices.

3. Traveling Cables: Provide New: Flame and moisture-resistant UL Label outer cover. Prevent traveling cable from rubbing or chafing against brackets or equipment located within hoistway. Provide five (5) pair of UL shielded wires and two (2) RG-6/U type coaxial cables for future card reader. Provide two (2) RG-6/U coaxial CCTV cables within traveling cable from car controller to car top, plus 3'-0" excess loop at both ends. Provide two (2) pair 14 gauge wires for future CCTV power.
 4. Auxiliary Wiring: Connect firefighter's operation alarm initiating devices, emergency two-way communication system, firefighters' phone, paging speaker, CCTV, digital video display, card reader, intercom, and announcement speaker for each car controller in approved designated locations in machine room.
 5. Provide 4 square boxes or approved enclosures mounted adjacent to elevator controller or wall for terminations of Alarm, Telephone, Intercom, Car Readers, CCTV and 110 VAC wiring by specialty trades.
- F. Provide new pit ladder per code. Paint Ladder Safety Yellow.
- G. All equipment shall comply with current seismic code requirements.

2.6 HOISTWAY ENTRANCES

- A. Entrance Frames: Retain existing.
- B. Hoistway Door Panels: Provide UL Labeled doors. SS # 4 Brushed complete with all hardware and gibs per code.
- C. Sight Guards: Provide new.
- D. Sills: Retain existing. Clean and polish. Check and tighten all fastenings. Replace distorted or damaged car or hoistway sills as may be needed
- E. Door Hangers: Provide new: GAL Two-point hanger roller with neoprene roller surface and suspension with eccentric up-thrust roller adjustment.
- F. Door Tracks: Provide new to fit in existing space and support the existing doors.
- G. Door Interlocks: Provide new: GAL Operable without retiring cam. Paint interlock box flat black.

- H. Door Closers: Provide new: Spring, Smart Tork Spirator or jamb/strut mounted counterweight type. Design and adjust to insure smooth, quiet mechanical self closing of landing doors.

2.7 CAR EQUIPMENT

- A. Car Frame: (car sling, platform, sill and safety plank): Retain & Refurbish Existing. Clean & check and tighten all fastenings.
- B. Guide Shoes: Provide New: Car and Counterweight - Roller Guides with 3 Inch on Counterweight and 6 Inch rollers on car, with spring dampened, sound-deadening rollers per shoe and seismic bracket.
- C. Car Doors: New. UL door Panels.
- D. Door Operator and Hangers: Provide new: Linear Operator with kinetic energy calculations located on door header or operator, Two-point hanger roller with neoprene roller surface and suspension with eccentric up-thrust roller adjustment.
- E. Door Track: Provide new: Bar or formed, cold-drawn removable steel track with smooth roller contact surface.
- F. Door Header: As required for mounting of new linear door operator. Construct of minimum 12 gauge steel, shape to provide stiffening flanges.
- G. Door Electrical Contact: New: Prohibit car operation unless car door is closed.
- H. Door Clutch: New: Heavy-duty clutch, linkage arms, drive blocks and pickup rollers or cams to provide positive, smooth, quiet door operation. Design clutch so car doors can be closed, while hoistway doors remain open.
- I. Restricted Opening Device: New: Restrict opening of car door(s) outside unlocking zone.
- J. Car Top Control Station: Provide New Mount to provide safe access and utilization while standing in an upright position on car top.

- K. Work Light and Duplex Plug Receptacle: Provide New GFCI protected outlet in service panel or on return panel. Include on/off switch and lamp guard. Provide additional GFCI protected outlet on car top for future installation of car CCTV and/or digital video display.
- L. Provide New car load weighing device to remove car from service if load exceeds the capacity limit. Provide audible and visual signals in the elevator to warn passengers to exit the elevator and reduce the load.
- M. Provide one new coat of paint as selected by the University on all exposed equipment that is not a running surface including car top, machine room, pit structures, and pit floors.
- N. Provide car top safety railing if needed.

2.8 CAR ENCLOSURE

- A. Ceiling: Provide new Island mirror stainless steel ceiling with dimmable LED lighting minimum 4000 lux and battery standby power feature. Man D Tec or approved equal.
- B. Cab Panels: Provide new Stainless steel # 4 cab panels and reveals.
- C. Flooring: Provide new ALTRO or approved equivalent.
- D. Cab Lighting: Provide new LED Lighting System with integrated battery operated emergency LED lights and test switch in COP Service Panel.

2.9 DOOR OPERATOR

- A. Door Operator: New GAL Linear, closed loop, heavy-duty door operator capable of opening doors at no less than 2-1/2 f.p.s. Accomplish reversal in no more than 2-1/2" of door movement. Provide solid-state door control with closed loop circuitry to constantly monitor and automatically adjust door operation based upon velocity, position, and motor current. Maintain consistent, smooth and quiet door operation at all floors, regardless of door weight or varying air pressure. Provide all kinetic energy data on door operators for car and hall doors.

- B. Door Detector:- Infrared Reopening Device: Provide New: Janus Pana Forty 3 D with Red & Green LED lighting strips for open close operation. Fully enclosed device with full screen infrared matrix or multiple beams extending vertically along leading edge of each door panel to minimum height of 7'-0" above finished floor. Device shall prevent doors from closing and reverse doors at normal opening speed if beams are obstructed while doors are closing, except during nudging operation. In event of device failure, provide for automatic shutdown of car at floor level with doors open.
- C. Detector Nudging Operation: After beams of door control device are obstructed for a predetermined time interval (adjustable 20.0 - 25.0 seconds), warning signal shall sound and doors shall attempt to close with a maximum of 2.5 foot pounds kinetic energy. Activation of the door open button shall override nudging operation and reopen doors. Integrate with Firefighters' operation per code.
- D. Detector Interrupted Beam Time: When beams are interrupted during initial door opening, hold door open a minimum of 3.0 seconds. When beams are interrupted after the initial 3.0 second hold open time, reduce time doors remain open to an adjustable time of approximately 1.0 – 3.0 seconds after beams are reestablished.
- E. Differential Door Time: Provide separately adjustable timers to vary time that doors remain open after stopping in response to calls.
- F. Car Call: Hold open time adjustable between 3.0 and 5.0 seconds.
- G. Hall Call: Hold open time adjustable between 5.0 and 8.0 seconds. Use hall call time when car responds to coincidental calls.

2.10 CAR OPERATING CONTROLS

- A. One car operating panel as part of each return panel, consisting of a metal box containing vandal resistant operating fixtures, mounted behind the car panel that is applied surface mounted on the car front return panel unless swing return is noted.
 - 1) Provide additional Special Needs Access COP on side cab wall located above handrail.
- B. Suitably identify floor buttons, alarm button, door open button, door close button and emergency push-to-call button with SCS, Vision Mark or Entrada cast tactile

symbols recessed flush rear mounted. Configure plates per local building code accessibility standards including Braille. Locate operating controls no higher than 48" above the car floor; no lower than 35" for emergency push-to-call button and alarm button.

- C. Provide keyed stop switch at bottom of car operating panel faceplate. Mark device to indicate "run" and "stop" positions.
- D. Provide lockable service compartment with recessed flush door. Door material and finish shall match car return panel. Provide the following features in service cabinet:
 - 1. Inspection switch.
 - 2. Two-position exhaust blower switch.
 - 3. Light switch.
 - 4. Independent service switch.
 - 5. Constant pressure test button for battery pack emergency lighting.
 - 6. 120-volt, AC, GFCI protected electrical convenience outlet.
- E. Provide Firefighters' Phase II FEKO key switch in new concealed section per latest code. Include light jewel, buzzer, and call cancel button and all required features.
- F. Provide black paint filled (except as noted), engraved or approved etched signage as follows with approved size and font:
 - 1. Car number on main car panel.
 - 2. Certificate of Inspection on main or alternate car panel located at 72" .
 - 3. "No Smoking" - main car panel.
 - 4. Car number and capacity in pounds on main car panel.
- G. "Push to Call," two-way hands free communication instrument in car with automatic dialing, tracking and recall features with shielded wiring to car controller in machine room. Provide two-way communication between car and machine room if required.

- H. Floor Passing Tone: Provide an audible tone of no less than 20 decibels and frequency of no higher than 1500 Hz, to sound as the car passes or stops at a floor served. Voice announcement of landing floor with on/off button on COP

2.11 SIGNAL FIXTURES

- A. Hall Stations: Meet ADA criteria in all respects.
- B. Pushbuttons: Provide New: Provide single riser with Surface mounted faceplates. Include pushbuttons for each direction of travel which illuminate to indicate call registration. Include digital LED direction arrows and car PI with face plates at all landings. Provide approved engraved message and pictorial representation prohibiting use of elevator during fire or other emergency situation as part of faceplate. Pushbutton design shall match car operating panel pushbuttons. Include Panel and key switches for Fire Recall.
- C. Car Riding Direction Lantern: Provide New. Illuminate up or down LED lights and sound electronic tone once for up and twice for down direction travel as doors open. Sound level for tone shall be adjustable from 0 - 80 dBA measured at 5'0" in front of hall control station and 3'-0" off floor. Provide adjustable car door dwell time to comply with ADA requirements relative to hall call notification time.
- D. Hall Lanterns & Position Indicators: Provide New. Illuminate with LED TFD Display and LED lights and direction arrows at main landing above entrance frame. Place intermediate vertical Hall Lanterns above push buttons in hall stations at 72".
- E. Inspection Service Operation: Provide New on the top of each elevator car controls for limited operation of the car during repairs, maintenance and inspection operations conducted in the hoistway. It shall be located between the car crosshead and the side of the car nearest the hoistway entrance normally used for access to the car top. The transfer of control to the top of car operating device

shall cause that device to be the sole means of control for the elevator. Power door operating equipment shall be rendered inoperative while the car is being operated in the Inspection Service mode.

1. Whenever the elevator is in the Inspection Service mode of operation, corridor call buttons to which the car normally responds shall be Inoperative.
 2. A separate means shall be provided to make power-door operating devices and automatic car-leveling devices operative from the top of the car for testing purposes.
 3. In-car inspection operation shall be provided with a key-operated switch marked "Inspection" with "On" and "Off" positions clearly identified. It will be inoperative if top-of-car inspection operation is activated.
 4. Provide machine room inspection operation with the means for transferring the control of the elevator to machine room inspection to be located in the machine room controller and marked "Inspection" with its "On" and "Off" positions clearly identified. The machine room inspection operation mode shall be inoperative if either the top-of-car inspection operation or the in-car inspection operation is activated.
- F. The new keyed switches to be provided shall be operable by the same key for all elevators. The keys shall not operate any other device or lock in the building. The keys shall be kept on the premises in a location readily accessible to the personnel in the assigned group, but not where they are accessible to the general-public. The same key shall be permitted to access or operate all of the devices within only one assigned group. Elevator personnel shall have access to all assigned groups. Eight (8) tagged spare keys shall be provided for each type of key used in the new equipment.

Group-1: Restricted

Group-1 covers access or operation of equipment restricted to elevator personnel. This key shall not be part of a master key system. The Inspection Operation, in-car stop switch and Hoistway Access Group-1 keyed switches shall have identical keys.

Group-2: Authorized Personnel

Group-2 covers access or operation of equipment by authorized personnel. The Independent Service, Medical Emergency, car ventilation fan and car light control Group 2 keyed switches shall have identical keys.

Group-3: Emergency Operation

Group 3 covers access or operation of equipment by firefighters and emergency personnel. This key shall not be part of a master key system. The Fire Fighters Service shall have a different key and shall be operable by that key in accordance with ASME Rule 2.27.8. The emergency or standby power selector switch key shall be part of this group.

PART 3 – ENGINEERING, DELIVERY, STORAGE, HANDLING AND INSTALLATION:

- A. Prior to beginning installation of equipment, examine hoistway and machine room areas. Verify that no irregularities exist which may affect the execution of work specified.
- B. Do not proceed with installation until work in place conforms to project requirements.
- C. Deliver material in Contractor's original, unopened protective packaging.
- D. Store material in original protective packaging. Prevent soiling, physical damage, or moisture damage.

- E. Install all equipment in accordance with Contractor's instructions, referenced Codes, specification and approved submittals.
- F. Install machine room equipment with clearances in accordance with referenced Codes and specification.
- G. Install all equipment so it may be easily removed for maintenance and repair.
- H. Remove oil, grease, scale, and other foreign matter from installed equipment and apply one coat of field-applied machinery enamel as needed. Color Scheme to be Approved for Car Top, Machine, Pit Components, Floors.
- I. Remove all unused material and dispose of same in accordance with local and national regulations.
- J. The Building is occupied and materials and tool storage space is limited. Coordination and location of all storage space must be approved by the consultant and University . Barricades and protection of work areas shall be required and maintained by the elevator contractor.
- K. The elevator contractor is responsible for providing access and supervision and coordination of other trades performing related work for the installation to minimize the down time of the elevator during the complete modernization.
- L. The elevator contractor will be required to provide access, supervision and operate the elevator for other contractors needing to work in the hoistway. Cost for this work shall be charged to the respective contractor and not included in the base bid.
- M. **Time allowed for the elevator to be out of service is Eight weeks.** If the elevator has to be out of service for an extended length of time, the contractor shall perform this work when the facility has less use or overtime to accelerate the progress. Prior written approval of the down time, including duration and date must be obtained from the University. All cost related to the overtime shall be included in the base contract bid. Elevator Contractor to include time each week for using elevator to deliver University materials to all building floors during the course of the project on a scheduled day and 4 hour window each week. No passengers permitted.

PART 4 – COMMISSIONING

A. Quality Control

1. Work at jobsite will be checked during course of installation. Full cooperation with reviewing personnel is mandatory. Accomplish corrective work required prior to performing further installation.
2. Have Code Authority acceptance inspection performed and complete corrective work.
3. Complete all deficiencies report to Contractor by University or their representative prior to final inspection.

B. Adjusting

1. Static balance car to equalize pressure of guide rollers on guide rails.
2. Lubricate all equipment in accordance with Manufacturer's instructions.
3. Adjust motor, power conversion unit, brake, controller, leveling switches, limit switches, stopping switches, door operator, interlocks, and safety devices to achieve required performance levels.

C. Final Acceptance, Review and Testing

1. Contractor shall perform review and evaluation of all aspects of its work prior to requesting Consultant's final review. Work shall be considered ready for Consultant's final contract compliance review when copies of Contractor's test and review sheets are available for Consultant's review and all elements of work or a designated portion thereof are in place and a unit or group are deemed ready for service as intended.
2. Furnish labor, materials, and equipment necessary for Consultant's review. Notify University and Consultant five (5) work days in advance when ready for final review of elevator.
3. Consultant's written list of observed deficiencies of materials, equipment and operating systems will be submitted to Contractor for corrective action. Consultant's review shall include as a minimum:

- a. Workmanship and equipment compliance with Contract Documents.
- b. Car speed, capacity, floor-to-floor, and door performance comply with Contract Documents.
- c. Exercise all features such as Independent Service, anti-nuisance, fire recall, etc.

D. University information

1. Provide three sets of neatly bound written information and electronic copy in PDF format necessary for proper maintenance and adjustment of equipment within thirty days following final acceptance. Final retention will be withheld until data is received by University and approved by Consultant.
2. Straight-line wiring diagram of "as-installed" elevator circuits, with index of location and function of components. Provide one set reproducible master. Provide one set wiring diagrams properly protected, in elevator machine room. Provide remaining set rolled and in a protective drawing tube. Maintain machine room set with addition of all subsequent changes. These diagrams are University 's property.
3. Lubricating instructions, including recommended grade of lubricants.
4. Parts catalogs for all replaceable parts including ordering forms and instructions.
5. Eight sets of neatly tagged keys for all switches and control features properly tagged and marked.
6. Diagnostic equipment complete with access codes, adjusters manuals and set-up manuals for adjustment, diagnosis and troubleshooting of elevator system, and performance of routine safety tests.
7. Conduct training for University personnel in the proper use, operations, and emergency provisions of elevator. Include emergency access and procedures to be followed at time of failure in operation and other building operations. Provide the training, during regular working hours, for not less than four hours for elevators. Competent personnel shall instruct the University personnel at the jobsite.

SECTION END

Fixture Note Typical – Wheelchair Access push button panel on side wall of cab



Attachments:

Lithonia Lighting

Conveyance Data Sheets Ableson

Conveyance Data Sheets Food Science

Attachment:

Lithonia

FEATURES & SPECIFICATIONS



INTENDED USE — Inspired by classic fluorescent strip channels, this LED fixture offers a traditional appearance that incorporates the latest technology. Available in several lengths and lumen packages. Ideal for use in commercial, retail, office, warehouse and display applications. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.**

[Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)

CONSTRUCTION — Compact design channel and cover are formed from code-gauge cold-rolled steel. Easy to install row aligner included with 2LL versions for continuous row mounting. High-gloss, baked white enamel finish (standard).

OPTICS — LEDs provided 80+ color rendering index (CRI) at 4000K. Diffuse polycarbonate lens provides smooth, linear illumination which is designed to resemble the classic look of traditional fluorescent tubes. Lumen output up to 1,150 lumens per foot.

ELECTRICAL — The fixture is tested to withstand a maximum line surge of 2.5kV/2kA ring wave for indoor locations. MVOLT versions also tested to withstand a maximum line surge of 2kV/1kA combination wave for indoor locations. For applications requiring higher level of protection, additional surge protection must be provided.

INSTALLATION — Fixture may be surface or suspension mounted with appropriate mounting options. Aligner locks in place for easy continuous row mounting. Luminaires should be installed in applications where ambient temperatures do not exceed 95° F (35° C) for 4' and 8' models or 104° F (40° C) for 2' models.

LISTINGS — CSA certified to US and Canadian safety standards and listed suitable for damp locations. Minimum starting temperature at -40° F (-40° C). Maximum ambient operating temperature of 95° F (35° C) for 4' and 8' models. Maximum ambient operating temperature of 104° F (40° C) for 2' models.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25° C. Specifications subject to change without notice.

MNSL

LED Striplight



ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Catalog number	Description	Lumens	Wattage	Voltage	Color Temperature	Color Rendering Index	Pallet Quantity
MNSL L23 1LL 120V 40K 80CRI	2' 1-Light 120V LED Strip Light	1150	12	120V	40K 4000K	80CRI 80 CRI	576
MNSL L24 2LL MVOLT 40K 80CRI	2' 2-Light MVOLT LED Strip Light	2200	25	MVOLT (120-277V)	40K 4000K	80CRI 80 CRI	336
MNSL L46 1LL 120V 40K 80CRI	4' 1-Light 120V LED Strip Light	2300	25	120V	40K 4000K	80CRI 80 CRI	288
MNSL L48 2LL MVOLT 40K 80CRI	4' 2-Light MVOLT LED Strip Light	4500	50	MVOLT (120-277V)	40K 4000K	80CRI 80 CRI	168
MNSL L96 2LL MVOLT 40K 80CRI	8' 2-Light MVOLT LED Strip Light	8200	90	MVOLT (120-277V)	40K 4000K	80CRI 80 CRI	252