Johnson Hall Demolition / Clark Hall Research Lab Renovation

Washington State University
Pullman, WA

Project Manual

Program No. 1543
Issued 7/7/2021
Washington State University
Facility Services, Capital

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Johnson Hall Demolition / Clark Hall Research Lab Renovation

Agreement between Owner and Design-Builder

(Cost-Plus Fee with a Guaranteed Maximum Price)

This AGREEMENT is made by and between the following parties, for design and construction services, in connection with the Project identified below.

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

DESIGN-BUILDER: [To be determined]

PROJECT: Johnson Hall Demolition
1820 NE Wilson Road
Pullman, WA 99164
/
Clark Hall research Lab Renovation
2000 NE Wilson Road
Pullman, WA 99164

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

Article 1
The Work of the Design-Build Contract

1.1 Design-Builder to fully execute the Work. Design-Builder shall fully execute the entire Work, including design and construction services, in strict accordance with the Contract Documents, and shall provide all material, equipment, tools, labor, and design services 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 Design-Builder to further Owner's interests. Design-Builder accepts the relationship of trust and confidence established by this Agreement and covenants with Owner to cooperate with Owner and others involved with the Project and to exercise Design-Builder's best skill and judgment; to furnish efficient, professional and competent design services and construction administration, management 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 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 Guaranteed Maximum Price (or "GMP").

Article 2
Contract Documents

2.1 The Contract Documents. The "Contract Documents" form the "Design-Build Contract" or "Contract." The Contract Documents consist of this Agreement (Agreement between Owner and Design-Builder or the "Agreement"); any attached Exhibits and other documents listed in the Contract Documents; the General Conditions; other documents listed in Article 13 of this Agreement; and written modifications, amendments and Change Orders to the Contract issued after execution of this Agreement. If authorized representatives of both parties execute the Agreement, the Contract is effective as of the date of first signature.

2.2. Contract is complete and integrated agreement. The Design-Build 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 Design-Builder. The Contract Documents shall not be construed to create a contractual relationship of any kind between any Persons other than Owner and Design-Builder.

2.4 General Conditions modified. The General Conditions and Division 01 define the term "A/E" and identify certain responsibilities of the A/E. In the Design-Build Contract, however, Design-Builder retains the A/E and is responsible for both design and construction of the Work. The following provisions of the General Conditions are hereby modified:

1.01B	A/E does not represent Owner.
1.01K	The Contract Time is defined in Section 4.2
1.02.1	Signed Agreement includes Design-Builder's final Proposal and presentation materials.
2.06A	The builder's risk insurance shall cover the interests of Design-Builder's A/E.
2.06B	A/E's services and expenses may not be covered. Refer to policy.
3.04B	Replace "A/E" with "Owner's consultants."
4.01C	Design-Builder to report discrepancies to Owner.
4.01F	Questions to be referred to Owner.
4.02C	Final Project Record to be submitted to Owner.
4.03	Submittals shall be submitted to and reviewed by Owner, not A/E. Replace "A/E" with "Owner" throughout.
4.03E	Design-Builder and Owner may agree on the number of copies of Submittals to be submitted to Owner. If no such agreement is reached, Design-Builder shall submit five (5) copies.
4.05	See Article 11 of this Agreement related to the instruments of service. Article 11 of this Agreement shall apply in the event of any inconsistency with Section 4.05 of the General Conditions.
5.07A	Replace "A/E" with "Owner's consultants."
5.07H	Replace "A/E" with "Owner's consultants."
5.13A	Owner must approve substitutions. Replace "A/E" with "Owner."

5.22	Design-Builder has no obligation under this Agreement to defend, indemnify, or hold harmless Design-Builder's A/E.
6.06A	Completion of the Contract Work for purposes of RCW Chapters 39.08 and 60.28 shall occur upon Final Acceptance.
Part 8	Part 8 shall apply to any disputes that arise during the Post-Completion Performance Period.
10.04	Strike "or A/E."
10.08	Strike "A/E 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 and design industry standards. In the event of any inconsistency in such definitions, the definitions in this Agreement shall control.

3.2 Construction Documents. "Construction Documents" are prepared by Design-Builder and accepted by Owner to convey Design-Builder's final design for the Work, consistent with the Contract Documents, including the Project Criteria. 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 Design-Builder. "Design-Builder" is the Person identified as such in the Agreement and identified as "Contractor" in the General Conditions. The terms "Design-Builder" and "Contractor" are used interchangeably to identify the Person that is a party to this Agreement. Design-Builder must be licensed, bonded, and insured as a contractor, and legally permitted to do business, in the State of Washington. Design-Builder's authorized representative, including its Designated Representative, shall be authorized to act on Design-Builder's behalf with respect to the Project.

3.4 Design-Builder's A/E. "Design-Builder's A/E" or "A/E" is a Person lawfully licensed to practice architecture or engineering in the State of Washington who has a direct contract or employment relationship with Design-Builder to perform design, architecture and/or engineering services for all or a portion of the Work. Although Design-Builder's A/E is referred throughout the Contract Documents as if singular in number, Design-Builder's A/E may be multiple Persons. The "Design-Builder's A/E" means Design-Builder's A/E or Design-Builder's A/E's authorized representative, and includes any architect or engineer contracted or employed by Design-Builder to perform design Work for the Project.

3.5 Transition to Sustainable Occupancy Program Payment (TSO Program Payment). NOT USED.

3.6 Transition to Sustainable Occupancy Reviews (TSO Reviews). NOT USED.

3.7 Post-Completion Performance Period. NOT USED.

3.8 Programmatic Period. The TBD Day period beginning immediately following selection of Design-Builder during which Design-Builder will perform services to (1)

finalize the scope, cost and schedule of the Programmatic Period and Design Development Periods and (2) complete the Programmatic Period Submittal described in the Contract Documents. During the first 14 Days of the Programmatic Period, Owner shall pay Design-Builder or other Persons engaged by Design-Builder for services rendered at the applicable hourly rate; however, in no circumstance shall this amount exceed Ten thousand dollars and no cents ($10,000) and Design-Builder is not authorized to proceed with, and Owner is not required to pay for, design or construction that would cause the total billable amount within the first 14 Days to exceed Ten thousand dollars and no cents ($10,000). If, at the end of the first 14 Days of the Programmatic Period an amendment is required to the Contract Documents to reflect a change in the scope, cost or schedule of the Programmatic Period and Design Development Periods, the Parties will execute an amendment to this Agreement. Any payments made for services rendered during the first 14 Days of the Programmatic Period are included in the Programmatic Period Payment and therefore also the GMP. Prior to submitting any Application for Payment for services rendered during the Programmatic Period, Design-Builder shall deliver the proof of insurance and bonds required by the Contract Documents to Owner. The Programmatic Period ends upon the earlier of (1) Owner's written acceptance of the Programmatic Period Submittal and the execution of a Post-Programmatic Period Amendment or (2) termination of this Agreement. Owner is obligated to pay no more than the Programmatic Period Payment for services during the Programmatic Period and has no obligation to authorize Design-Builder to proceed further with design or construction under the Agreement if it does not accept Design-Builder's Programmatic Period Submittal and execute the Post-Programmatic Period Amendment.

3.9 Programmatic Period Payment. The maximum amount established in Section 8.3.1 that Design-Builder and other Persons engaged by Design-Builder can earn during the Programmatic Period.

3.10 Programmatic Period Submittal. The technical Programmatic package described in the accepted proposal, and other information required by the Contract Documents.

3.11 Post-Programmatic Period Amendment. The Contract amendment executed by Owner and Design-Builder following Owner's acceptance of the Programmatic Period Submittal to confirm both parties' intent to proceed with the Work, to memorialize design decisions agreed upon during the Programmatic Period, and otherwise to incorporate any changes to the Contract, including any change to the Contract Time, or scope of Work.

3.12 Design-Development Period. The TBD Day period beginning immediately following acceptance of the Programmatic Period during which Design-Builder will perform services to complete the Design-Development Period Submittal described in the Contract Documents. The Design-Development Period ends upon the earlier of (1) Owner's written acceptance of the Design-Development Period Submittal and the execution of a Post-Design-Development Period Amendment or (2) termination of this Agreement. Owner is obligated to pay no more than the Design-Development Period Payment for services during the Design-Development Period and has no obligation to authorize Design-Builder to proceed further with design or construction under the Agreement if it does not accept Design-Builder's Design-Development Period Submittal and execute the Post-Design-Development Period Amendment.

3.13 Design-Development Period Payment. The maximum amount established in Section 8.3.2 that Design-Builder and other Persons engaged by Design-Builder can earn during the Design-Development Period.

3.14 Design-Development Period Submittal. The technical 100% design-development package described in the accepted proposal, and other information required by the Contract Documents.

3.15 Post-Design-Development Period Amendment. The Contract amendment executed by Owner and Design-Builder following Owner's acceptance of the Design-Development Period Submittal to confirm both parties' intent to proceed with the Work, to memorialize design decisions agreed upon during the Design-Development Period, and otherwise to incorporate any changes to the Contract, including establishment of the GMP, Contract Time, or scope of Work.

3.16 The Project Criteria. The Project Criteria may consist of preliminary engineering and architectural drawings and other information intended to convey Owner's initial concepts for the facility, the expected programmatic, functional and operational elements of the facility, and the expected net and gross areas of the buildings. Any drawings and other information included with the Project Criteria are not for construction, but will be considered and used by Design-Builder to prepare the final design and Construction Documents for the Project. Design-Builder or its A/E will be the designer of record for the Project, will take full responsibility for the design, and will produce Construction Documents for permit submission, Owner acceptance, Subcontractor procurement, and construction.

3.17 Design Review Packages. Design-Builder will submit design review packages to Owner at each of the following milestones, or as agreed upon by Owner: Programmatic Period Submittal; Design-Development Period Submittal; 50% design-development document; 100% design-development documents; 50% construction documents; and 90% construction documents; to convey Design-Builder's design for the Work, consistent with the Contract Documents, including the Project Criteria. When accepted by Owner, these design review packages shall establish baseline Construction Documents to be provided by Design-Builder and from which future submissions will be evaluated. A final 100% Construction Document set will be submitted to Owner for retention.

Article 4
Notice to Proceed and Substantial Completion

4.1 Notice to Proceed. Notices to Proceed will be issued by Owner. Owner may issue separate Notices to Proceed for the Programmatic Period, Design-Development Period, for Design-Builder's other design phase services and for construction.

4.2 Contract Time. The Contract Time shall be measured from the effective date of the Agreement 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. Design-Builder shall achieve Substantial Completion of the Work by December 1, 2022, subject to adjustments as provided in the Contract Documents, and shall achieve Final Completion not later

than 90 Days thereafter. Design-Builder represents to Owner that the Contract Time is adequate for full performance of the Work. Design-Builder shall also achieve any interim milestones and phasing requirements set forth in the Contract Documents.

4.4 Post-Completion Performance Period. NOT USED.

4.5 Liquidated damages. Owner will assess, and Design-Builder will be responsible for, liquidated damages in the amount of Two thousand, five hundred eighty-seven dollars and ninety cents ($2,587.90) per Day for each Day beyond the contractual date for Substantial Completion that Substantial Completion is not timely achieved, and an additional One thousand, six hundred forty-six dollars and thirty cents ($1,646.30) per Day for each Day beyond the time period established in Section 4.3 that Final Completion of the entire Work is not achieved. Design-Builder and Owner agree that any liquidated damages established by this Agreement 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
Design-Builder's Design and Preconstruction Services

During the Programmatic Period, Design-Development Period and final design and preconstruction phase, Design-Builder shall perform services as provided in this Agreement and the Contract Documents.

5.1 Programmatic Period Obligations.

5.1.1 Design-Builder is not authorized to proceed with, and Owner is not required to pay for, design or construction beyond the Programmatic Period Payment until Owner accepts Design-Builder's Programmatic Period Submittal and confirms Project funding, and the parties execute the Post-Programmatic Period Amendment.

5.1.2 If Owner and Design-Builder are unable to finalize and execute the Post-Programmatic Period Amendment, Owner may terminate the Contract as provided in the Contract Documents. If Owner elects to terminate the Agreement prior to executing the Post-Programmatic Period Amendment, Owner shall have no liability to Design-Builder beyond the Programmatic Period Payment. If Design-Builder does not provide a Programmatic Period Submittal acceptable to Owner or otherwise declines or is unable to execute the Post-Programmatic Period Amendment, Design-Builder shall receive no Programmatic Period Payment (and shall reimburse to Owner any portion of the Programmatic Period Payment previously paid) and shall receive no other compensation from Owner of any kind. In addition, Owner shall have the right to seek reimbursement from Design-Builder for the costs incurred by Owner during the Programmatic Period in accordance with the dispute resolution procedures set forth in the Contract Documents.

5.2 Design-Development Period Obligations.

5.2.1 Design-Builder is not authorized to proceed with, and Owner is not required to pay for, design or construction beyond the Design-Development Period Payment until Owner accepts Design-Builder's Design-Development Period Submittal and confirms Project funding, and the parties execute the Post-Design-Development Period

Amendment.

5.2.2 If Owner and Design-Builder are unable to finalize and execute the Post-Design-Development Period Amendment, Owner may terminate the Contract as provided in the Contract Documents. If Owner elects to terminate the Agreement prior to executing the Post-Design-Development Period Amendment, Owner shall have no liability to Design-Builder beyond the Design-Development Period Payment. If Design-Builder does not provide a Design-Development Period Submittal acceptable to Owner or otherwise declines or is unable to execute the Post-Design-Development Period Amendment, Design-Builder shall receive no Design-Development Period Payment (and shall reimburse to Owner any portion of the Design-Development Period Payment previously paid) and shall receive no other compensation from Owner of any kind. In addition, Owner shall have the right to seek reimbursement from Design-Builder for the costs incurred by Owner during the Programmatic Period and Design-Development Period in accordance with the dispute resolution procedures set forth in the Contract Documents.

5.3 Design Obligations.

5.3.1 During the design and preconstruction phase, Design-Builder shall advise and work with Owner and its representatives to make recommendations for alternate or substitute technologies, construction techniques, methods and practices based on maintainability and durability as well as cost savings, time saving and/or other related efficiencies.

5.3.2 The agreements between Design-Builder and Design-Builder's A/E, other design professionals retained by Design-Builder, and Subcontractors shall be in writing. These agreements, including services with respect to this Project, shall be promptly and fully disclosed to Owner upon Owner's written request after the effective date of the Contract.

5.3.3 Design-Builder shall be responsible for ensuring that the Construction Documents are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations, and lawful orders of public authorities, including, but not limited to, the latest adopted versions of:

.1 International Building Code with State of Washington Administrative Code Amendments
.2 International Mechanical Code with State of Washington Administrative Code Amendments
.3 Uniform Plumbing Code with State of Washington Administrative Code Amendments
.4 International Energy Conservation Code-Commercial with State of Washington Administrative Code Amendments
.5 International Fire Code with State of Washington Administrative Code Amendments
.6 National Electric Code with Washington State Administrative Code Amendments – Regulated by State of Washington Department of Labor and Industries
.7 ADA Title II for Public Buildings in conjunction with the IBC and ICC A-117.1
.8 ASME A17.1 with State of Washington Administrative Code Amendments for elevators – Regulated by State of Washington Department of Labor and Industries

.9 State of Washington Safety Codes for workers per Washington Administrative Code

.10 Asbestos regulations per Washington Administrative Code

5.3.4 Owner and Design-Builder shall mutually agree on a schedule for Design-Builder's delivery of in-progress design documents for Owner review and comment. Owner shall have at least fourteen (14) Days to review in-progress design documents at established milestones unless otherwise agreed. Design-Builder shall meet with Owner at a minimum monthly to review progress of the design documents. Design-Builder shall submit the design-development documents, including draft drawings and other design documents, for Owner's written review and preliminary authorization to proceed. The initial documents shall set forth in detail the requirements for construction of the Project, shall include draft drawings and other details that establish the quality levels of materials and systems proposed, and shall identify any deviations from the Project Criteria, Proposal, or previously approved design documents. Following acceptance of the design-development documents and after incorporating any changes required by Owner, Design-Builder shall provide Construction Documents at 50% and 90% completion for review and written acceptance by Owner. The Construction Documents shall include drawings and other documents and electronic data setting forth in detail the requirements for the Work, and shall provide information for the use of those in the building trades and include documents required for regulatory agency approvals. Design-Builder shall resolve all design review comments to the satisfaction of Owner.

5.3.5 Not Used.

5.3.6 Upon Owner's written authorization, Design-Builder, with the assistance of Owner, shall prepare and file design documents, including Construction Documents, required to obtain necessary approvals of governmental authorities having jurisdiction over the Project.

5.3.7 Design-Builder shall obtain from each of its design professionals, including Design-Builder's A/E, and shall provide Owner with certifications with respect to the documents and services provided by these professionals (a) that, to the best of their knowledge, information and belief, the documents or services to which such certifications relate (i) are consistent with the Project Criteria and Proposal (as the Proposal may be modified in writing by Owner and Design-Builder), (ii) comply with applicable professional practice standards, and (iii) comply with applicable laws, ordinances, codes, rules and regulations governing the design of the Project; and (b) that Owner and its consultants shall be entitled to rely upon the accuracy of the representations and statements contained in such certifications.

5.3.8 Design-Builder's design services will result in a Project design in accordance with the Contract Documents, including the Project Criteria, and suitable for its intended purpose. At the time of performance, Design-Builder's design professionals shall be properly licensed in the State of Washington, equipped, organized and financed to perform the services. Each Person who performs the services shall be experienced and qualified to perform the services he or she performs, and Owner shall be entitled to rely upon any assistance, guidance, direction, advice or other services provided by any such Person.

5.3.9 Design-Builder shall, at no cost to Owner, promptly and satisfactorily correct any of

Design-Builder's design services that are defective or not in conformity with the requirements of the Design-Build Contract. The obligations of Design-Builder to correct defective or non-conforming design services shall not in any way limit any other obligations of Design-Builder or other rights and remedies available to Owner under the Design-Build Contract or otherwise by law.

5.3.10 When the Contract Documents require or Design-Builder causes a Subcontractor of any tier to provide professional design services or certifications related to systems, materials or equipment, Design-Builder shall cause design services or certifications to be provided by properly licensed design professionals and shall ensure that all documents bear such design professional's written approval. Owner shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals.

5.4 Supplemental Preconstruction Obligations.

5.4.1 Design-Builder shall schedule and conduct meetings with Owner on a weekly basis, or as otherwise agreed upon, to discuss such matters as design, procedures, progress, coordination, and scheduling of the Work. Design-Builder shall actively and cooperatively advise Owner on proposed site use and improvements, selection of materials, and building systems and equipment. Design-Builder shall also actively and collaboratively provide recommendations consistent with the Project requirements to Owner regarding constructability; availability of materials and labor; time requirements for procurement, installation and construction; phasing and site work planning; sequencing and scheduling for procurement, installation and construction; traffic planning; factors related to construction quality, maintainability and durability; and factors related to construction cost including, but not limited to, costs of alternative designs and materials, preliminary budgets, life-cycle data, and possible cost reductions.

5.4.2 Design-Builder shall work with Owner to prepare a constructability plan for the Project to reduce cost, save time, improve quality, reduce risk and improve the overall process of Project delivery. Key objectives of the constructability program will include creation and maintenance of a well-planned, safe, effective, cooperative and mutually beneficial work environment for all participants. A primary objective of these efforts will be to ensure that the final Cost of the Work does not exceed the GMP and the Project is completed on time. Design-Builder shall minimize adverse effects of labor or material shortages or delays; time requirements for procurement, installation and construction; and construction cost.

5.4.3 Design-Builder shall perform site investigations, including but not limited to utility locates, to assist in development of the design and construction planning. Any investigations of hidden or subsurface conditions have been made only for purposes of developing the Project Criteria. The results of these investigations are available for the convenience of Design-Builder but they are not Contract Documents. There is no guarantee, express or implied, that the conditions indicated are representative of those existing throughout the site or that unforeseen developments may not occur. Design-Builder is solely responsible for interpreting the information and extrapolating beyond the testing location, including each individual boring, test pit or other location. Design-Builder shall undertake any further investigation that Design-Builder believes necessary for design or construction.

5.4.4 Design-Builder shall provide recommendations with regard to accelerated or fast-track scheduling, procurement, or phased construction. Design-Builder shall take into consideration occupancy needs, cost reductions, cost information, constructability, provisions for temporary facilities and procurement and construction scheduling issues.

5.4.5 Design-Builder shall prepare, for Owner's review and acceptance, and update at least monthly, a procurement schedule for long lead items. Design-Builder shall expedite and coordinate the ordering and delivery of long lead materials. If Owner agrees to procure any items prior to the establishment of the GMP, such items will be identified in the Contract Documents and Owner will assign contracts for these items to Design-Builder. Thereafter, Design-Builder shall accept responsibility for them.

5.4.6 If the GMP is not established when the Agreement is signed, Design-Builder shall prepare a preliminary estimate of the Cost of the Work or the cost of program requirements using area, volume or similar conceptual estimating techniques for Owner's review and approval. Thereafter, Design-Builder will collaborate with Owner on cost estimates throughout the preconstruction phase, which may occur in phases as the design is completed, and will prepare detailed cost estimates following completion of design-development documents, when Construction Documents are ninety percent (90%) complete, and following completion of Construction Documents. Estimates will include increasing detail and refinement and allow for the further development of the design. Design-Builder will inform Owner when estimates of the Cost of the Work exceed the latest approved Project budget and make recommendations for corrective action. Design-Builder will also prepare other necessary cost studies, comparative estimates, and comparative schedules to evaluate alternatives and options.

5.4.7 Owner, Design-Builder, and their consultants may participate in value engineering prior to completion of the design. Changes may be proposed to the drawings as a result of these processes. Design-Builder shall make changes requested by Owner after consultation with Design-Builder's A/E. At the completion of its review(s), Design-Builder will provide Owner with a formal record of its findings and recommendations. Value engineering will include selecting building systems, with final selection of systems to occur prior to completion of Construction Documents.

5.4.8 Design-Builder shall prepare promptly following execution of this Agreement (and prior to submitting any Application for Payment) and periodically update an overall Project schedule consistent with the requirements of the Contract Documents. This schedule shall identify all major Project milestones and coordinate and integrate Design-Builder's services with Owner's responsibilities. . The Progress Schedule shall include all major components of the Work; expected commencement and completion dates for the Work and for each Subcontractor; major milestones; dates for ordering and the delivery of major products, including those that are long lead; expected Submittal submission dates; occupancy requirements of Owner; and all other information required by the General Conditions and other Contract Documents. Design-Builder will be responsible for updating the Progress Schedule during construction as set forth in the General Conditions and other Contract Documents.

5.4.9 Design-Builder shall prepare and submit a subcontracting plan to Owner that identifies Design-Builder's intended scopes of work, the timing of solicitation of Subcontractor bids and proposals, major coordination issues, and means to enhance

the opportunity for local businesses to participate in performing the Work. Design-Builder shall use its best efforts to develop Subcontractor interest in the Project and competition for each scope of work. Unless otherwise approved by Owner, Design-Builder shall solicit at least three (3) bids or proposals for each component of the Work. Design-Builder shall only self-perform Work when such Work is competitively bid by Design-Builder and Design-Builder can perform the Work at the lowest net cost to Owner.

Article 6
Design-Builder's Obligations During Construction

During the construction phase, Design-Builder shall perform services as provided in this Agreement and the other Contract Documents, including Section 01 11 00, Summary of Work, and the General Conditions.

6.1 Owner to review and accept Construction Documents. Design-Builder shall perform no construction Work prior to Owner's review and acceptance of Design-Builder's Construction Documents. Review and acceptance of Construction Documents by Owner is subject to the limitations of the Contract Documents and shall not constitute an approval of Design-Builder's means and methods or a waiver or modification of any requirement of the Contract Documents.

6.2 Design-Builder to provide Submittals. Owner and Design-Builder shall mutually agree on a schedule for Design-Builder to deliver Submittals for Owner review and comment. Owner shall have at least fourteen (14) Days to review Submittals unless otherwise agreed. Design-Builder shall perform no portion of the construction Work for which the Contract Documents require Submittals until Owner has accepted and taken action on each required Submittal in accordance with the procedure set forth in the Contract Documents. However, Submittals are not Contract Documents. Their purpose is to demonstrate for those portions of the Work for which Submittals are required the way that Design-Builder proposes to conform to the Contract Documents. Review and acceptance of Submittals by Owner is subject to the limitations of the Contract Documents and shall not constitute an approval of Design-Builder's means and methods or a waiver or modification of any requirement of the Contract Documents. Design-Builder shall resolve all Owner Submittal review comments prior to commencement of the Work.

6.3 Design-Builder to provide Project staff. Design-Builder shall provide experienced staff through Final Completion consistent with or in excess of that specified in the Proposal. Design-Builder's Project staff shall not be changed without the written permission of Owner. The staff shall include necessary and appropriate design, construction management personnel and administrative staff, including, at a minimum, a qualified Project Manager, a full-time Superintendent, a full-time Project Engineer, a Contractor Quality Control ("CQC") Manager, a scheduler, and an estimator. Design-Builder's staff shall be sufficient to ensure that:

.1 Responses to all correspondence are provided within seven (7) Days of receipt;

.2 Submittals are reviewed for completeness and forwarded to Owner within three (3) Days of receipt;

.3 Design-Builder's Project staff remains dedicated to the Project through Final Completion at no additional cost to Owner; and

.4 Responses, Notices, substantiation, Rejections, and Claims as required by

Parts 7 and 8 of the General Conditions are provided to Owner within the time periods required by the Contract Documents.

6.4 Design-Builder to conduct meetings. Unless otherwise determined by Owner, Design-Builder shall schedule and conduct weekly Project review meetings to discuss such matters as procedures, progress, coordination, scheduling, and status of the Work, and shall prepare and promptly distribute written minutes from the meetings.

6.5 Design-Builder to actively manage and supervise Subcontractors. Design-Builder shall coordinate and review and inspect the Work of Subcontractors. Design-Builder shall provide notification at regularly scheduled meetings of any major defects or deficiencies and recommend remedial action. Design-Builder shall take the lead role in negotiating and resolving any disputes with Subcontractors and obtain Owner's concurrence or approval of all settlements before executing change orders with Subcontractors.

6.6 Progress reports. Design-Builder shall record the progress of the Project. On a monthly basis, or otherwise as agreed by Owner, Design-Builder shall submit with its Application for Payment written progress reports to Owner, showing percentages of completion and other information required by Owner. The reports shall:

.1 Include information about Subcontractor buyout, as applicable.
.2 Identify variances between scheduled and probable completion dates for major components of the Work. Recommend action required to meet scheduled completion dates.
.3 Provide summary reports of each Progress Schedule update to document all significant changes and the reasons for them.
.4 Record in writing and by photographs the progress of the Project.
.5 Maintain and report a QC log.
.6 Document any outstanding questions and risks associated with delayed responses.
.7 List outstanding Submittals and risks associated with delayed responses.
.8 Describe the status of outstanding Contract Change Proposals and Change Proposal Requests, and any risks associated with delayed responses.
.9 List all unresolved issues and Claims.
.10 Identify the status of permits that Design-Builder is required to obtain or assist in obtaining.

Design-Builder shall also keep, and make available to Owner with its monthly Application for Payment or more often as requested by Owner, a daily log containing a record for each Day of weather, Subcontractors working on the site, deliveries, Work accomplished, portions of the Work in progress, number of workers on site, identification of equipment on site, problems that might affect progress of the Work, accidents, injuries, and other information required by Owner. The information on the log does not constitute Notice of a potential or actual Claim to Owner.

Design-Builder shall maintain, in good order and on a current basis, a record copy of all subcontracts, purchase orders, Addenda, Unilateral and Bilateral Change Orders, Submittals, inspection reports, maintenance and operating manuals and instructions, and Project Record. These records shall be available to Owner, and, at completion of the Project, delivered to Owner.

6.7 Financial reporting and forecasting: Design-Builder shall develop and maintain a system of cost control and accurate financial reporting capabilities during the Project, keep full and detailed records and accounts, and exercise such controls as necessary for proper financial management under this Agreement and to substantiate all costs incurred. At least monthly and as otherwise requested, Design-Builder shall report to Owner any variances between actual and estimated costs. Design-Builder's financial reporting shall include but not necessarily be limited to:

.1 Subcontractor and supplier buyout status;
.2 Expenditures to date and forecasted costs to complete the Work (including projected savings or overruns) allocated by Schedule of Values line item with variances explained;
.3 Projected cash flow;
.4 Contingency use log;
.5 Change Order log (pending and/or approved Unilateral and Bilateral Change Orders); and
.6 Risk and issues log identifying estimated costs for each identified risk and issue.

6.8 Quality control and assurance and Owner's right to inspect the Work: Design-Builder shall develop and submit an overall Quality Control and Assurance Plan administered by Design-Builder's CQC Manager to ensure that the Work is inspected by qualified members of Design-Builder'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. Design-Builder 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 Design-Builder on a QC log for correction, tracking and documentation to the satisfaction of Owner. Neither Design-Builder nor its Subcontractors shall intentionally install Work that does not meet applicable requirements.

6.9 Survey and layout obligations. Owner may provide survey benchmarks within or near the construction limits for the Project. Once benchmarks are established by Owner, it will be Design-Builder's responsibility to re-establish them if they are disturbed. Design-Builder shall be responsible to Owner for general building layout from established benchmarks, for the detailed layout of individual Work, and for the coordination of Work between Subcontractors to ensure that no conflicts exist.

6.10 Special inspection and testing. Certain special inspection and testing may be provided by Owner per Section 01 45 23, Testing Laboratory Services. Design-Builder shall provide inspectors and testers furnished by Owner adequate advance notice and timely and appropriate access to the Work.

Article 7
Design-Builder Obligations During Post-Completion Performance Period

Not Used.

Article 8
Contract Sum and Guaranteed Maximum Price

8.1 Contract Sum. Following execution of the Post-Programmatic Period Amendment and the Post-Design-Development Period Amendment, Owner shall pay the Contract Sum to Design-Builder for Design-Builder's performance of the Design-Build Contract. The Contract Sum is the sum of the Cost of the Work and Design-Builder's Fee, and shall not exceed the GMP. The Contract Sum does not include Washington State sales tax due on progress payments on account of the Contract Sum.

8.2 Design-Builder's Fee. Design-Builder's Fee shall be calculated and fixed based upon the established GMP by multiplying TBD percent (TBD%) times the estimated sum of the Cost of the Work. Design-Builder's Fee covers all of Design-Builder's profit and home office overhead as well as all other costs not reimbursable under this Agreement, including but not limited to costs of principal participation, home office administrative support, taxes, financing costs, and profit. The insurance rates and bond premium used to calculate the GMP will not increase during the term of this Agreement. The fee for changed Work for Design-Builder and Subcontractors shall be as specified in the General Conditions. Design-Builder shall not separately mark-up such fee by the Design-Builder's Fee above.

8.3 Guaranteed Maximum Price. The sum of the Cost of the Work and Design-Builder's Fee for the Project, for all design and construction services required by the Contract Documents including all Programmatic Period and Design-Development Period services, is guaranteed by Design-Builder not to exceed the estimated GMP of Twelve million, two hundred thousand dollars and no cents ($12,200,000.00), subject to additions and deductions for changes in the Work as provided in the Contract Documents. The GMP includes by way of example and not limitation all design and construction Costs of the Work; all taxes except Washington State sales tax due on the Contract Sum; Design-Builder's contingency; any approved Allowances; all insurance, including liability and E&O coverage; overhead; and Design-Builder's Fee. Costs that would cause the GMP to be exceeded shall be paid by Design-Builder without reimbursement by Owner.

8.3.1 Programmatic Period Payment. During the Programmatic Period, Design-Builder can earn up to TBD dollars ($TBD) (the "Programmatic Period Payment."). The Programmatic Period Payment amount is included within the GMP.

8.3.2 Design-Development Period Payment. During the Design-Development Period, Design-Builder can earn up to TBD dollars ($TBD) (the "Design-Development Period Payment."). The Design-Development Period Payment amount is included within the GMP.

8.3.3 TSO Program Payment. Not used.

8.4 Contingency. The GMP includes Design-Builder's contingency of TBD percent (TBD%) of the estimated Cost of the Work. The contingency is a sum established for Design-Builder's use to cover costs that are properly reimbursable as Cost of the Work but not the basis for a Change Order, such as, for example, design omissions, buyout error, scope gaps, failure of a Subcontractor of any tier, or expediting costs for critical materials. Design-Builder shall use the contingency only with Owner's

consent. Unused contingency will revert to Owner at Final Completion of the Project. Since Design-Builder's Fee is calculated based upon the GMP, which includes Design-Builder's contingency, Design-Builder shall apply no additional fee for use of contingency.

8.5 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 Design-Builder's 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.

8.6 Allowances. Allowances included in the GMP are as follows:

Allowance	Amount	Included Items
NONE		

A limited number of Allowances may be included in the GMP 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 GMP will be appropriately adjusted. Design-Builder 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.

8.7 Assumptions. Assumptions or qualifications, if any, on which the GMP is based, are:

Completion Deliverables Exhibit dated 7/7/2021
Programmatic Period and Design-Development Period Exhibit dated [date]

8.8 Changes in the Work.

8.8.1 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.

8.8.2 Adjustments of the GMP on account of changes in the Work shall be determined by the methods specified in the General Conditions.

8.8.3 In the event a Change Order is issued for a Change in the Work, Design-Builder and Subcontractors of any tier may only apply fee for changed Work, including overhead and profit, as specified in Section 7.02 of the General Conditions.

8.8.4 It is the intent of the parties that when the GMP is set, the GMP will include all elements necessary to design, construct, and complete the Project in accordance with the Contract Documents, and that Change Orders adjusting the GMP will therefore not be necessary except in limited circumstances. Accordingly, the GMP shall be adjusted only for the following events:

.1 Scope changes.

.2 Concealed or unknown conditions.
.3 Regulatory agency changes.
.4 Changes required by an inspector beyond those contained in regulations.
.5 Allowance adjustments.

8.8.5 Events for which the GMP shall not be adjusted include but are not limited to:
.1 Gaps in coverage between Subcontractors, including self-performed Work by Design-Builder, that occur after the GMP is negotiated.
.2 An item indicated in the Contract Documents that was not picked up in the GMP.
.3 Errors, omissions, or ambiguities in the design documents, including Construction Documents, prepared by Design-Builder.
.4 Coordination inconsistencies between design disciplines that Design-Builder knew of, caused, or reasonably should have known of.
.5 Failure or bankruptcy of a Subcontractor.
.6 Escalation of materials, equipment or labor prices.
.7 Estimating errors.
.8 Expediting costs for critical materials.
.9 Costs related to Subcontractor charges that result from mistakes or omissions in Subcontractor buyout, or coordination issues between Subcontractors, or interference between Subcontractor and Design-Builder or among Subcontractors.

Article 9
Cost of the Work

9.1 Costs to be Reimbursed.

9.1.1 Definition. The term Cost of the Work shall mean the actual costs reasonably and necessarily incurred by Design-Builder in the proper performance of the Work, without overhead, profit, mark-up or fee, and at rates not higher than the standard paid at the place of the Project except with prior consent of Owner. The Cost of the Work shall include only items reimbursable as set forth in this Article 9. If any cost is subject to Owner's prior approval, Design-Builder shall obtain this approval in writing prior to incurring the cost. Whenever the Contract Documents state that Design-Builder shall perform any Work or incur any expense, it shall be understood to mean, in the absence of language to the contrary, that the cost shall be a Cost of the Work payable by Owner, not to exceed the GMP.

The following Sections identify the categories of costs to be reimbursed as Costs of the Work.

9.1.2 Construction and Supervision Labor Costs.

9.1.2.1 Wages of construction workers, including working foremen, directly employed by Design-Builder to perform the construction of the Work at the site or, with Owner's approval, at off-site locations in the performance of the Work. Wages of construction workers shall not be less than the prevailing rate of wage required by RCW Chapter 39.12, "Prevailing Wages on Public Works."

9.1.2.2 Wages or salaries of Design-Builder's supervisory and administrative personnel pre-approved in writing by Owner when stationed at or away from the site, in expediting

the production or transportation of materials or equipment required for the Work, but only for that portion of time required for the Work and directly involving the Project. The project superintendent, project manager, and estimator are included under this Section, regardless of whether they are or are not working from the field office, for that portion of their time spent working on the Project. Design-Builder shall not bill Owner for wages or salaries of these supervisory and administrative personnel in excess of eight (8) hours per day and forty (40) hours per week.

9.1.2.3 Costs paid or incurred by Design-Builder for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary annualized benefits such as sick leave, medical and health benefits, vacation, holidays and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Sections 9.1.2.1 through 9.1.2.3. Costs paid or incurred by Design-Builder for bonuses, stock options, deferred compensation, or discretionary payments to employees are not reimbursable Costs of the Work unless included in agreed burden rates. Owner and Design-Builder reserve the right to establish potential performance bonuses that can benefit Owner by reducing the overall cost of the Project.

9.1.2.4 The parties may establish fully burdened wage rates when establishing the GMP. Any agreed wage and burden rates are subject to Owner's audit and may be adjusted to reflect actual charges.

9.1.3 Subcontract Costs.

9.1.3.1 Payments made by Design-Builder to Subcontractors shall be in accordance with the requirements of their subcontracts. The costs in any cost-plus subcontracts must conform to the requirements of this Article 9. Design-Builder shall maintain a procedure for the review, processing and payment of Subcontractor payment applications. Design-Builder shall verify the completeness of all Subcontractor payment applications and assemble and check all supporting documentation required by the Contract Documents or by the subcontracts, including receipt of all lien waivers and releases.

9.1.3.2 Payments made to subsidiaries or affiliates of Design-Builder must be approved by Owner. Owner expressly reserves the right to require Design-Builder to utilize independent Subcontractors rather than Design-Builder's subsidiaries or affiliates. Any Work subcontracted to a Design-Builder subsidiary or affiliate shall be executed on a lump sum or cost-reimbursable basis as pre-approved by Owner.

9.1.4 Costs of Materials and Equipment Incorporated in the Completed Construction.

9.1.4.1 Costs, including transportation and storage, of materials and equipment incorporated or to be incorporated in the completed construction.

9.1.4.2 Costs of materials described in Section 9.1.4.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, if any, shall become Owner's property at the completion of the Work or, at Owner's option, shall be sold or returned to the supplier by Design-Builder. Any amounts realized from such sales or returns shall be credited to Owner as a deduction from the Cost of the Work.

9.1.5 Costs of Other Materials and Equipment, Temporary Facilities and Related Items.

9.1.5.1 Costs of consumables, including transportation, storage, installation, maintenance, dismantling and removal, of materials, supplies, temporary facilities, machinery, and equipment, that are provided by Design-Builder at the site and fully consumed in the performance of the Work.

9.1.5.2 Rental charges (not to exceed the local fair market rental costs) actually paid to unrelated third parties for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by Design-Builder at the site, and the costs of transportation, installation, minor repairs and replacements, dismantling and removal.

.1 Rates and quantities of equipment rented shall be an itemization of the actual length of time that construction equipment necessary and appropriate for the Work is used at the site times the applicable rental cost. Rentals from Design-Builder or any entity in which Design-Builder or one or more of its owners has a direct or indirect ownership interest ("CM Equipment") shall be pre-approved by Owner and separately accounted for. The rental cost for CM Equipment, as well as all other rental charges, shall not exceed rates listed in the Rental Rate Blue Book by Data Quest, San Jose, California, or fair market rental costs, whichever are lower. If more than one rate is applicable, the best available rate will be utilized. The rates in effect at the time of the performance of the Work are the maximum rates allowable for equipment of modern design and in good working condition and include full compensation for furnishing all fuel, oil, lubrication, repairs, maintenance, and insurance. No gas surcharges shall be charged. Equipment not of modern design and/or not in good working condition will have lower rates. Hourly, weekly, and/or monthly rates, as appropriate, will be applied to yield the lowest total cost. The total cost of rental allowed shall not exceed the cost of purchasing the equipment outright. Owner, at its option, may direct Design-Builder to purchase tools and equipment specifically for the Project, which shall become Owner's possession upon completion of the Work. If equipment is required for which a rental rate is not established by the Rental Rate Blue Book, an agreed rental rate shall be established for the equipment, which rate and use must be approved by Owner prior to performing the Work. Design-Builder shall separately account for rentals from itself or any Person in which Design-Builder or one or more of its owners has a direct or indirect ownership interest.

9.1.5.3 Costs of street cleaning, if any, and for removal and disposal of debris and rubbish from the site.

9.1.5.4 Cost of document reproductions, telephone service including long-distance telephone calls, Internet service, postage and parcel delivery charges, and other technology-related costs incurred by Design-Builder at the site and approved by Owner, including the cost of computers, other hardware, and software, as well as reasonable petty cash expenses of the site office.

9.1.5.5 The reasonable travel expenses, based upon most current Washington State travel per diem guideline rates, of Design-Builder's personnel incurred while traveling more than fifty (50) miles in connection with the Work with Owner's prior written approval and vehicle expenses which are not related to travel expenses but are assignable to

the worksite for Design-Builder's personnel (Superintendent, Project Manager, Project Engineer and Quality Control Staff).

9.1.5.6 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, if approved in advance by Owner and meeting the other requirements for payment of off-site materials and equipment.

9.1.6 Design and Other Consulting Services.

9.1.6.1 Compensation, including fees and reimbursable expenses, paid by Design-Builder for design and design-related consulting services required by the Contract Documents, including but not limited to services to produce Construction Documents and Submittals needed for permitting, final Owner approval, Subcontractor bidding purposes, and construction.

9.1.7 Miscellaneous Costs.

9.1.7.1 That portion of insurance and bond premiums that are directly attributed to the Design-Build Contract. Costs for self-insurance are not reimbursable without Owner's prior written approval.

9.1.7.2 Use, B&O or similar taxes (but not income taxes) imposed by a governmental authority that are related to the Work and for which Design-Builder is liable. Sales tax due on the Contract Sum will be paid by Owner with each progress payment.

9.1.7.3 Project-specific fees and assessments for permits, license fees, inspections that Design-Builder is required by the Contract Documents to pay, but not for the cost of any re-inspection fees or penalties.

9.1.7.4 Fees of laboratories for tests required of Design-Builder by the Contract Documents and not paid for by Owner, except those related to defective or non-conforming Work for which reimbursement is excluded by the Contract Documents.

9.1.7.5 Royalties and license fees paid for the use of a particular design, process or product explicitly required by the Contract Documents. The Cost of the Work shall not include, and Design-Builder shall be responsible for, any costs of defending suits or claims for infringement of patent rights, or payments made resulting from such suits or claims, resulting from any design or other Work provided by Design-Builder or its A/E, consultants, or Subcontractors of any tier.

9.1.7.6 The cost of warehousing pre-approved in writing by Owner for stored materials or equipment subsequently incorporated into the Work.

9.1.7.7 Costs incurred by Design-Builder in preparing and maintaining the Progress Schedule, scheduling plots, correspondence, and reports, so long as such costs are specific to this Project and were not incurred to prepare for, submit or prove a Claim.

9.1.7.8 The cost of a Third Party Neutral, if applicable, to the extent not separately paid by Owner.

9.1.8 Other Costs and Emergencies.

9.1.8.1 Other costs reasonably incurred in the performance of the Work if and to the extent approved in advance and in writing by Owner.

9.1.8.2 Costs incurred in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property, as provided in the Contract Documents.

9.1.8.3 Cost of repairing or correcting, prior to Final Completion, damaged Work executed by Design-Builder, Subcontractors or suppliers, provided that such damaged Work was not caused by Design-Builder's negligence or failure to fulfill a specific responsibility of the Design-Build Contract, and only to the extent that the cost of repair or correction is not recoverable by Design-Builder from insurance, sureties, Subcontractors of any tier or suppliers. Design-Builder shall take reasonable action to recover and, to the extent it has failed to recover, shall assign its rights to pursue and collect to Owner upon request.

9.2 Costs Not to Be Reimbursed.

The Cost of the Work shall not include:

9.2.1 Salaries and other compensation of Design-Builder's personnel stationed at Design-Builder's principal office or offices other than the site office, including all administrative and accounting personnel, except as specifically provided in Sections 9.1.2.

9.2.2 Expenses of Design-Builder's principal office and offices other than the site office.

9.2.3 Overhead and general expenses, except as may be expressly included in Section 9.1.

9.2.4 Design-Builder's capital expenses, including interest on Design-Builder's capital employed for the Work.

9.2.5 Rental costs of machinery and equipment, except as specifically provided in Section 9.1.5, or costs or losses resulting from lost, damaged or stolen machinery or equipment or negligent or improper use of machinery or equipment.

9.2.6 Costs due to the negligence or failure of Design-Builder, Subcontractors and/or suppliers or anyone directly or indirectly employed by any of them, or for whose acts any of them may be liable, to fulfill a specific responsibility of the Contract Documents.

9.2.7 Costs, other than costs included in Change Orders approved by Owner that would cause the GMP to be exceeded.

9.2.8 Penalties, extensions, fines, and re-inspection fees imposed by governmental entities to the extent caused by Design-Builder or a Subcontractor of any tier.

9.2.9 Safety costs expressed as a percentage or as any other calculated expression.

9.2.10 Legal, consultant, or claims-related expenses, except as specifically provided in Section 9.1.7.8.

9.2.11 Accounting in Design-Builder's main or home office.

9.2.12 Warehousing in Design-Builder's facility, except as approved under Section 9.1.7.6.

9.2.13 Daily commuting to the jobsite.

9.2.14 Business license(s).

9.2.15 Testing and inspection of rejected Work.

9.2.16 Home office data processing, software, hardware or computer-related costs.

9.2.17 Insurance or bonding costs except as specifically required and reimbursable under this Agreement.

9.2.18 Overtime wages unless pre-approved by Owner.

9.2.19 Any cost not specifically and expressly described in Section 9.1.

9.3 Discounts, Rebates and Refunds.

9.3.1 Trade discounts, rebates, refunds and amounts received from sales of surplus materials and equipment shall accrue to Owner and Design-Builder shall make provisions so that they can be obtained. If Design-Builder is offered discounts and/or rebates based upon prompt payment, Design-Builder shall offer Owner the opportunity to take advantage of such discount and/or rebate, and if Owner makes prompt payment then Owner shall only be charged the price as reduced by the discount and/or rebate. If Owner declines the opportunity, Design-Builder may keep any such discounts and/or rebates it achieves through its own prompt payment. If Design-Builder does not provide Owner the opportunity to participate then Design-Builder may only charge the net costs after consideration of discounts and rebates. Design-Builder shall notify Owner in a timely manner of the availability of such cash discounts, rebates, or refunds.

9.3.2 Amounts that accrue to Owner in accordance with the provisions of Section 9.3.1 shall be credited to Owner as a deduction from the Cost of Work.

9.4 Related Party Transactions.

9.4.1 For purposes of Section 9.4, the term "related party" shall mean a parent, subsidiary, affiliate or other entity having common ownership or management with Design-Builder; any entity in which any stockholder in, or management employee of, Design-Builder owns any interest in excess of ten percent in the aggregate; or any Person or entity which has the right to control the business or affairs of Design-Builder. The term "related party" includes any member of the immediate family of any Person identified above.

9.4.2 If any of the costs to be reimbursed arise from a transaction between Design-Builder and a related party, Design-Builder shall notify Owner of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost

incurred. If Owner, after such notification, authorizes the proposed transaction, then the cost incurred shall be included as a cost to be reimbursed, and Design-Builder shall procure the Work, equipment, goods or service from the related party. If Owner fails to authorize the transaction, Design-Builder shall procure the Work, equipment, goods or service from some Person or entity other than a related party according to the terms of the Contract Documents.

9.5 Accounting Records. Design-Builder and its Subcontractors shall keep full and detailed records and accounts related to the Cost of the Work and exercise such controls as may be necessary for proper financial management under this Contract and to substantiate all costs incurred. The accounting and control systems shall be satisfactory to Owner. Owner will usually conduct, at a minimum, a pre-construction audit conference, an interim audit and a final audit of the Project, however Owner reserves the right to conduct an audit at any time. Owner and Owner's auditors shall, during regular business hours and upon reasonable notice, be afforded access to, and shall be permitted to audit and copy (including electronically), Design-Builder's and Subcontractors' original records and accounts, including complete documentation supporting accounting entries, books, ledgers, computerized records, daily reports, correspondence, instructions, drawings, receipts, subcontracts, Subcontractor's proposals, purchase orders, vouchers, invoices of Subcontractors of any tier, memoranda and other data relating to this Project or any Claim. Design-Builder and its Subcontractors shall preserve these records for a period of six (6) years after Final Completion, or for such longer period as may be required by law.

Article 10
Payments

10.1 Applications for Payment.

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

10.1.2 Costs associated with the Programmatic Period and the Design-Development Period (not to exceed the maximum payments designated for each Period) shall be identified within the Schedule of Values as separate line items.

10.2 Progress Payments.

10.2.1 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 GMP properly allocable to completed Work as determined by multiplying the percentage of completion of each portion of the Work by the share of the GMP 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 GMP 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 Add Design-Builder's Fee. Design-Builder's Fee shall be prorated to equal the percentage of the Cost of the Work described in .1 and .2 as compared to the GMP;

.4 Subtract the aggregate sum of previous payments made by Owner;

.5 Subtract amounts, if any, for which Owner has withheld payment; and

.6 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.

10.3 Final Accounting.

10.3.1 Following Substantial Completion and Final Completion, and when Design-Builder believes that all Work required by the Agreement has been fully performed, Design-Builder shall deliver to Owner a final accounting of the Cost of the Work with its final Application for Payment.

10.3.2 Owner will review and report in writing on Design-Builder's final accounting within thirty (30) Days after delivery, provided that Owner is given prompt access to Design-Builder's records. Design-Builder shall promptly make available at its office all accounting documents related to the Project. Based upon such Cost of the Work as Owner reports to be substantiated by Design-Builder's final accounting, and provided the other conditions of the Contract Documents or other applicable provisions of the Agreement have been met, Owner will notify Design-Builder in writing of Owner's intention to make final payment or to withhold payment. Owner's final accounting shall not preclude or in any way limit Owner from exercising its rights of audit under other provisions of the Design-Build Contract.

10.3.3 If Owner reports that the Cost of the Work as substantiated by Design-Builder's final accounting to be less than claimed by Design-Builder, Design-Builder shall be entitled to invoke the dispute resolution procedure of the Contract with respect to the disputed amount. If Design-Builder fails to so initiate resolution of the dispute within the time specified in Article 8 of the General Conditions following Owner's delivery of the accounting to Design-Builder, the substantiated amount reported by Owner shall become final and binding. Pending a final resolution pursuant to the Contract Documents, Owner shall pay Design-Builder any undisputed amount determined by Owner to be due Design-Builder, not to exceed the GMP, in response to Design-Builder's final Application for Payment.

10.3.4 If, subsequent to final payment and at Owner's request, Design-Builder incurs costs in connection with the correction or completion of Work as described as reimbursable in Article 9, Owner shall reimburse Design-Builder such costs and Design-Builder's Fee applicable thereto on the same basis as if such costs had been incurred prior to final payment, not to exceed the GMP.

10.4 Final Payment.

10.4.1 Final payment, constituting the entire unpaid balance of the Contract Sum, less retainage, shall be made by Owner to Design-Builder no later than thirty (30) Days after Design-Builder has fully performed the Design-Build Contract and Final Completion has occurred (except for Design-Builder's responsibility to correct non-conforming Work discovered after final payment or to satisfy other requirements, if any, that extend beyond final payment), Design-Builder has submitted a final Application for Payment, and Owner has substantiated Design-Builder's final accounting.

10.4.2 Owner shall release retainage to Design-Builder in accordance with RCW Chapter 60.28 and the Contract Documents.

Article 11
Instruments of Service

11.1 Instruments of service. The Drawings (including original Construction Documents), Specifications, materials, models, sketches, renderings, surveys, reports, and other documents, including those prepared as 3D electronic models, using CAD, and existing in other electronic formats, prepared or provided by Design-Builder's A/E and/or Design-Builder are instruments of service intended for use solely with respect to the Project. Owner shall own any instruments of service prepared during the Programmatic Period and Design-Development Period, and will be permitted to retain copies, including reproducible and originally stamped copies, of all other instruments of service. For all instruments of service, including those prepared during the Programmatic Period and Design-Development Period, Owner is granted an unlimited and royalty free license to utilize the instruments of service to communicate about the Project, complete or expand the Project, correct any deficiencies, make any renovations or repairs to the Project, or for future projects other than the construction of another building.

Owner agrees to indemnify and hold Design-Builder harmless from any subsequent modification of the instruments of service by Owner and from Owner's use of the instruments of service on other projects not involving Design-Builder.

11.2 Design-Builder to convey instruments of service to Owner. Upon Owner's request if made during the Project or within five (5) years of Substantial Completion, each of Design-Builder's design professionals, including Design-Builder's A/E, shall be contractually required to convey to Owner in whatever format Owner may designate that design professional's instruments of service for the completion, use, updating, modernizing, and maintenance of the Project, conditioned upon Owner's agreement to indemnify and hold harmless the design professional as set forth above. Design-Builder's design professionals, including Design-Builder's A/E, shall be permitted to remove all indications of their ownership and/or involvement from instruments of service provided in electronic format. Design-Builder shall incorporate the requirements of this Section in all agreements with design professionals.

11.3 Submission of instruments of service does not waive rights. Submission or distribution of Design-Builder's instruments of service to meet official regulatory requirements or for similar purposes in connection with the Project shall not be construed as publication in derogation of any rights reserved in this Section.

Article 12
Miscellaneous Provisions

12.1 Design-Builder's A/E. Design-Builder's A/E and other design professionals and consultants engaged by Design-Builder are listed below:

Name and Address	License Number	Relationship to Design-Builder	Other Information
TBD			

12.2 Owner's Consultants. Consultants, if any, engaged directly by Owner, as well as their professions and responsibilities, are listed below:

Name and Address	Responsibilities to Owner	Other Information
None		Owner consultants identified in this table are not eligible to contract with or provide services to Design-Builder.

12.3 Separate Contractors. Separate contractors, if any, engaged directly by Owner and known by Owner as of the date of this Agreement, as well as their trades and responsibilities, are listed below:

Name and Address	Responsibilities to Owner	Other Information
None		

12.4 Designated Representatives.

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

Cynthia Arbour
Project Manager
Facilities Services, Capital

Jason Harper
Construction Manager, Lead
Facilities Services, Capital

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

_____
_____
_____

12.4.3 Neither Owner's nor Design-Builder's Designated Representatives shall be changed without ten (10) Days' written Notice to the other party.

12.5 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.

12.6 Information to CPARB. Design-Builder and all Subcontractors shall submit Project information required by the state Capital Projects Advisory Review Board (CPARB).

12.6.1 Design-Builder shall submit to Owner the complete project specific diverse business inclusion plan summarized in the Design-Builder's Proposal. At a minimum, the plan must address inclusion of underutilized firms as subcontractors and suppliers including, but not limited to, the office of minority and women's business enterprises certified businesses, veteran certified businesses, and small business.

12.7 Insurance.

12.7.1 In addition to the insurance requirements imposed in the General Conditions and other Contract Documents, Design-Builder and Design-Builder's A/E, other design consultants, and any design-build Subcontractors of any tier will purchase and maintain for at least six (6) years after Substantial Completion Professional Liability/Errors and Omissions Liability insurance in an amount of not less than two million dollars ($2,000,000) per claim and annual aggregate (deductible of up to fifty thousand dollars ($50,000) permitted). If design consultants or design-build Subcontractors of any tier have a contract value of less than two million dollars ($2,000,000), they may purchase and maintain for at least six (6) years after Substantial Completion Professional Liability/Errors and Omissions Liability insurance in an amount of not less than one million dollars ($1,000,000) per claim and annual aggregate (deductible of up to fifty thousand dollars ($50,000) permitted) in lieu of the requirements above. Design consultants or design-build Subcontractors of any tier whose contract value is greater than two million dollars ($2,000,000.00) but would like the reduced Professional Liability/Errors and Omissions Liability insurance requirements must receive Owner's written approval. Design-Builder, Design-Builder's A/E, other design consultants, and any design-build Subcontractors of any tier will promptly notify Owner of any material changes to, interruption of, or termination of this insurance, and will immediately procure replacement coverage. Design-Builder, Design-Builder's A/E, other design consultants, and any design-build Subcontractor of any tier will either maintain active policy coverage or secure an extended reporting period, providing coverage for claims first made and reported to the insurance company within six (6) years of Substantial Completion or termination of the Work under this Agreement, whichever occurs first.

12.8 Payment and performance bonds. Payment and performance bonds shall be provided by Design-Builder. During the Programmatic Period and Design-Development Period, the bonds must be in amounts that equal or exceed the maximum Programmatic Period and Design-Development Period Payments respectively. Upon execution of the Post-Design-Development Period Amendment, the amounts of such payment and performance bonds shall be increased to equal or exceed the GMP plus Washington State sales tax.

12.9 Use of Third Party Neutral. Owner and Design-Builder 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 13
Enumeration of the Contract Documents

13.1 The Contract Documents. The Contract Documents, except for modifications issued after execution of this Agreement, are enumerated as follows:

13.1.1 This executed Agreement, any attached Exhibits and other documents listed in this Agreement.

13.1.2 The General Conditions and any Supplementary Conditions of the Contract.

13.1.3 Owner's Project Criteria.

13.1.4 The Addenda, if any, are as follows:

Number	Date	Pages
TBD		

13.1.5 Post-Programmatic Period Amendment executed by Owner and Design-Builder. The amendment will include Design-Builder's Voluntary Alternates List, if applicable, and any assumptions in the updated GMP accepted by Owner.

13.1.6 Post-Design-Development Period Amendment executed by Owner and Design-Builder. The amendment will include Design-Builder's Voluntary Alternates List, if applicable, and any assumptions in the updated GMP accepted by Owner.

13.1.7 Design-Builder's Proposal dated [date], and Statement of Qualifications dated [date] (together, the "Proposal"), to the extent consistent with or which represent enhancements to Owner's Project Criteria. Design-Builder's submission and identification of proposed design features to Owner are to be provided by Design-Builder within the GMP. Proposal and Construction Documents prepared by Design-Builder and accepted by Owner in accordance with the Contract Documents. Acceptance by Owner of each of the following design review packages shall establish baseline Construction Documents from which future submissions will be evaluated:

.1 Programmatic Period Submittal (accepted via the Post-Programmatic Period Amendment)
.2 Design-Development Submittal (accepted via the Post-Design-Development Period Amendment)
.3 Fifty percent (50%) Construction Document Submittal
.4 Ninety percent (90%) Construction Document Submittal
.5 One hundred percent (100%) Construction Document Submittal

All Submittals shall include updated deviation log(s) noting variances from previous Submittals, proposal criteria and standards for review and approval.

13.1.8 Other documents ("Exhibits"), if any, forming part of the Contract cDocuments are as follows:

Project Manual dated 7/7/2021
WSU Request for Qualifications dated 7/7/2021
WSU Request for Proposals dated TBD
Department of Labor and Industries Prevailing Wage Rates.

OWNER:
WASHINGTON STATE UNIVERSITY

(Signature) (Date)

(Printed Name)
Vice President for
Finance and Administration

DESIGN-BUILDER:
FIRM NAME
WA CONTRACTOR LICENSE NUMBER

(Signature) (Date)

(Printed Name)
(Title)

END OF SECTION 00 50 00

COMPLETION DELIVERABLES EXHIBIT
Johnson Hall Demolition / Clark Hall Research Lab Renovation

This Attachment lists the deliverables specific to Design-Build required in addition to (or specifically altering) the established deliverables of the completion milestones of the Contract Documents.

Substantial Completion	
	Provide a Substantial Completion Submittal inclusive of all documentation required to achieve Substantial Completion as described in the Agreement, the General Conditions and Section 01 70 00. In additional, Design-Builder shall also provide:
	1. Record of Design-Builder's A/E Certification of review of the draft O&M Manual.
	2. Scheduled prior and submitted upon Substantial Completion provide Owner with the A/E developed punch list inspection report. Architect of record and Engineer of record must conduct the punchlist inspection accompanied by Owner's Repesentative.
Final Completion	
	Provide a Final Completion Submittal inclusive of all documentation required to Achieve Final Completion as described in the Agreement, the General Conditions and Section 01 70 00. In addition, Design-Builder shall also provide:
	1. In lieu of the Project Record as described in 00 72 00, Article 4.02, Design-Builder shall maintain the Project Record electronically in Bluebeam or approved equivalent. Design-Builder shall upon Final Completion provide a hyperlinked PDF that includes tracked changes showing all changes to the Project Documents throughout the project, and is bookmarked for all divisions.
	2. Design-Builder shall compile a final Conformed Record Drawing with revision date in native format, as a converted CAD sheet set in DWG format, as a text searchable PDF format, one no larger than 30" X 42" paper set drawing, and one set of 4-mil single sided Mylar Drawings no larger than 30" X 42". For the CAD drawings: Adhere to the National CAD Standars. Do not provide multiple tab layout in a a single file. Bind all .xrefs prior to submitting. Purge all files prior to submission. Must be viewable in native format without any add-ons.
	3. Provide an Excel or CSV drawing index.
	4. Provide any 3D Models in native format, if created.
	5. Provide any additional surveys or geotechnical reports obtained by Design-Builder.
	6. Provide a minimum of 2 Final O&M Manuals per the requirements of Section 01 78 39, as well as a text searchable PDF.
	7. Provide LEED submittal documentation.
	8. Provide the termination of stormwater permit.
Final Acceptance	
	Provide a Final Acceptance Submittal inclusive of all documentation required to Achieve Final Acceptance as described in the Agreement, the General Conditions and Section 01 70 00.
Retention Release	
	No deliverables required.

End of Attachment Completion Deliverables Exhibit

Washington State University
Johnson Hall Demolition / Clark Hall Research Lab Renovation

Programmatic Period Amendment
to
Agreement between Owner and Design-Builder
(Cost Plus Fee with a Guaranteed Maximum Price)

Contract No. TBD

This AMENDMENT is effective as of the date of first signature if authorized representatives of both parties execute this Amendment. This Amendment amends and supplements the [Date] Agreement Between Owner and Design-Builder (the "Agreement"), in connection with the Project identified below.

OWNER:	Washington State University c/o Facilities Services, Capital P.O. Box 641150 Pullman, WA 99164-1150
DESIGN-BUILDER:	[Design-Builder Firm Name] [Address]
PROJECT:	Johnson Hall Demolition 1820 NE Wilson Road Pullman, WA 99164 / Clark Hall research Lab Renovation 2000 NE Wilson Road Pullman, WA 99164

In consideration of the mutual covenants and obligations contained herein, Owner and Design-Builder agree to amend and supplement the Agreement as set forth herein.

1. Section 3.8 is amended as follows:

Programmatic Period. The ___ Day period beginning immediately following selection of Design-Builder during which Design-Builder will perform services to complete the Programmatic Period Submittal described in the Contract Documents. The Programmatic Period ends upon the earlier of (1) Owner's written acceptance of the Programmatic Period Submittal and the execution of a Post-Programmatic Period Amendment or (2) termination of this Agreement. Owner is obligated to pay no more than the Programmatic Period Payment for services during the Programmatic Period and has no obligation to authorize Design-Builder to proceed further with design or construction under the Agreement if it does not accept Design-Builder's Programmatic Period Submittal and execute the Post-Programmatic Period Amendment.

2. Section 3.10 is amended as follows:

[Amend 3.10 as need to establish scope of Programmatic Period]

3. Section 3.12 is amended as follows:

[Amend 3.12 as need to establish period of time for the Design-Development Period]

4. Section 3.14 is amended as follows:

[Amend 3.14 as need to establish scope of Design-Development Period]

5. Section 8.3.1 is amended as follows:

Programmatic Period Payment. During the Programmatic Period, Design-Builder can earn up to_____ dollars ($_____) (the "Programmatic Period Payment."). The Programmatic Period Payment amount is included within the GMP.

6. Section 8.3.2 is amended as follows:

Design-Development Period Payment. During the Design-Development Period, Design-Builder can earn up to_____ dollars ($_____) (the "Design-Development Period Payment."). The Design-Development Period Payment amount is included within the GMP.

7. [Other amendments as required]

All other terms and conditions of the Agreement not changed by this Amendment shall remain in effect.

OWNER: **WASHINGTON STATE UNIVERSITY**	**DESIGN-BUILDER:** **FIRM NAME**
_____ (Signature) (Date)	_____ (Signature) (Date)
(Printed Name) Vice President for Finance and Administration	(Printed Name) (Title)

END OF PROGRAMMATIC PERIOD AMENDMENT

Washington State University
Johnson Hall Demolition / Clark Hall Research Lab Renovation

Post-Programmatic Period Amendment
(Amendment No. 2)
to
Agreement between Owner and Design-Builder
(Cost Plus Fee with a Guaranteed Maximum Price)

Contract No. TBD

This AMENDMENT is effective as of the date of first signature if authorized representatives of both parties execute this Amendment. This Amendment supplements and amends the [Date] Agreement Between Owner and Design-Builder (the "Agreement"), and the [Date] Programmatic Period Amendment No. 1, in connection with the Project identified below.

OWNER:	Washington State University c/o Facilities Services, Capital P.O. Box 641150 Pullman, WA 99164-1150
DESIGN-BUILDER:	[Design-Builder Firm Name] [Address]
PROJECT:	Johnson Hall Demolition 1820 NE Wilson Road Pullman, WA 99164 / Clark Hall research Lab Renovation 2000 NE Wilson Road Pullman, WA 99164

In consideration of the mutual covenants and obligations contained herein, Owner and Design-Builder agree to supplement the Agreement as set forth herein.

1. Acceptance of Programmatic Period Submittal.

Design-Builder's Programmatic Period Submittal dated [Date], is accepted by Owner and made a part of the Contract.

2. Confirmation of Intent to Proceed with the Design Development Period.

Owner and Design-Builder confirm their intention to proceed with the Design Development Period in accordance with the Contract and this Post-Programmatic Period Amendment.

3. Confirmation of Scope of Work and Any Changes to the Contract During Programmatic Period.

[Identify Drawings, Specifications, and other scope of work details on which the GMP is based, including any changes accepted by Owner during Programmatic Period, including any GMP changes.]

All other terms and conditions of the Agreement not changed by this Amendment shall remain in effect.

OWNER: **WASHINGTON STATE UNIVERSITY**	**DESIGN-BUILDER:** **FIRM NAME** **WA CONTRACTOR LICENSE NUMBER**
(Signature) (Date)	(Signature) (Date)
(Printed Name) Vice President for Finance and Administration	(Printed Name) (Title)

END OF POST-PROGRAMMATIC PERIOD AMENDMENT (NO. 2)

Washington State University
Johnson Hall Demolition / Clark Hall Research Lab Renovation

Post-Design-Development Period Amendment
(Amendment No. 3)
to
Agreement between Owner and Design-Builder
(Cost Plus Fee with a Guaranteed Maximum Price)

Contract No. TBD

OWNER:	Washington State University c/o Facilities Services, Capital P.O. Box 641150 Pullman, WA 99164-1150
DESIGN-BUILDER:	[Design-Builder Firm Name] [Address]
PROJECT:	Johnson Hall Demolition 1820 NE Wilson Road Pullman, WA 99164 / Clark Hall research Lab Renovation 2000 NE Wilson Road Pullman, WA 99164

In consideration of the mutual covenants and obligations contained herein, Owner and Design-Builder agree to supplement the Agreement as set forth herein.

1. Acceptance of Design-Development Period Submittal.

Design-Builder's Design-Development Period Submittal dated [Date], is accepted by Owner and made a part of the Contract.

2. Confirmation of Intent to Proceed with the Work.

Owner and Design-Builder confirm their intention to proceed with the Work in accordance with the Contract and this Post-Design-Development Period Amendment.

3. Confirmation of Guaranteed Maximum Price.

Owner and Design-Builder confirm that the sum of the Cost of the Work and Design-Builder's Fee, for all design and construction services required by the Contract Documents including all Programmatic Period and Design-Development Period services, is guaranteed by Design-Builder not to exceed the GMP of_____ dollars ($_____), subject to additions and deductions for changes in the Work as provided in the Contract

Documents. The GMP includes by way of example and not limitation all design and construction Costs of the Work; all taxes except Washington State sales tax due on the Contract Sum; Design-Builder's contingency; any approved Allowances; all insurance, including liability and E&O coverage; overhead; and Design-Builder's Fee. Costs that would cause the GMP to be exceeded shall be paid by Design-Builder without reimbursement by Owner.

4. Confirmation of the Fee and Contingency Based Upon Establishment of the GMP.

Design-Builder's Fee. Design-Builder's Fee shall be a lump sum amount of _____ ($_____), which is calculated and fixed based upon the established GMP by multiplying _____ percent (_____%) times the estimated sum of the Cost of the Work. The Design-Builder's Fee covers all of Design-Builder's profit and home office overhead as well as all other costs not reimbursable under this Agreement, including but not limited to costs of principal participation, home office administrative support, taxes, financing costs, and profit. The insurance rates and bond premium used to calculate the GMP will not increase during the term of this Agreement. The fee for changed Work for Design-Builder and Subcontractors shall be as specified in the General Conditions. Design-Builder shall not separately mark-up such fee by the Design-Builder's Fee above.

Contingency. The GMP includes Design-Builder's contingency of _____ ($_____), which is _____ percent (_____%) of the estimated Cost of the Work. The contingency is a sum established for Design-Builder's use to cover costs that are properly reimbursable as Cost of the Work but not the basis for a Change Order, such as, for example, design omissions, buyout error, scope gaps, failure of a Subcontractor of any tier, or expediting costs for critical materials. Design-Builder shall use the contingency only with Owner's consent. Unused contingency will revert to Owner at Final Completion of the Project. Since Design-Builder's Fee is calculated based upon the GMP, which includes Design-Builder's contingency, Design-Builder shall apply no additional fee for use of contingency.

5. Confirmation of Scope of Work and Any Changes to the Contract During Design-Development Period.

[Identify Drawings, Specifications, and other scope of work details on which the GMP is based, including any changes accepted by Owner during Design-Development Period, including any GMP changes.]

All other terms and conditions of the Agreement not changed by this Amendment shall remain in effect.

OWNER: **WASHINGTON STATE UNIVERSITY**	**DESIGN-BUILDER:** **FIRM NAME** **WA CONTRACTOR LICENSE NUMBER**
_____	_____
(Signature) (Date)	(Signature) (Date)
(Printed Name) Vice President for Finance and Administration	(Printed Name) (Title)

END OF POST-DESIGN-DEVELOPMENT PERIOD AMENDMENT NO. 3

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WSU amendments to the Washington State Facility Construction
General Conditions are identified by a bar on the right hand side of modified paragraphs

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.

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.

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

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.

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.

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.

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

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.

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

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.

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

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

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

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 oversite 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

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.

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 prefiled 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

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

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.

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.

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

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

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.

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.

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

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

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

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.

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;

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.

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.

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

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).

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 with 14 Days shall constitute Contractor's acceptance of the terms of the Unilateral Change Order.

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

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:

(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

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:

(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

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

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

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

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:

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.

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;

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.

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

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.

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

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.

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

WASHINGTON STATE UNIVERSITY

Environmental Health and Safety

Good Faith Survey
Johnson Hall (#0076)
Washington State University
Pullman, Washington

May 18, 2017

Prepared by:

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Environmental Control Technician
WSU Environmental Health and Safety
AHERA Building Inspector # BIR20160426-04 (exp. April 27, 2018)

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1 INTRODUCTION

Washington State University (WSU) Environmental Health and Safety (EH&S) conducted a "Good Faith" asbestos and limited lead in painted coatings survey of Johnson Hall in March and April 2017. Johnson Hall is a four-story building constructed in 1961 for soil science and plant pathology laboratories and offices associated with the WSU College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) and United States Department of Agriculture (USDA). A similarly constructed classroom building, known as the Johnson Hall annex, constructed in 1967, is adjoined to the original building's south portion by ground and first floor corridors. Offices and instructional classrooms for the Apparel, Merchandising, Design, and Textile (AMDT) department are located in the annex. Johnson Hall and the associated annex are located at 1820 Northeast Wilson Road, Pullman, Washington. This survey was conducted to meet Washington Administrative Code (WAC) 296-62-07721 Good Faith survey requirements for construction, renovation, demolition, and maintenance projects at Johnson Hall with the following limitations.

1.1 Limitations of the Assessment

The conclusions herein 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 or would have caused damage to the building if sampled. Locations where inspectors would have been exposed to hazards were not evaluated (e.g., operating HVAC or building mechanical systems). Typical construction techniques can render building portions 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 following specific areas were excluded from this survey:

- Elevator mechanical rooms, shafts and pits
- Enclosed pipe chases in laboratories
- Inaccessible rooms: B-3 (Transformer vault), Suite 6, 160, Suite 104, 252, 262, 266, 316, 348, 370

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

2 METHODOLOGY

This good faith survey was conducted by Matthew McKibbin and Stephan Gilley with WSU EH&S, AHERA Building Inspector #BIR20160426-03 and #BIR20160426-04 (exp. April 26, 2017) in March and April 2017. The asbestos survey was performed referencing the "Good Faith" survey requirements outlined in WAC 296-62-07721.

To identify suspect ACM, EH&S walked through accessible Johnson Hall locations, noting building materials and construction. Not all concealed areas or sub-surface suspect materials may have been surveyed (see Limiting Conditions in Section 1.1). Approximate suspect material quantities were estimated based upon field observations, measurements, and scaled building drawings provided by WSU Facilities Services. Quantities given are intended for order of magnitude information only and must be field verified to support project bidding or estimates.

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. The sampling plan included, at a minimum, the collection and analysis of samples as follows referencing 40 CFR 763.86:

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.
- In a manner sufficient to determine whether the material is ACM, samples were collected from plaster/mudded pipe fitting insulation.

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, structural concrete or other generally recognized non-ACM were not sampled.

Asbestos bulk samples and chain-of-custody forms were delivered to NVL Laboratories (NVL) in Seattle, Washington for analysis. Quality control samples were delivered to Environmental Hazards Services, LLC (EHS) in Richmond, Virginia for analysis. Each sample was analyzed by Polarized Light Microscopy (PLM) with dispersion staining referencing EPA Method 600/R-93/116. The detection limit for this type of analysis is approximately one percent (by visual estimate). Materials containing more than one percent asbestos are considered ACM.

2.2 Limited Lead Paint/Coatings Sampling

This lead survey was performed to assist employers in efforts to comply with the Washington Labor and Industries (LNI) lead standard for the construction industry (WAC 296-155-176) during renovation/demolition activities. Paint evaluation was limited to large homogeneous surfaces. Representative paints were analyzed by a Niton portable X-ray fluorescence (XRF) spectrometer. Calibration was conducted per manufacturer's guidance. XRF results are reported in milligrams per square centimeter (mg/cm^2). Any detection of lead in paint is reported as a lead-containing paint.

3 RESULTS

The following section details WSU EHS asbestos sampling and lead in painted coatings sampling results. Asbestos and lead sample locations are identified on Figures 1 through 11.

3.1 Visual Inspection

Johnson Hall is a rectangular shaped five-story structure with basement level constructed in 1961, with an attached Annex constructed in 1967. The building initially provided research and educational facilities for Plant Sciences, Entomology, Forestry and Range Management, Horticulture, and Plant Pathology. Currently, USDA-ARS Plant Introduction, Agricultural Science Library, classrooms, and laboratories occupy the ground floor. Natural Resource Science, NRS, Horticulture and Landscape Architecture, classrooms, and offices occupy the first floor. Crop and Soil Science, USDA, offices, and laboratories occupy the second floor. Plant Pathology, USDA, offices, and classrooms occupy the third floor. The fourth floor includes the Geospatial Research Laboratory and penthouse mechanical room.

The building is constructed on a structural concrete basement foundation with concrete load-bearing perimeter walls. Inspectors observed concrete foundation walls and flooring absent coatings or finishes at the basement level. The ground, first, second, and third floors are generally finished with 9-inch square vinyl floor tiles, 12-inch drill hole pattern acoustic/glued on ceiling tiles and a mixture of plaster, gypsum wallboard and structural concrete and concrete masonry walls. Renovations to eastern building portions, individual suites, and the connection to Vogel Plant Biosciences on the second and third floors include newer gypsum wallboard partition walls, 12-inch vinyl floor tile and/or carpet, and various suspended and acoustical glue-on ceiling tiles. Stairwells throughout the building are finished with tectum ceiling tiles, 12-inch floor tiles and sheet vinyl flooring. Restrooms are finished with ceramic tile floors and walls, and 12-inch drill-hole pattern acoustic/glued on ceiling tile. The exterior is finished with a pebblecrete cladding and a newer rubber-membrane roof. Asbestos-containing roofing was removed and replaced with non-ACM components in 2014 (see Appendix F). Some ACM roofing components remain (see Table 1 below).

3.2 Asbestos

Table 1 summarizes confirmed ACMs and assumed ACMs identified (**bold font**) during the survey.

Photographs referenced in the tables are provided in Appendix A. Quantities are estimated for order of magnitude information only and not intended for bidding purposes or fee estimates for construction or renovation projects.

Table 1 – ACMs and Assumed ACMs

Material	Location(s) of ACM	Photo #	Approximate Quantity
Class I - Thermal Systems Insulation			
Pipe Insulation: **Mudded/plaster fittings** with yellow non-asbestos fiberglass/canvas/foil wrap on straight runs	Heating, laboratory water and domestic water distribution piping throughout building (3-inch to 6-inch diameter)	1	4,500 EA
Pipe Insulation: 8-inch black horse hair insulation with **black asphaltic paper wrap**	Roof drains - B10, 300 (hallway), and pipe chases throughout building	2	2,000 LF
Duct Insulation: Non-asbestos fiberglass duct insulation with white canvas wrap and **mud patch at seams**	Mechanical penthouse supply fan ductwork and room 260	3	1000 LF/ 10 LF (patch area)
Tank insulation: Canvas wrap and **hard white magnesia-type insulation** on tank ends	B4 (two, approximately 3,500-gallon tanks)	4	200 SF

Material	Location(s) of ACM	Photo #	Approximate Quantity
Pipe insulation: Cork insulation with **paper/foil and canvas wrap**	Chilled water piping in 62 (vertical length of chase), penthouse, near cooler locations and annex mechanical room	5	1,250 LF
Tank Insulation: Canvas wrap and **hard white magnesia-type insulation**	Penthouse: Expansion tank	6	100 SF
Class I - Surfacing Materials			
White skim coat/paint	Concrete and masonry structural walls in laboratories and stairwells throughout Also applied as a patch material on ceiling cracks in laboratories	7	35,000 SF
Popcorn ceiling	Annex: C107 (auditorium)	8	2,100 SF
Class II - Miscellaneous Materials			
Gypsum wallboard/joint compound system (**joint compound contains up to 3% asbestos**)	Partition walls and corridor ceilings throughout building <u>except</u> renovated area of annex (C1 through C30A)	9	17,000 SF
9-inch gray-green vinyl asbestos tile and associated black mastic	Dominant floor tile throughout building (see Figures 2, 4, 6, 8)	10	110,000 SF
Gray insulation anchor pin mastic on metal ductwork	Fiberglass insulation anchor pins on supply fans in mechanical penthouse rooms 401 and 402	11	3,000 SF
Black mastic on white foam cooler insulation	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A	12	2,000 SF
Gray window glazing	Windows throughout the annex and full-height windows in main building stairwells	13 and 19	105 EA
Black duct mastic	Penthouse: Applied to seams on metal supply fan ductwork Ground through 4th floor: Applied to *some* insulated supply ductwork and metal fume hood exhaust ducting	14 and 15	200 LF

Material	Location(s) of ACM	Photo #	Approximate Quantity
Red mastic/caulk	Uninsulated metal ductwork and door frames in duct chases: 36 and 62	16	100 SF
Gray gasket caulk	Mechanical penthouse: BAC cooling tower	17	50 SF
Metal sink units' assorted colored undercoatings	Laboratories and classrooms (see Figures 2, 4, 6, 8)	18	15 EA
Black laboratory countertops	Laboratories and classrooms (see Figures 2, 4, 6, 8)	20	144 EA
Laboratory hood – **cement asbestos board lining** (assumed)	Laboratory fume hoods (see Figures 2, 4, 6, 8)	21	53 EA
12-inch white with brown fleck vinyl floor tile and associated **black mastic**	202, 204, 272	22	2,100 SF
12-inch tan with brown and white streak vinyl floor tile and associated **black mastic**	230A and 308A	23	425 SF
12-inch tan with burgundy streak vinyl floor tile and associated **black mastic**	Annex: C5 (storage)	24	200 SF
12-inch white with gray fleck vinyl floor tile and associated **black mastic**	224, 237, 268, 291D, 364, 386, 388	25	3,375 SF
2 ft. by 4 ft. etch-pinhole pattern suspended ceiling tile	Annex: C10B, C10VS	26	75 SF
Pink and brown fleck sheet vinyl tile with yellow mastic and **residual black mastic**	143	27	50 SF
Black roof roofing tar and lightweight concrete insulation	Residual roofing materials found around fume hood exhaust roof penetrations in main building	28	38 EA 200 SF
Yellow duct mastic	Annex mechanical room C3M on SF1A	29	25 SF
Black laboratory glassware drying racks (mounted on walls)	Laboratories and classrooms (see Figures 2, 4, 6, 8)	30	27 EA
Cement asbestos board (mounted on wall)	262	31	1 EA
Fire rated doors (assumed)	Interior stairwells and entrance doors (ground level) labeled with fire rating	32	42 EA
Elevator equipment - brake shoes, electrical components, insulation (assumed)	Mechanical penthouse rooms 400EL and 406	-	2 EA

Note: **Bold** indicates material that contains asbestos within description

Appendix B details asbestos survey sample numbers, material descriptions, sample locations and laboratory analytical results. A summary of homogeneous building materials observed is provided in Appendix C. Specific observations concerning ACMs are discussed below.

Thermal System Insulation

Five homogeneous areas of pipe insulation were identified in Johnson Hall.

1. High pressure steam supply and condensate piping is insulated with **asbestos-containing magnesia-type hard pipe insulation** from the WSU steam tunnels into room B10 and routed vertically to supply fan coils located in the mechanical penthouse.
2. Pipe insulation associated with laboratory hot water systems, radiant heater distribution systems and domestic water are covered with non-asbestos-containing foil wrap and/or canvas wrap on fiberglass straight runs. **Asbestos-containing mud/plaster is applied to fittings** from 3 to 6-inches in outside diameter throughout the systems. These systems are present throughout the building in ceiling spaces, air shafts, perimeter wall chases, wall cavities near restrooms, and laboratories.
3. Chilled water supply piping from the campus chilled water system enters the building in basement mechanical room B10. This 12 to 14-inch outside diameter piping is insulated with a newer non-asbestos black foam and foil wrap which connects to the **asbestos-containing cork insulation** noted below. Supply piping was observed in the basement level and mechanical penthouse.
4. Chilled water distribution piping is insulated with **cork and an asbestos-containing paper/foil/canvas wrap** on straight runs and an **asbestos-containing mud/plaster is applied to fittings**. Chilled water distribution systems are present throughout the building in enclosed vertical pipe chases, ceiling spaces near cooler and freezer rooms, and the basement and penthouse level mechanical rooms.
5. Roof drain piping is insulated with horse hair and an **asbestos-containing asphaltic black paper wrap or air-cell type insulation**. Piping was observed to be largely uninsulated in the penthouse mechanical room and observed with ACM insulation in room B10, some interior enclosed pipe chases and the 300 (hallway) ceiling space.

Metal ductwork is insulated with canvas/foil wrapped fiberglass throughout Johnson Hall. Several areas of fiberglass insulation were observed with an **asbestos-containing mud on insulation seams**. This ACM mud is applied throughout the mechanical penthouse supply fan duct system. Duct work in room 260 also has a **patched area of ACM mud**, limited to 10 linear feet. In addition, an **asbestos-containing black duct mastic** is applied to seams inconsistently throughout the entire system. Black duct mastic was observed on supply fan duct work in the mechanical penthouse, where **asbestos-containing insulation anchor pin mastic** is also located, and on smaller distribution ducts in areas of the 3rd floor corridor ceiling space where fiberglass insulation had been removed. **Asbestos-containing red duct mastic/caulk** was also noted on ductwork and door frames in both air shafts.

Surfacing materials

An **asbestos-containing white paint or skim coat** is applied to most concrete and concrete masonry structural walls, including stairwells and interior laboratory walls throughout the building (see figures). The **ACM skim coat** is also applied to ceiling cracks as a patching compound in central laboratories located on ground through third floors. ACM paint/skim coat was *not* observed on plaster and gypsum wallboard wall systems.

An ACM popcorn ceiling texture covers the annex auditorium ceiling. The popcorn ceiling texture (approximately 1/2-inch thick) covers a composite/wood base.

3.3 Lead Paints and Coatings

Appendix D details lead paint/coatings sample numbers, descriptions, sample locations, and XRF results collected during the survey. With few exceptions noted in Appendix D, all painted surfaces contain detectable quantities of lead in Johnson Hall.

4 CONCLUSIONS

A copy of this report must be provided to any entity bidding on work in Johnson Hall. A copy of this report must also be on site during any demolition, renovation and/or construction activities at the site.

4.1 Asbestos-containing Materials

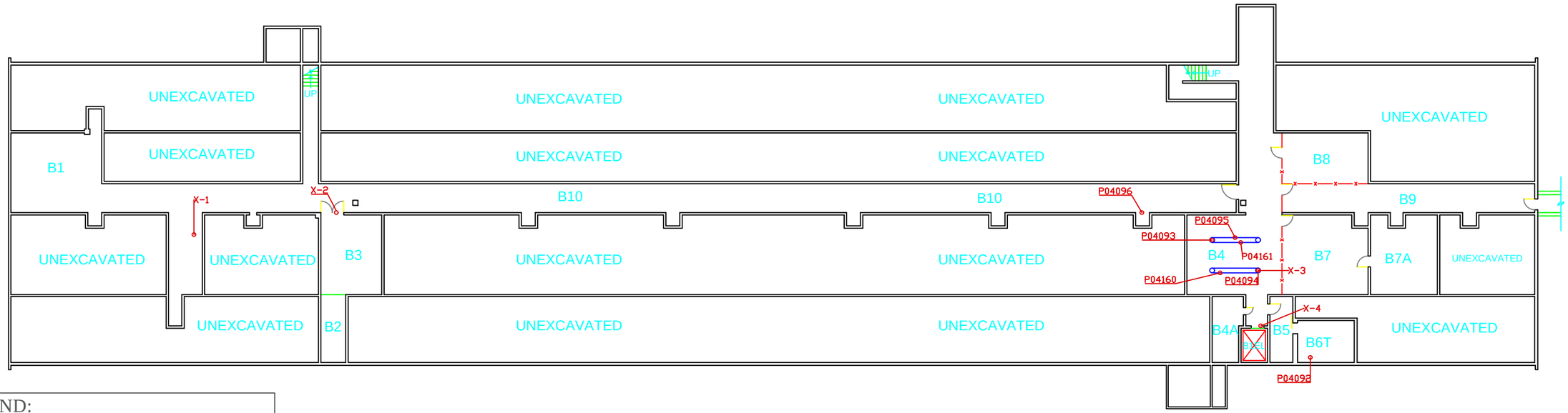
Regulated ACMs are identified in Table 1. Construction, renovation and maintenance activities involving the disturbance or removal of ACM must be conducted in accordance with WAC 296-62-077. Asbestos abatement must be performed by a Washington State licensed asbestos abatement contractor.

Contractors should use caution during construction even after asbestos abatement activities, as concealed ACM that has not previously been evaluated for asbestos may be encountered. Inaccessible concealed spaces (e.g., wall and ceiling spaces enclosed by wallboard, internal components of energized systems etc. that have not been surveyed for ACM, and should be presumed to contain asbestos until destructive sampling is performed in those areas.

4.2 Lead-containing Paints/Coatings

Materials that have been shown to contain detectable levels of lead are regulated due to the potential for occupational exposure to lead if these materials are disturbed. Projects that may disturb lead require employers to evaluate worker/project personnel exposure to lead and prevent exposure above the permissible exposure limit (PEL).

FIGURES



LEGEND:

P04### = Asbestos Sample Location

X-## = Lead Sample Location

BASEMENT FLOOR PLAN

GROSS SQUARE FEET
8,936
BLDG. TOTAL: 195,394 S.F.

SCALE: 1" =30'
0 5 10 20 30

JOHNSON HALL
Figure 1 Asbestos/Lead Sample Locations

NORTH

WASHINGTON STATE UNIVERSITY

BLDG. NO.
76
SHEET NO.
R-1

FILE: S:\Shared\Capital Services\Service Center\Asbestos Program\Asbestos Database\Full Building Surveys\EH&S MCS GFS Projects\9356-2017 Johnson Hall\Figures\0076_R01 Samp Loc.dwg
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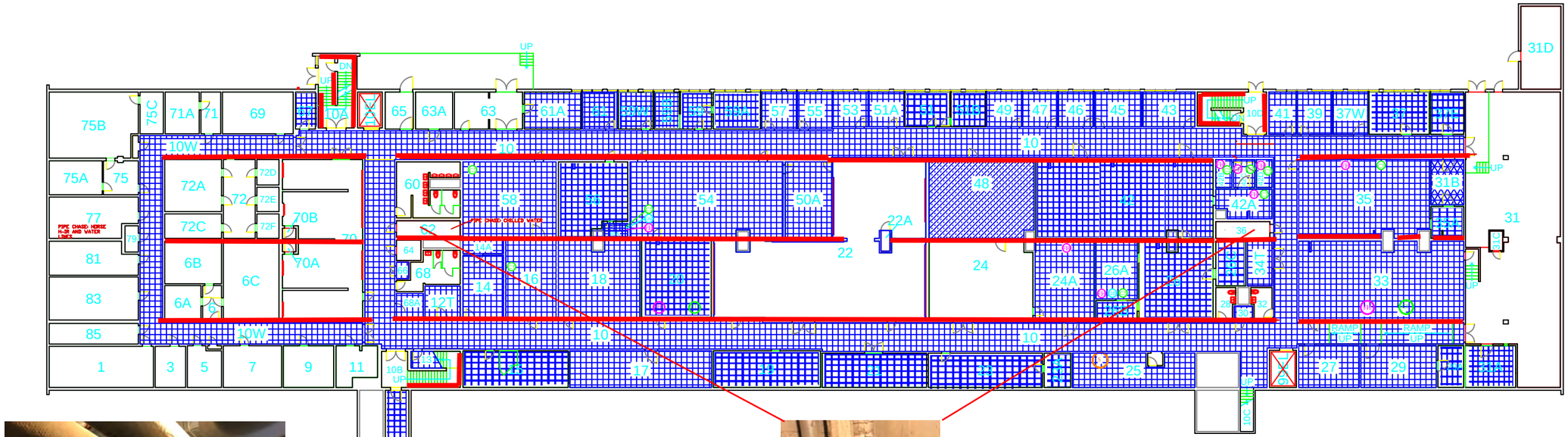
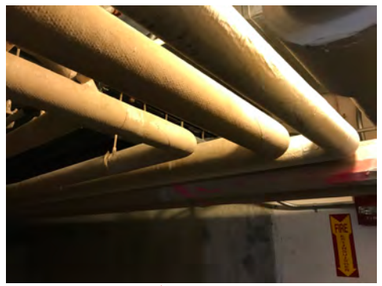




ACM pipe insulation located in air shafts

ACM pipe insulation and tank insulation located in C3M

ACM window glazing throughout annex

ANNEX

Ground Floor Plan

ACMs Not Shown:

1. Joint compound on gypsum wallboard systems located in offices and corridor ceilings
2. Pipe insulation located in air shafts, enclosed pipe chases and ceiling spaces.
3. Window glazing on windows throughout annex and stairwells of main building.
4. Duct mastic applied to metal supply air ductwork.
5. Black mastic applied to foam insulation board associated with walk-in cooler/freezers in rooms 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85
6. Fire doors (assumed)

ACM Legend:

- = 9" VAT
- = 12" VCT
- (S) = Sink
- = Wall skim coat
- (CT) = Counter Top
- (DR) = Drying Rack
- (FH) = Fume Hood

GROSS SQUARE FEET
49,251
BLDG. TOTAL: 195,394 S.F.

Johnson Hall
Figure 2 ACM Locations

NORTH

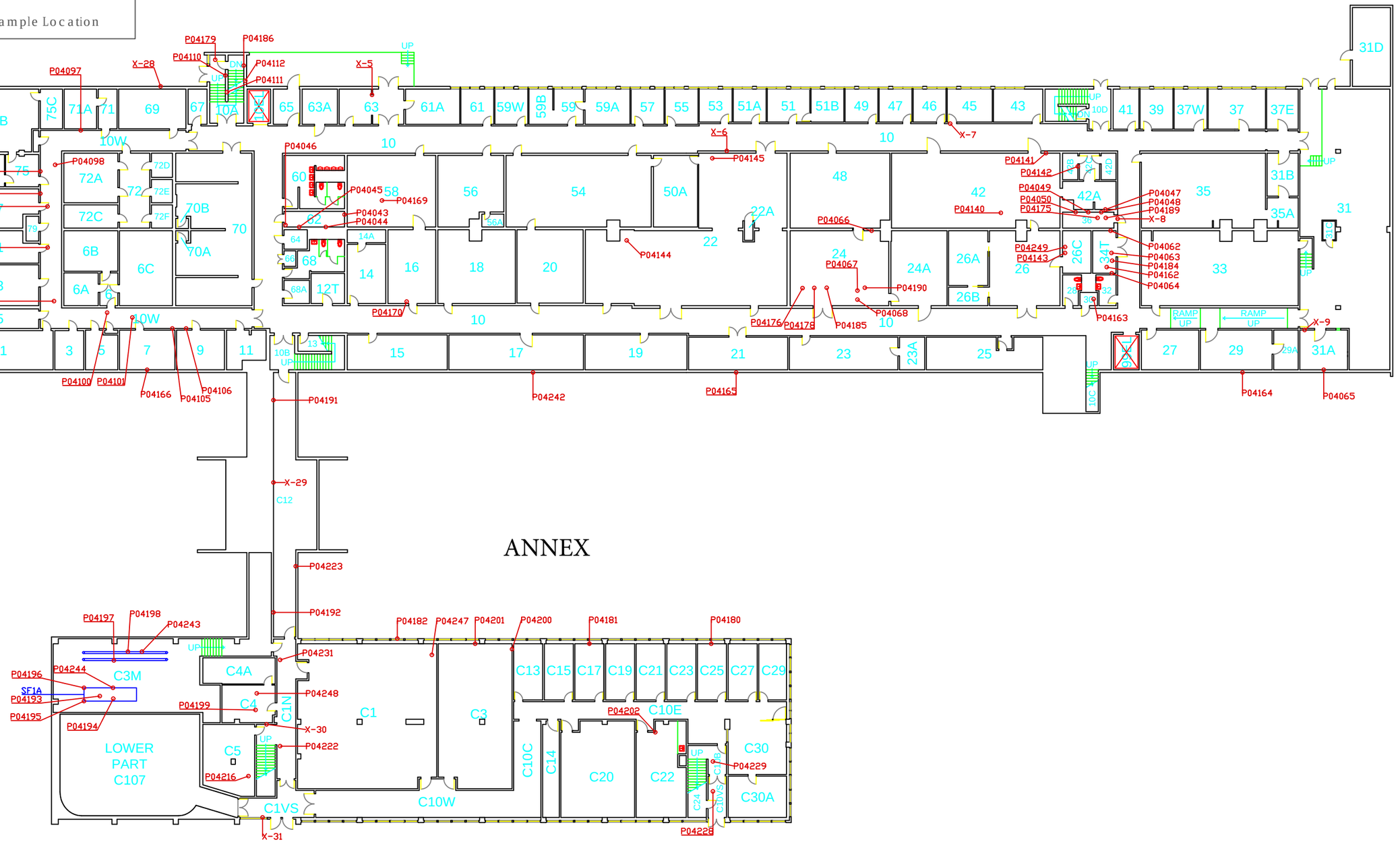
WASHINGTON STATE UNIVERSITY

BLDG. NO. 76
SHEET NO. R-2

LEGEND:

P04### = Asbestos Sample Location

X-## = Lead Sample Location



GROUND FLOOR PLAN

GROSS SQUARE FEET

49,251

BLDG. TOTAL: 195,394 S.F.

SCALE: 1" =30'

0 5 10 20 30

JOHNSON HALL

Figure 3 Asbestos/Lead Sample Locations

NORTH

WASHINGTON STATE UNIVERSITY

BLDG. NO. 76

SHEET NO. R-2

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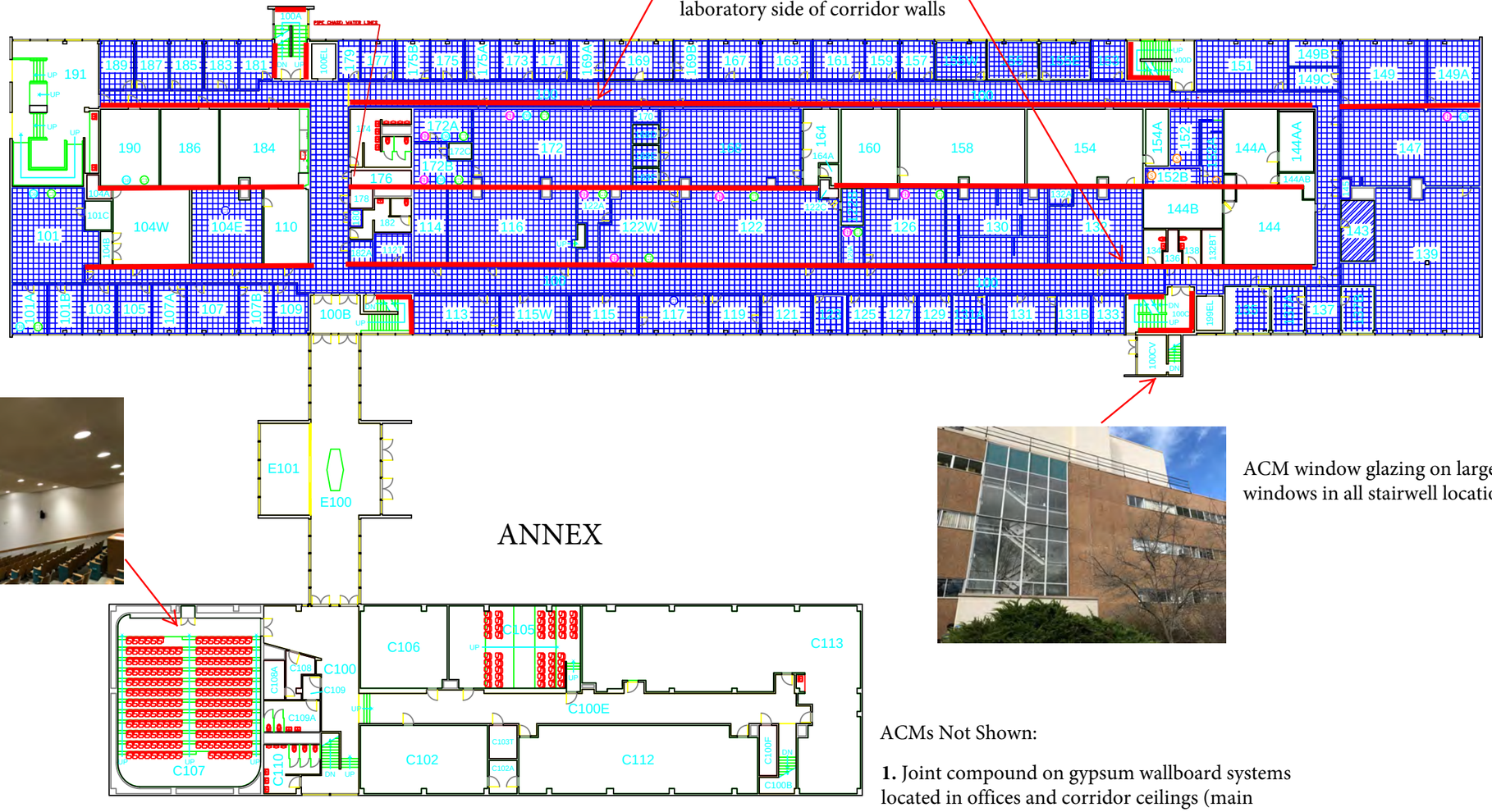
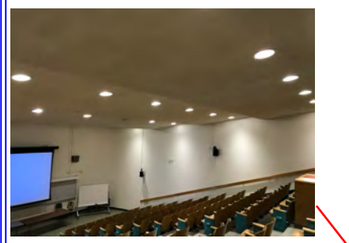
ACM skim coat/paint applied to structural concrete located on laboratory side of corridor walls





ACM window glazing on large framed windows in all stairwell locations

ACM LEGEND:

- = 9" VAT
- = Sheet Vinyl
- S = Sink
- C = 9" VAT Under Carpet
- CT = Counter Top
- DR = Drying Rack
- FH = Fume Hood
- Wall skim coat

ACMs Not Shown:

1. Joint compound on gypsum wallboard systems located in offices and corridor ceilings (main building)
2. Pipe insulation located in air shafts, enclosed pipe chases and ceiling spaces.
3. Window glazing on windows throughout annex and stairwells of main building.
4. Duct mastic applied to metal supply air ductwork.
5. Black mastic applied to foam insulation board associated with walk-in cooler/freezers in rooms 101C, 168D and 168E
6. Fire doors (assumed)

First Floor Plan

GROSS SQUARE FEET
49,687
BLDG. TOTAL: 195,394 S.F.

Johnson Hall
Figure 4 ACM Locations

NORTH

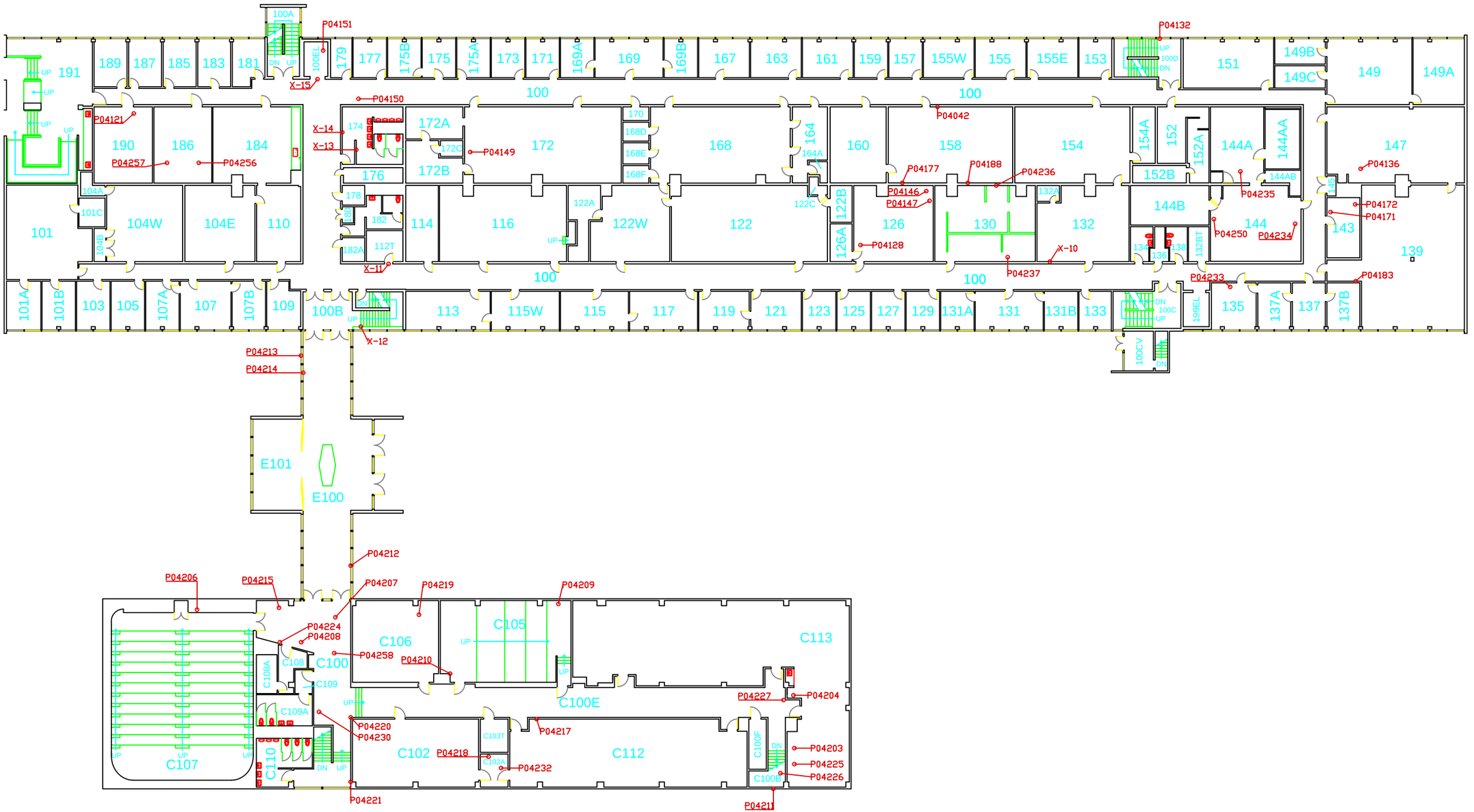
WASHINGTON STATE UNIVERSITY

BLDG. NO. 76
SHEET NO. R-3

LEGEND:

P04000 = Asbestos Sample Location

X-00 = Lead Sample Location



FIRST FLOOR PLAN

GROSS SQUARE FEET	SCALE: 1" =30'	JOHNSON HALL	NORTH	WASHINGTON STATE UNIVERSITY	BLDG. NO.
49,687	0 5 10 20 30	Figure 5 Asbestos/Lead Sample Locations			76
BLDG. TOTAL: 195,394 S.F.					SHEET NO. R-3

FILE: S:\Shared\Capital Services\Service Center\Asbestos Program\Asbestos Database\Full Building Surveys\EH&S MCS GFS Projects\9356-2017 Johnson Hall\Figures\0076_R03 Sample Locations.dwg
PLOT DATE: June 05, 14 - 2:19 PM ORIGINAL PAPER SIZE: 11" x 17"

ACM mud on insulation seams in room 260

ACM skim coat/paint applied to structural concrete located on laboratory side of corridor walls.

ACM LEGEND:

- = 9" VAT
- = 12" VCT
- S = Sink
- CT = Counter Top
- DR = Drying Rack
- FH = Fume Hood
- Wall skim coat

ACMs Not Shown:

1. Joint compound on gypsum wallboard systems located in offices and corridor ceilings
2. Pipe insulation located in air shafts, enclosed pipe chasess, ceiling spaces and mechanical spaces.
3. Window glazing on windows throughout annex and stairwells of main building.
4. Duct mastic applied to metal supply air ductwork.
5. Fire doors (assumed)

Second Floor Plan

GROSS SQUARE FEET
37,371
BLDG. TOTAL: 195,371 S.F.

Johnson Hall
Figure 6 - ACM Locations

NORTH

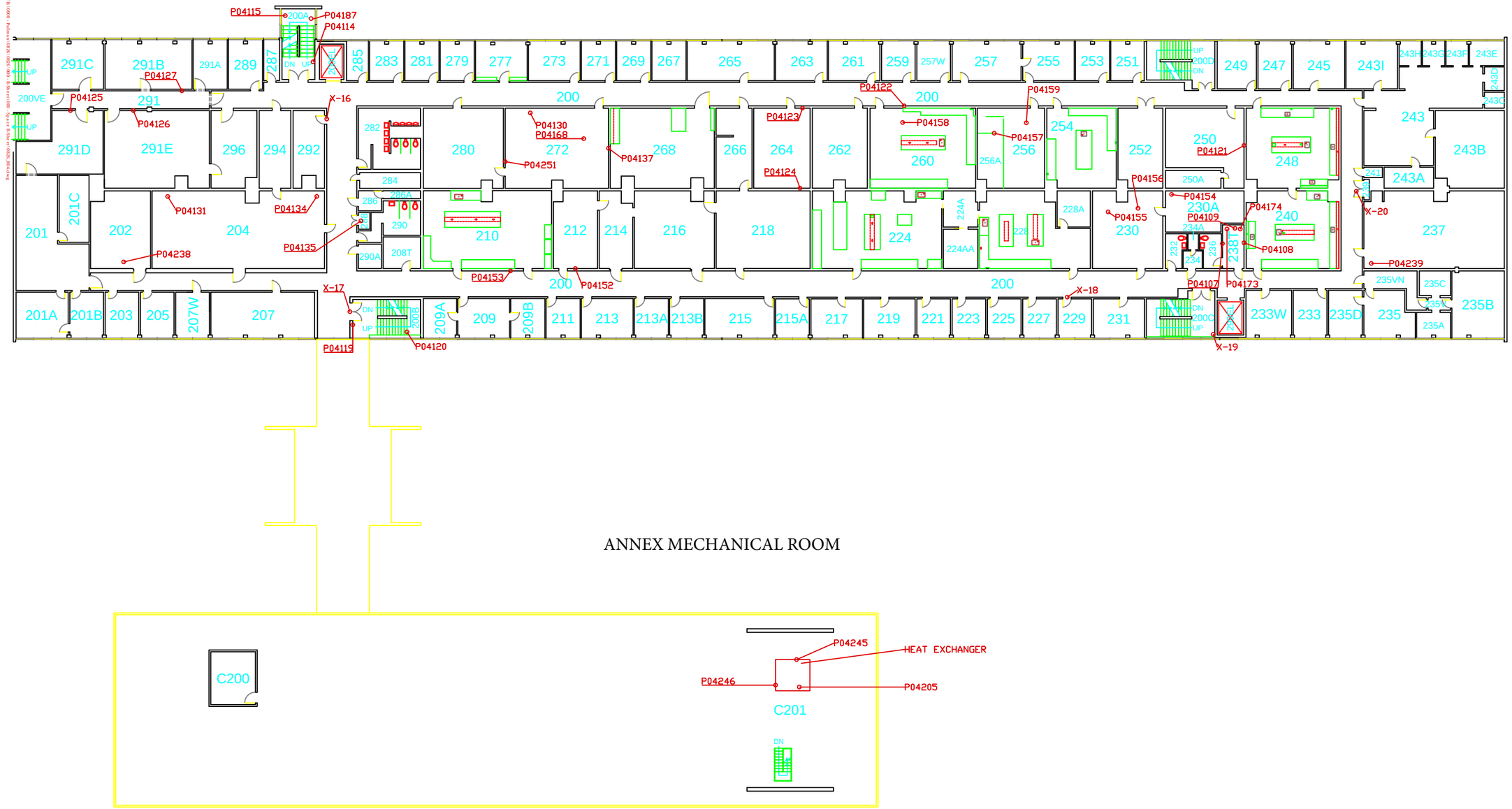
WASHINGTON STATE UNIVERSITY

BLDG. NO. 76
SHEET NO. R-4

LEGEND:

P04### = Asbestos Sample Location

X-## = Lead Sample Location



SECOND FLOOR PLAN

GROSS SQUARE FEET

37,371

BLDG. TOTAL: 195,394 S.F.

SCALE: 1" =30'

0 5 10 20 30

JOHNSON HALL

Figure 7 Asbestos/Lead Sample Locations

NORTH

WASHINGTON STATE UNIVERSITY

BLDG. NO. 76

SHEET NO. R-4

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ACM LEGEND:

= 9" VAT

= 12" VCT

S = Sink

CT = Counter Top

DR = Drying Rack

FH = Fume Hood

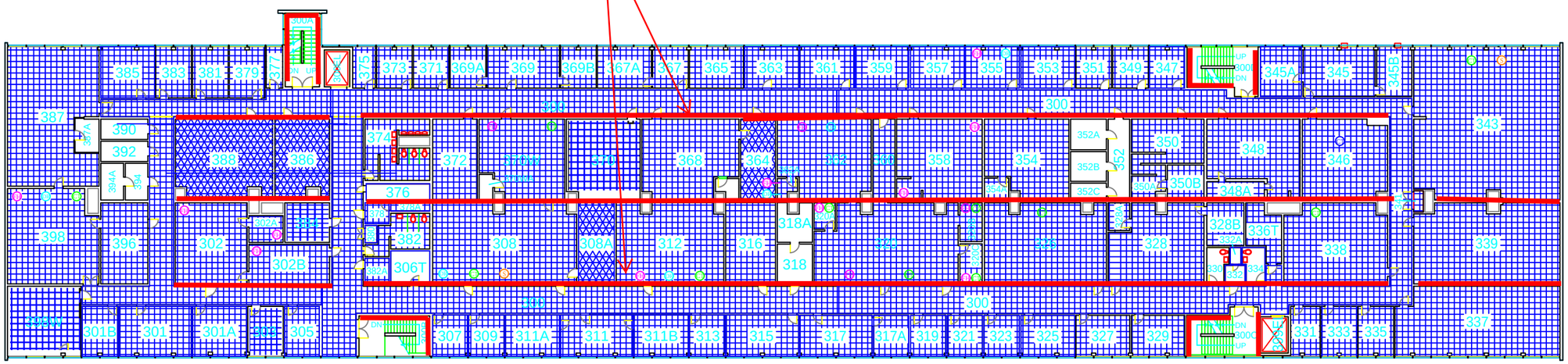
C = 9" VAT Under Carpet

Wall skim coat/paint

ACM skim coat/paint applied to structural concrete walls located on laboratory side of corridor walls

ACMs Not Shown:

1. Joint compound on gypsum wallboard systems located in offices and corridor ceilings
2. Pipe insulation located in air shafts, enclosed pipe chasess, ceiling spaces and mechanical spaces.
3. Window glazing on windows throughout annex and stairwells of main building.
4. Duct mastic applied to metal supply air ductwork.
5. Fire doors (assumed)



Third Floor Plan

GROSS SQUARE FEET

36,079

BLDG. TOTAL: 195,394 S.F.

Johnson Hall
Figure 8 ACM Locations

NORTH

WASHINGTON STATE UNIVERSITY

BLDG. NO. 76

SHEET NO. R-5

LEGEND:

P04### = Asbestos Sample Location

X-## = Lead Sample Loaction

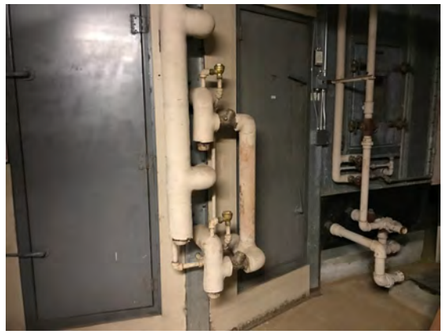
THIRD FLOOR PLAN

GROSS SQUARE FEET		SCALE: 1" =30'	JOHNSON HALL	NORTH	WASHINGTON STATE UNIVERSITY	BLDG. NO.
36,079		0 5 10 20 30	Figure 9 Asbestos/Lead Sample Loactions			76
BLDG. TOTAL: 195,394 S.F.						SHEET NO. R-5

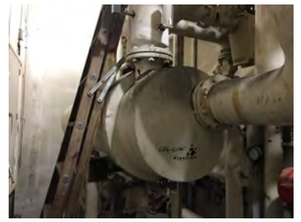
FILE: S:\Shared\Capital Services\Service Center\Asbestos Program\Asbestos Database\Full Building Surveys\EH&S MCS GFS Projects\9356-2017 Johnson Hall\Figures\0076_R05 Samp Loc.dwg
PLOT DATE: June 05, 14 - 2:19 PM ORIGINAL PAPER SIZE: 11" x 17"

Mastic associated with anchor pins holding fiberglass insulation panels on supply fan ductwork contains asbestos

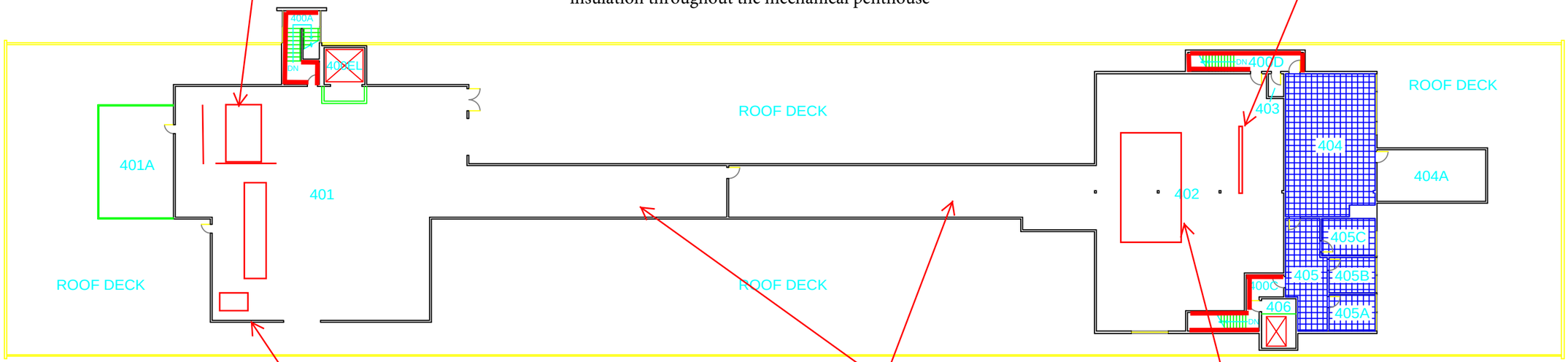
SF-2



Steam piping is insulated with fiberglass and ACM mudded fittings or ACM hard magnesia-type insulation throughout the mechanical penthouse



Water Expansion Tank with ACM insulation



Residual ACM roofing tars and lightweight concrete may be present around roof vent and fume hood exhaust penetrations

B.A.C cooling tower with ACM gasket putty. ACM black duct mastic above (not shown)

Chilled water piping insulated with cork and ACM paper wrap

Fiberglass insulation on supply fan ductwork has ACM mud applied to corners and seams

ACM LEGEND:

= 9" VAT

Skim coat

Mechanical Penthouse Plan

GROSS SQUARE FEET
14,070
BLDG. TOTAL: 195,394 S.F.

SCALE: 1" =30'
0 5 10 20 30

Johnson Hall
Figure 10 ACM Locations

NORTH

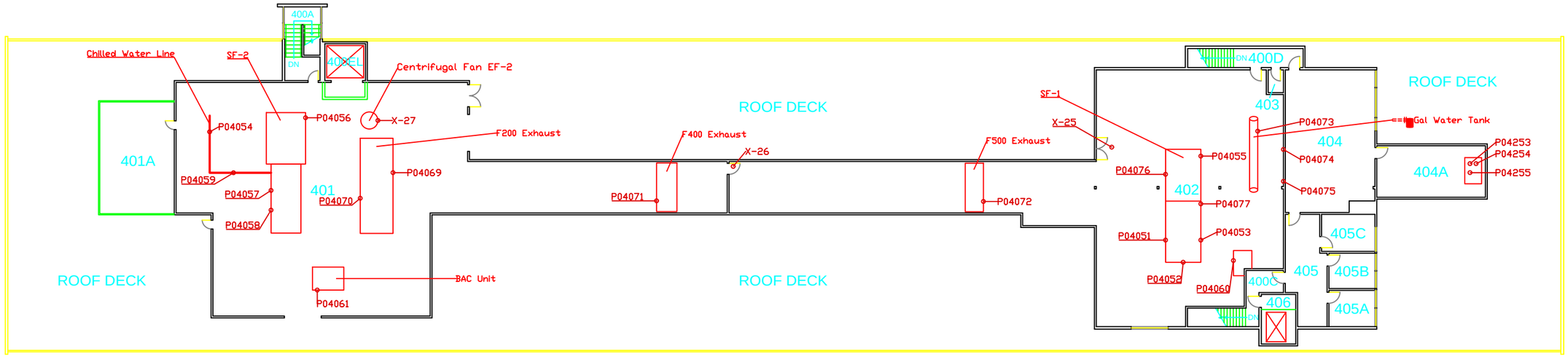
WASHINGTON STATE UNIVERSITY

BLDG. NO.
76
SHEET NO.
R-6

LEGEND:

P04### = Asbestos Sample Location

X-## = Lead Sample Location



MECHANICAL PENTHOUSE FLOOR PLAN

GROSS SQUARE FEET	REVISION DATES	
14,070	07-12-1968	04-10-1996
	06-03-1993	04-11-2000
	02-21-1996	09-04-2002
BLDG. TOTAL: 195,394 S.F.	WSU FILE NO.	0076_R06

SCALE: 1" =30'
0 5 10 20 30

JOHNSON HALL
Figure 11 Asbestos/Lead Sample Locations

NORTH

WASHINGTON STATE UNIVERSITY

BLDG. NO. 76

SHEET NO. R-6

FILE: S:\Shared\Capital Services\Service Center\Asbestos Program\Asbestos Database\Full Building Surveys\EH&S MCS GFS Projects\9356-2017 Johnson Hall\Figures\0076_R06 Samp 11.dwg
PLOT DATE: June 05, 14 - 2:19 PM ORIGINAL PAPER SIZE: 11" x 17"

APPENDIX A
Photographic Log

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No.
1

Location:

C3M

Description:

Pipe insulation: **Asbestos-containing** mudded/plaster fittings with non-asbestos yellow fiberglass/canvas/foil wrap on straight runs

Photo No.
2

Location:

B4

Description:

Pipe insulation: 8-inch black horse hair insulation with **black paper and asphaltic coating**

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No.
3

Location:

Mechanical penthouse (SF-2), ductwork

Description:

Fiberglass duct insulation has asbestos-containing mud/patch at corners and seam locations

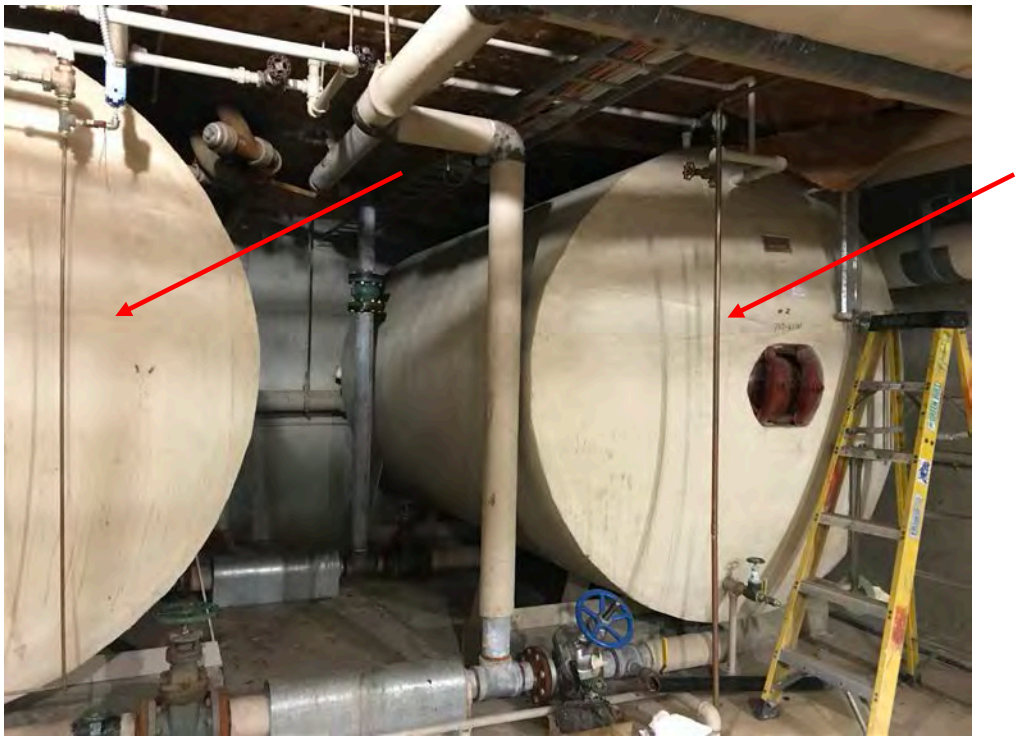
Photo No.
4

Location:

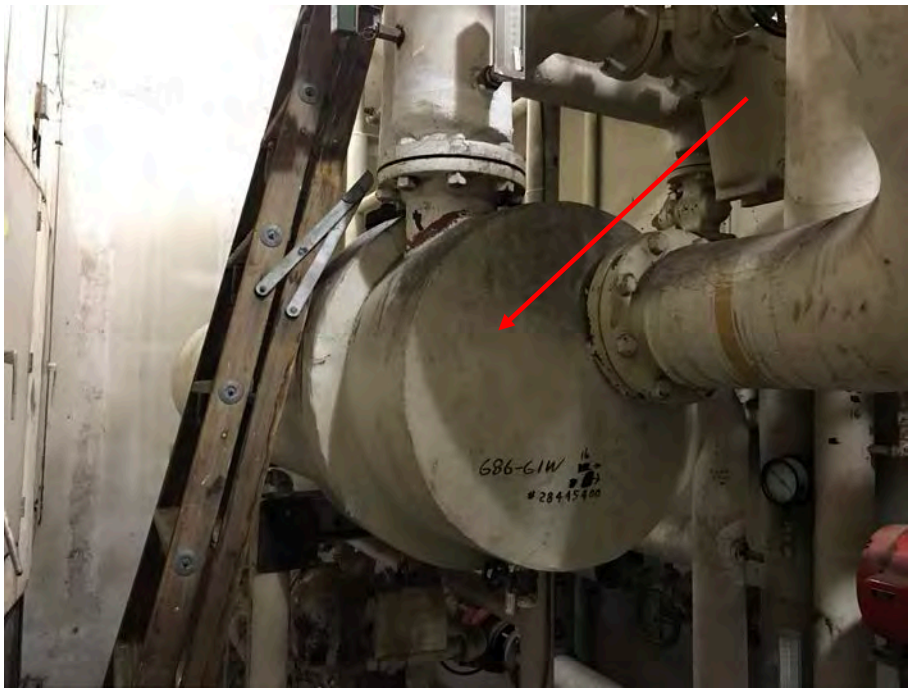
B4

Description:

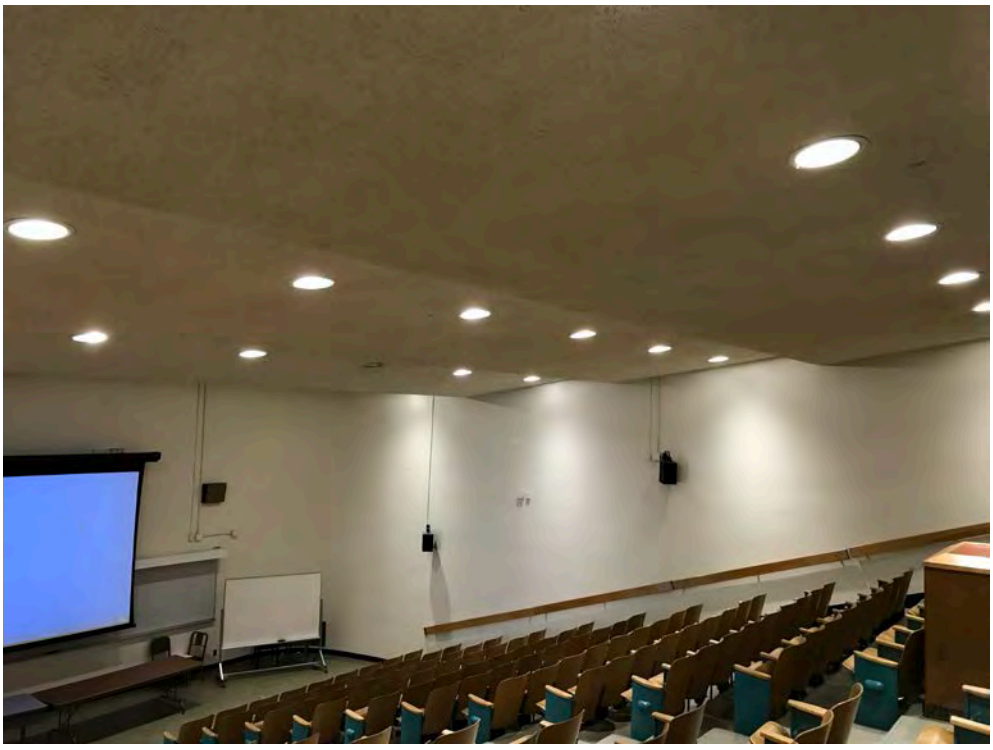
Asbestos-containing **hard white magnesia-type insulation** is located on tank ends. Non-asbestos cork and canvas wrap are installed on the sidewalls.



Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **5**	
Location: Room 72 ceiling space	
Description: Pipe insulation: Cork insulation with **ACM paper/foil wrap and mudded fittings.** Other areas have the pipe insulation wrapped in painted canvas on top of the ACM components.	
Photo No. **6**	
Location: Mechanical penthouse:	
Description: Expansion tank with asbestos-containing **hard white magnesia-type insulation**	

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **7** **Location:** 126 **Description:** A thin white asbestos-containing skim coat/paint is applied concrete structural walls, concrete masonry units, and ceiling cracks	
Photo No. **8** **Location:** Annex: C107 (auditorium) **Description:** Popcorn textured ceiling	

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **9**

Location:

Electrical closet

Description:

Asbestos-containing joint compound is applied to seams and nail head locations. Gypsum wallboard systems are located on partition walls in offices and corridor ceilings.

Photo No. **10**

Location:

Dominant floor tile throughout building

Description:

9-inch gray-green vinyl asbestos tile and associated black mastic

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No.
11

Location:

Mechanical penthouse SF2 ductwork

Description:

Asbestos-containing gray anchor pin mastic associated with fiberglass insulation panels.

Photo No.
12

Location:

All walk-in cooler/freezers

Description:

Black mastic associated with blue foam cooler insulation

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No.
13

Location:

Stairwell 100 window

Description:

Gray window glazing

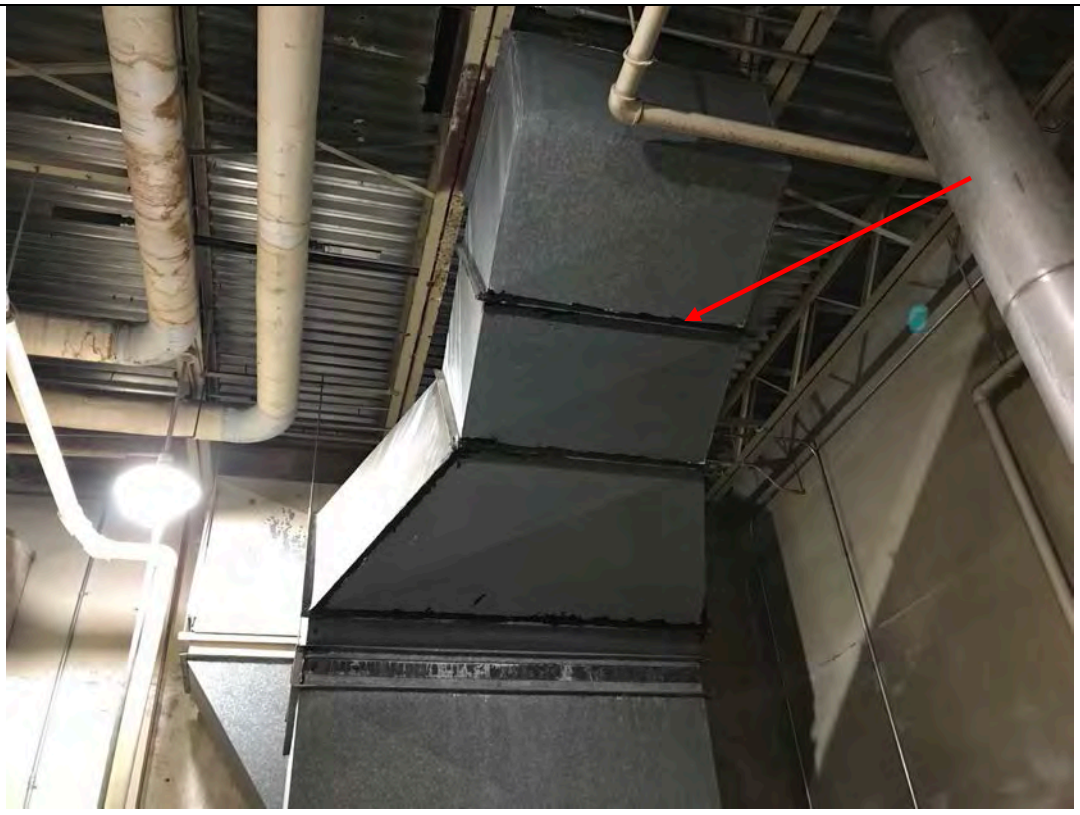
Photo No.
14

Location:

Mechanical penthouse

Description:

Black duct mastic applied to seams



Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No.
15

Location:

Mechanical penthouse: SF-1

Description: Black duct mastic applied near rubber flex connector

Photo No.
16

Location:

Uninsulated metal ductwork and door frames in duct chases: 36 and 6

Description:

Red mastic/caulk

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **17**	
Location: Mechanical penthouse: BAC cooling tower	
Description: Asbestos-containing gray gasket/seam caulk	
Photo No. **18**	
Location: Typical laboratory sink unit	
Description: Metal sink units with asbestos-containing undercoatings (assorted colors)	

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **19**

Location:

Annex: Two windows east of C1VS (exterior)

Description:

Gray asbestos-containing window glazing putty

Photo No. **20**

Location:

Typical laboratories and classrooms

Description:

Black asbestos-containing laboratory countertops

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **21**

Location:

Typical laboratory fume hood

Description:

Laboratory hood with **cement board lining** (assumed to contain asbestos)

Photo No. **22**

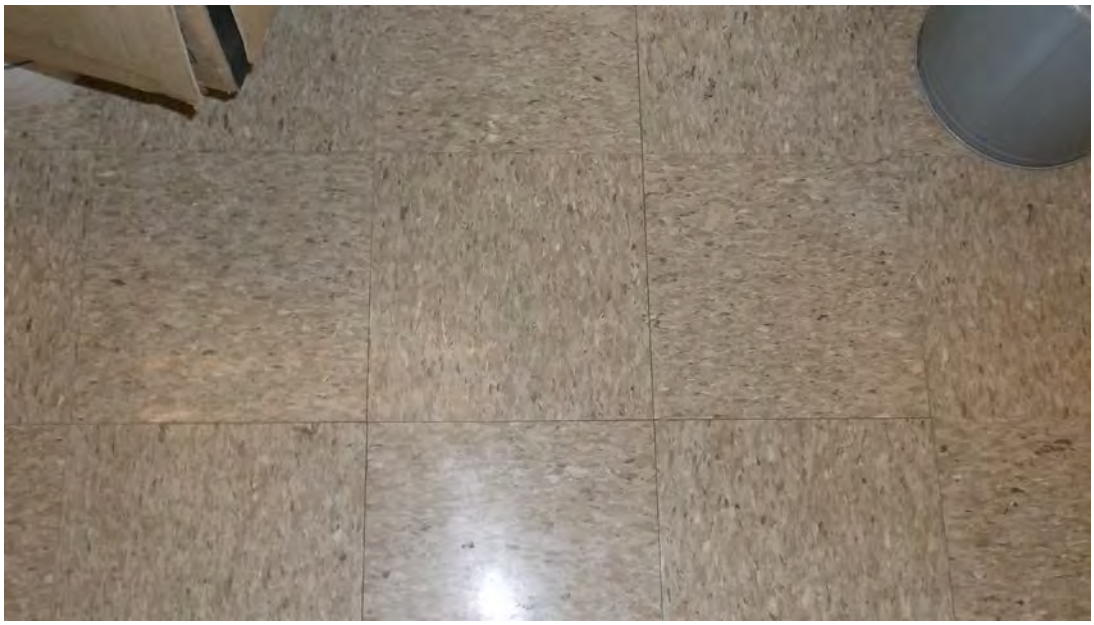
Location:

Rooms 202, 204, 272

Description:

12-inch white with brown fleck vinyl floor tile and associated asbestos-containing **black mastic**

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **23**	
Location: 230A and 308A	
Description: 12-inch tan with brown and white streak vinyl floor tile and associated **asbestos-containing black mastic**	
Photo No. **24**	
Location: Annex: C5 (storage)	
Description: 12-inch tan with burgundy streak vinyl floor tile and associated **asbestos-containing black mastic**	

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No.
25

Location:

Rooms 224, 237, 268, 291D, 364, 386, 388

Description:

12-inch white with gray fleck vinyl floor tile and associated asbestos-containing **black mastic**

Photo No.
26

Location:

Annex: C10B, C10VS

Description:

Asbestos-containing 2 ft. by 4 ft. etch-pinhole suspended ceiling tile (original tile)

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No.
27

Location:

Room 143

Description:

Pink and brown fleck sheet vinyl tile with yellow mastic and **residual asbestos-containing black mastic**

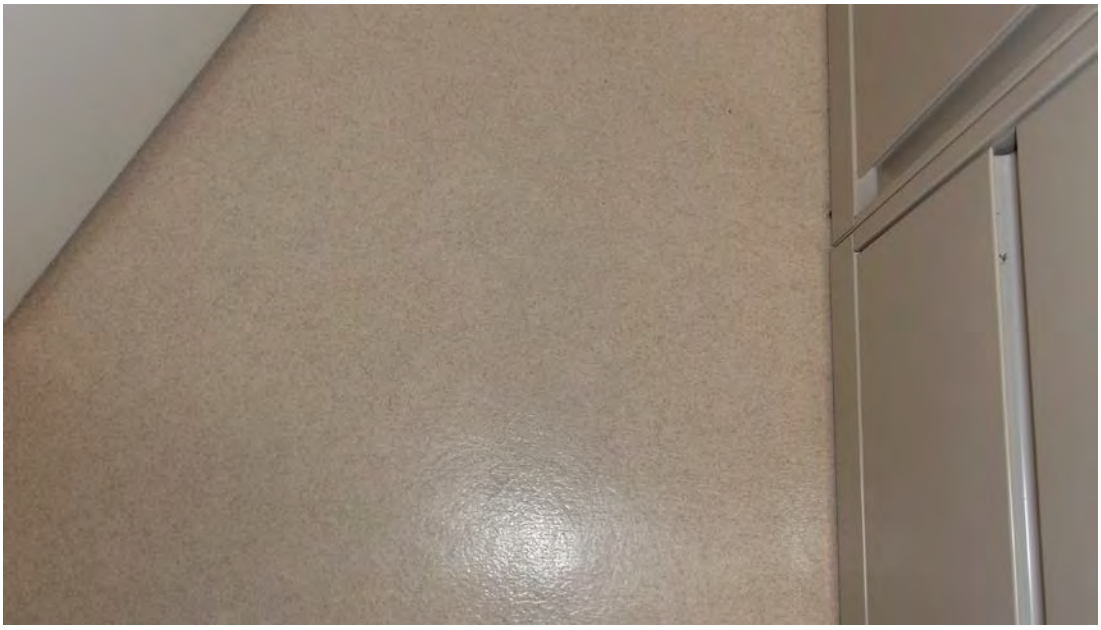


Photo No.
28

Location:

404A: Mechanical Room

Description:

Asbestos-containing roofing materials (lightweight concrete and roofing tar) as seen near roof vent

Washington State University Environmental Health and Safety	PHOTOGRAPHIC LOG

Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **29**

Location:

Annex mechanical room C3M: SF1A

Description:

Asbestos-containing yellow duct mastic

Photo No. **30**

Location:

Typical laboratory

Description:

Black asbestos-containing laboratory glassware drying racks (mounted on walls)

Washington State University Environmental Health and Safety		PHOTOGRAPHIC LOG
Good Faith Survey	Johnson Hall	**Date:** May 12, 2017

Photo No. **31**	
Location: Room 262	
Description: Cement asbestos board mounted on wall	
Photo No. **32**	
Location: Typical - Interior stairwells and entrance doors (ground level) labeled with fire rating	
Description: Fire rated doors are assumed to contain asbestos	

APPENDIX B

Table Summary of Asbestos Sampling and Analytical Results

TABLE SUMMARY OF ASBESTOS SAMPLING AND ANALYTICAL RESULTS
JOHNSON HALL

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04042	Johnson Hall	0076	158	Wallboard system	Layer 1: 4-inch black cove base Layer 2: White gypsum wallboard and paper	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Partition walls and corridor ceilings throughout
P04043	Johnson Hall	0076	62 (duct chase)	Concrete masonry	Layer 1: Red CMU Layer 2: Gray mortar	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Air shafts and portions of structural walls throughout building
P04044	**Johnson Hall**	**0076**	**62 (duct chase)**	**Pipe Insulation**	**Layer 1: White paper and foil** Layer 2: Cork pipe insulation	**TSI**	**750**	**LF**	**Chilled water lines**	**Layer 1: 54% CHR** Layer 2: ND	**Yes**	**Chilled water piping in 62 (vertical length of chase), penthouse, near cooler locations and annex mechanical room**
P04045	**Johnson Hall**	**0076**	**62 (duct chase)**	**Pipe Insulation**	Layer 1: Yellow mastic Layer 2: **White paper, foil, and black mastic**	**TSI**	**750**	**LF**	**Chilled water lines**	Layer 1: ND L**ayer 2: 56% CHR**	**Yes**	**Chilled water piping in 62 (vertical length of chase), penthouse, near cooler locations and annex mechanical room**
P04046	**Johnson Hall**	**0076**	**62 (duct chase)**	**Duct mastic**	**Red duct mastic**	**Misc.**	**100**	**SF**	**Uninsulated metal bands**	**3% CHR**	**Yes**	**Vertical air shafts throughout**
P04047	**Johnson Hall**	**0076**	**36 (duct chase)**	**Duct mastic**	**Red duct mastic and caulk**	**Misc.**	**100**	**SF**	**Uninsulated metal bands**	**2% CHR**	**Yes**	**Vertical air shafts throughout**
P04048	Johnson Hall	0076	36 (duct chase)	Pipe Insulation	Layer 1: Fiberglass pipe insulation straight run Layer 2: White foil asphalt paper wrap	TSI	-	LF	Hot water pipe	Layer 1: ND Layer 2: ND	No	Heating, laboratory water and domestic water distribution piping throughout building (3-inch to 6-inch diameter)
P04049	Johnson Hall	0076	36 (duct chase)	Pipe Insulation	Layer 1:Yellow fiberglass pipe insulation straight run Layer 2: White canvas wrap with mastic	TSI	-	LF	Hot water pipe	Layer 1: ND Layer 2: ND	No	Heating, laboratory water and domestic water distribution piping throughout building (3-inch to 6-inch diameter)
P04050	Johnson Hall	0076	36 (duct chase)	Pipe Insulation	Layer 1: Black foam pipe insulation Layer 2: White paper Layer 3: White canvas wrap Layer 4: Black mastic	TSI	750	LF	**-**	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	12 to 14-inch chilled water supply piping in basement and mechanical penthouse
P04051	Johnson Hall	0076	Penthouse SF-1	Duct insulation	Layer 1: White fiberglass duct insulation Layer 2: White-gray mudded seams Layer 3: White foam	TSI	-	LF	**Sample P04058 contains asbestos**	Layer 1: ND Layer 2: ND Layer 3: ND	**Yes**	Supply air duct insulation in mechanical penthouse 401 and 402
P04052	Johnson Hall	0076	Penthouse SF-1	Duct insulation	Layer 1: Fiberglass duct insulation and mastic Layer 2: White-gray mudded seams	TSI	-	LF	**Sample P04058 contains asbestos**	Layer 1: ND Layer 2: ND	**Yes**	Supply air duct insulation in mechanical penthouse 401 and 402
P04053	Johnson Hall	0076	Penthouse SF-1	Duct Insulation	Layer 1: Fiberglass duct insulation and mastic Layer 2: White-gray mudded seams	TSI	-	LF	**Sample P04058 contains asbestos**	Layer 1: ND Layer 2: ND	**Yes**	Supply air duct insulation in mechanical penthouse 401 and 402

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04054	Johnson Hall	0076	Penthouse	Pipe Insulation	Layer 1: White canvas wrap Layer 2: Black foam pipe insulation Layer 3: Black mastic	TSI	750	LF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	12 to 14-inch chilled water supply piping in basement and mechanical penthouse
P04055	Johnson Hall	0076	Penthouse SF-1	Anchor mastic	Layer 1: Gray insulation anchor mastic Layer 2: Orange fiberglass duct insulation	TSI	-	LF	-	Layer 1: ND Layer 2: ND	No	Penthouse supply fan ductwork
P04056	**Johnson Hall**	**0076**	**Penthouse SF-2**	**Anchor mastic**	**Gray insulation anchor mastic**	**TSI**	**3,000**	**SF**	**-**	**3% CHR**	**Yes**	**Penthouse supply fan ductwork**
P04057	Johnson Hall	0076	Penthouse SF-2	Duct Insulation	Layer 1: Fiberglass insulation Layer 2: Mudded seams Layer 3: Yellow insulation Layer 4: White paper	TSI	1000/10	LF	**Sample P04058 contains asbestos**	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	**Yes**	Supply air duct insulation in mechanical penthouse 401 and 402
P04058	**Johnson Hall**	**0076**	**Penthouse SF-2**	**Duct Insulation**	Layer 1: White canvas wrap Layer 2: Yellow fiberglass insulation **Layer 3: Gray fibrous material**	**TSI**	**3,000**	**SF**	**Mudded seams**	Layer 1: ND Layer 2: ND **Layer 3: 35% CHR/2% AMO**	**Yes**	**Supply air duct insulation in mechanical penthouse 401 and 402**
P04059	**Johnson Hall**	**0076**	**Penthouse**	**Pipe insulation**	Layer 1: Cork pipe insulation **Layer 2: White paper/foil wrap**	**TSI**	**750**	**LF**	**Chilled water pipe**	Layer 1: ND **Layer 2: 54% CHR**	**Yes**	**Chilled water piping in 62 (vertical length of chase), penthouse, near cooler locations and annex mechanical room**
P04060	**Johnson Hall**	**0076**	**Penthouse**	**Duct mastic**	**Layer 1: Black duct mastic** Layer 2: Yellow insulation	**Misc.**	**300**	**SF**	**-**	**Layer 1: 2% CHR** Layer 2: ND	**Yes**	**Mechanical penthouse – applied to ductwork seams throughout**
P04061	**Johnson Hall**	**0076**	**Penthouse**	**Caulk**	**Gray gasket caulk**	**Misc.**	**50**	**LF**	**Chilled water unit (B.A.C.)**	**3% CHR**	**Yes**	**Mechanical penthouse – chilled water tower**
P04062	Johnson Hall	0076	34 T	Ceiling tile	2 ft. by 4 ft. etch-pinhole ceiling tile	Misc.	-	SF	-	ND	No	Classrooms and offices throughout the building
P04063	**Johnson Hall**	**0076**	**34 T**	**Floor tile**	**Layer 1: 9-inch gray-green vinyl floor tile** **Layer 2: Black mastic**	**Misc.**	**110,000**	**SF**	**-**	**Layer 1: 3% CHR** **Layer 2: 4% CHR**	**Yes**	**Dominant floor tile throughout building**
P04064	Johnson Hall	0076	34 T	Ceiling tile	12-inch white drill hole ceiling tile	Misc.	-	SF	-	ND	No	Dominant ceiling tile in hallways
P04065	**Johnson Hall**	**0076**	**31 A**	**Sink undercoat**	**Black sink under coat**	**Misc.**	**15**	**EA**	**Various colored sink under coatings**	**3% CHR**	**Yes**	**Laboratory sinks (see Figures 2, 4, 6, 8)**
P04066	Johnson Hall	0076	24	Sink undercoat	Black sink under coat	Misc.	15	EA	**Sample P04065 has 3% CHR**	ND	**Yes**	Laboratory sinks (See Figures 2, 4, 6, 8)
P04067	Johnson Hall	0076	24	Carpet mastic	Green carpet mastic	Misc.	-	SF	-	ND	No	24
P04068	Johnson Hall	0076	24	Floor tile	Layer 1: Green carpet mastic Layer 2: 9-inch gray-green vinyl floor tile Layer 3: Black mastic	Misc.	110,000	SF	**Sample P04092 has 5% CHR tile and 6% CHR mastic (9-inch tile under carpet**)	Layer 1: ND Layer 2: ND Layer 3: ND	**Yes**	24

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04069	Johnson Hall	0076	Penthouse	Gasket putty	Gray-black gasket putty	Misc.	-	SF	-	ND	No	Fume hood exhaust system
P04070	Johnson Hall	0076	Penthouse	Clay pipe	Layer 1: Gray-black paint Layer 2: Red clay	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Fume hood exhaust system
P04071	Johnson Hall	0076	F403 exhaust system	Clay pipe	Layer 1: Gray-black paint Layer 2: Red clay	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Fume hood exhaust system
P04072	Johnson Hall	0076	F500 exhaust system	Clay pipe	Layer 1: Gray-black paint Layer 2: Red clay Layer 3: Black mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Fume hood exhaust system
P04073	**Johnson Hall**	**0076**	**Penthouse Water tank**	**Tank insulation**	Layer 1: White canvas wrap **Layer 2: White magnesia insulation**	**TSI**	**100**	**SF**	-	Layer 1: ND **Layer 2: 55% CHR/4% AMO**	**Yes**	**Penthouse - expansion water tank**
P04074	Johnson Hall	0076	Penthouse east wall	Cork insulation	Layer 1: Black mastic Layer 2: Cork sound proofing board	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Penthouse
P04075	Johnson Hall	0076	Penthouse east wall	Cork insulation	Layer 1: Black mastic Layer 2: Cork sound proofing board	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Penthouse
P04076	Johnson Hall	0076	Penthouse baghouse filters	Mastic	Gray duct mastic	Misc.	-	SF	-	ND	No	Penthouse
P04077	**Johnson Hall**	**0076**	**Penthouse SF-1**	**Mastic**	**Black duct mastic**	**Misc.**	**300**	**SF**	**At flex connector**	**5% CHR**	**Yes**	**Penthouse supply fan ductwork**
P04078	Johnson Hall	0076	336 T	Plaster system/cove base	Layer 1: Brown cove base mastic Layer 2: White skim coat Layer 3: White base coat Layer 4: White plaster	Surf.	35,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	Common building plaster on structural walls in corridors and some interior walls in central laboratory rooms
P04079	Johnson Hall	0076	336 T	Plaster system/cove base	Layer 1: 4-inch black vinyl cove base Layer 2: Brown cove base mastic Layer 3: White skim coat Layer 4: White plaster	Surf.	35,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	Common building plaster on structural walls in corridors and some interior walls in central laboratory rooms
P04080	Johnson Hall	0076	380	Ceiling tile	Layer 1: 12-inch white drill hole ceiling tile Layer 2: Brown cove base mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Dominant ceiling tile throughout building
P04081	**Johnson Hall**	**0076**	**300 (Hallway)**	**Pipe insulation**	Layer 1: Black paper **Layer 2: Asphaltic coating** Layer 3: Brown horse hair insulation	**TSI**	**2,000**	**LF**	**Chilled water pipe**	Layer 1: ND **Layer 2: 4% CHR** Layer 3: ND	**Yes**	**Roof downspout piping visible in B10, 300 (hallway), and pipe chases throughout building**
P04082	**Johnson Hall**	**0076**	**300 (Hallway ceiling)**	**Wallboard system**	**Layer 1: White joint compound with paper** Layer 2: White gypsum wallboard	**Misc.**	**17,000**	**SF**	**Above 12-inch ceiling tile**	**Layer 1: 3% CHR** Layer 2: ND	**Yes**	**Partition walls and corridor ceilings throughout**
P04083	**Johnson Hall**	**0076**	**300 (Hallway ceiling)**	**Duct mastic**	**Black duct mastic**	**Misc.**	**1,600**	**SF**	**Ceiling space duct work**	**5% CHR**	**Yes**	**Supply duct insulation line throughout building**
P04084	Johnson Hall	0076	332	Ceramic tile system	Gray ceramic wall tile mortar	Misc.	-	SF	-	ND	No	Janitor and bathroom wall tile system
P04085	Johnson Hall	0076	332	Concrete masonry	Layer 1: Red CMU Layer 2: Gray mortar	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Air shafts and portions of structural walls throughout building

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04086	Johnson Hall	0076	300 C (Stairwell)	Ceiling tile	White tectum ceiling tile	Misc.	-	SF	-	ND	No	Stairwells throughout the building
P04087	**Johnson Hall**	**0076**	**300 C (Stairwell)**	**Plaster system (patch)**	Layer 1: White joint compound **Layer 2: White plaster base coat on concrete** Layer 3: White plaster skim coat	**Surf.**	**25**	**SF**	**Point count results: < 1% ACT**	**Layer 1: ND** **Layer 2: <1% ACT** **Layer 3: ND**	**No**	**Patch plaster between structural concrete and doorway. ACM skim coat is applied on top**
P04088	**Johnson Hall**	**0076**	**300 C (Stairwell)**	**Window system**	**Layer 1: Gray window glazing** Layer 2: Gray soft glazing	**Misc.**	**105**	**EA**	-	**Layer 1: 6% CHR** Layer 2: ND	**Yes**	**Windows throughout the annex and full-height windows in stairwells of the main building**
P04089	Johnson Hall	0076	East elevator	Flooring mastic	Layer 1: White mastic Layer 2: Gray flooring mastic	Misc.	-	SF	Under laminate flooring	Layer 1: ND Layer 2: ND	No	Elevators throughout building
P04090	**Johnson Hall**	**0076**	**331**	**Wallboard system**	**Layer 1: White joint compound** Layer 2: White gypsum wallboard	**Misc.**	**17,000**	**SF**	-	**Layer 1: 2% CHR** Layer 2: ND	**Yes**	**Partition walls and corridor ceilings throughout**
P04091	Johnson Hall	0076	331	Wallboard system	Layer 1: 4-inch black cove base Layer 2: Brown cove base mastic Layer 3: White joint compound	Misc.	17,000	SF	**Sample P04090 has 2% CHR joint compound**	Layer 1: ND Layer 2: ND Layer 3: ND	**Yes**	Partition walls and corridor ceilings throughout
P04092	**Johnson Hall**	**0076**	**B6T**	**Floor tile**	**Layer 1: 9-inch gray-green vinyl floor tile** **Layer 2: Black mastic**	**Misc.**	**110,000**	**SF**	**-**	**Layer 1: 5% CHR** **Layer 2: 6% CHR**	**Yes**	**Dominant floor tile throughout building**
P04093	**Johnson Hall**	**0076**	**B4**	**Tank insulation**	Layer 1: White canvas wrap **Layer 2: White insulation** Layer 3: Brown cork insulation	**TSI**	**200**	**SF**	**Tank ends**	Layer 1: ND **Layer 2: 60% CHR** Layer 3: ND	**Yes**	**B4 (3500-gallon water tanks)**
P04094	**Johnson Hall**	**0076**	**B4**	**Tank insulation**	Layer 1: White canvas wrap and mastic **Layer 2: White insulation** Layer 3: Brown cork insulation	**TSI**	**200**	**SF**	**Tank ends**	Layer 1: ND **Layer 2: 48% CHR** Layer 3: ND	**Yes**	**B4 (3500-gallon water tanks)**
P04095	Johnson Hall	0076	B4	Tank insulation	Layer 1: White canvas wrap Layer 2: Red paper wrap	TSI	-	SF	Tank sidewalls	Layer 1: ND Layer 2: ND	No	B4 (3500-gallon water tanks)
P04096	Johnson Hall	0076	B10	Pipe insulation	Layer 1: Horse hair pipe insulation Layer 2: Black asphaltic paper wrap	TSI	2,000	LF	**Sample P04081 has 4% CHR black asphaltic coating**	Layer 1: ND Layer 2: ND	**Yes**	B10, 300 (hallway), and pipe chases throughout building
P04097	**Johnson Hall**	**0076**	**71A at 10W**	**Cooler insulation**	**Layer 1: Black mastic** Layer 2: White foam board insulation	**TSI**	**2,000**	**SF**	**On foam cooler insulation**	**Layer 1: 4% CHR** Layer 2: ND	**Yes**	**Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A**
P04098	Johnson Hall	0076	10 W	Ceiling tile	Layer 1: 12-inch white drill hole ceiling tile Layer 2: Brown puck mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Dominant ceiling tile throughout building
P04099	Johnson Hall	0076	10 W	Wallboard system	Layer 1: White joint compound Layer 2:White joint compound with paper Layer 3: White gypsum wallboard	Misc.	**-**	SF	**Composite result is < 1 % CHR**	**Layer 1: 2% CHR** **Layer 2: 3 % CHR** Layer 3: ND	No	Partition walls and corridor ceilings throughout

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04100	Johnson Hall	0076	10 W	Plaster system	Layer 1: Black asphalt paper vapor barrier Layer 2: White plaster	Surf.	2,000	SF	Cooler area: Plaster-mesh system	Layer 1: ND Layer 2: ND	No	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
P04101	Johnson Hall	0076	10 W	Vapor barrier paper	Layer 1: Paper with mastic Layer 2: Foil paper wrap insulation	Misc.	-	SF	Vapor barrier	Layer 1: ND Layer 2: ND	No	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
P04102	Johnson Hall	0076	10 W (exterior Room 77)	Concrete masonry	Layer 1: Red CMU Layer 2: Gray mortar	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Air shafts and portions of structural walls throughout building
P04103	Johnson Hall	0076	10 W (exterior Room 81)	Cooler insulation	Layer 1: Black mastic Layer 2: Black paper vapor barrier Layer 3: White foam insulation	TSI	2,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
P04104	Johnson Hall	0076	10 W (exterior Room 81)	Cooler insulation	Layer 1: Black mastic Layer 2: Black paper vapor barrier Layer 3: White foam insulation	TSI	2,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
P04105	Johnson Hall	0076	10 W	Plaster system	Layer 1: Gray sandy plaster Layer 2: White finish coat	Surf.	2,000	SF	Cooler area: Plaster-mesh system	Layer 1: ND Layer 2: ND	No	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
P04106	Johnson Hall	0076	10 W	Wallboard system	Layer 1: 4-inch black vinyl cove base Layer 2: Clear mastic Layer 3: : Brown brittle mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Partition walls and corridor ceilings throughout
P04107	Johnson Hall	0076	238 T	Wallboard system	Layer 1: White joint compound Layer 2: White gypsum wallboard	Misc.	17,000	SF	**Sample P04090 has 2% CHR joint compound**	Layer 1: 2% CHR Layer 2: ND	**Yes**	Partition walls and corridor ceilings throughout
P04108	Johnson Hall	0076	238 T	Wallboard system	Layer 1: Brown cove base mastic Layer 2: Tan paper	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Partition walls and corridor ceilings throughout
P04109	Johnson Hall	0076	238 T	Ceiling tile	Layer 1: 12-inch white drill hole ceiling tile Layer 2: Brown puck mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Dominant ceiling tile throughout building
P04110	**Johnson Hall**	**0076**	**10A**	**Wallboard system**	Layer 1: 4-inch black cove base Layer 2: Brown cove base mastic **Layer 3: White joint compound**	**Misc.**	**17,000**	**SF**	**Concrete wall: stairwell**	Layer 1: ND Layer 2: ND **Layer 3: 2% CHR**	**Yes**	**Partition walls and corridor ceilings throughout**
P04111	**Johnson Hall**	**0076**	**10A**	**Wallboard system**	Layer 1: Brown cove base mastic **Layer 2: White joint compound**	**Misc.**	**17,000**	**SF**	**Concrete wall: stairwell**	Layer 1: ND **Layer 2: 3% CHR**	**Yes**	**Partition walls and corridor ceilings throughout**

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04112	**Johnson Hall**	**0076**	**10A**	**Skim coat/paint**	**Thin white skim coat/paint on concrete**	**Surf.**	**35,000**	**SF**	**Concrete wall**	**2% CHR**	**Yes**	**Concrete structural walls – stairwells, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks in central laboratories**
P04113	**Johnson Hall**	**0076**	**300A**	**Skim coat/paint**	**Thin white skim coat/paint on concrete**	**Surf.**	**35,000**	**SF**	**Concrete wall**	**3% CHR**	**Yes**	**Concrete structural walls – stairwells, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks in central laboratories**
P04114	Johnson Hall	0076	200A	Sheet vinyl	Gray rolled-on sheet vinyl	Misc.	-	SF	-	ND	No	Stairwell landings
P04115	Johnson Hall	0076	200A	Sheet vinyl	Gray rolled-on sheet vinyl	Misc.	-	SF	-	ND	No	Stairwells landings
P04116	Johnson Hall	0076	300A	Sheet vinyl	Gray rolled-on sheet vinyl	Misc.	-	SF	-	ND	No	Stairwells landings
P04117	**Johnson Hall**	**0076**	**300D**	**Skim coat/paint**	Layer 1: White paint **Layer 2: White skim coat**	**Surf.**	**35,000**	**SF**	**Concrete wall: stairwell**	Layer 1: ND **Layer 2: 4% CHR**	**Yes**	**Concrete structural walls – stairwells, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks in central laboratories**
P04118	Johnson Hall	0076	300C	Skim coat/paint	Thin white skim coat/paint on concrete	Misc.	35,000	SF	**Sample P04117 has 4% CHR finish coat**	ND	**Yes**	Concrete structural walls – stairwells, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks in central laboratories
P04119	Johnson Hall	0076	200	Skim coat/paint	Layer 1: White paint Layer 2: White skim coat/paint	Misc.	35,000	SF	**Sample P04117 has 4% CHR finish coat**	Layer 1: ND Layer 2: ND	**Yes**	Concrete structural walls – stairwells, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks in central laboratories
P04120	Johnson Hall	0076	200B	Ceiling tile	White tectum ceiling tile	Misc.	-	SF	-	ND	No	Stairwells throughout the building
P04121	**Johnson Hall**	**0076**	**250**	**Skim coat/paint**	Layer 1: Brown cove base mastic **Layer 2: White skim coat/paint** Layer 3: Gray concrete	**Surf.**	**35,000**	**SF**	**Structural wall**	Layer 1: ND **Layer 2: 2% CHR** Layer 3: ND	**Yes**	**Concrete structural walls – stairwells, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks in central laboratories**
P04122	Johnson Hall	0076	200 (hallway)	Plaster system	Layer 1: White plaster finish coat Layer 2: Gray sandy plaster base coat	Surf.	-	SF	260 exterior	Layer 1: ND Layer 2: ND	No	Common building plaster on structural walls in corridors and some interior walls in central laboratory rooms

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04123	**Johnson Hall**	**0076**	**264**	**Skim coat/paint**	**Thin white skim coat/paint on concrete**	**Surf.**	**35,000**	**SF**	**Concrete wall**	**2% CHR**	**Yes**	**Concrete structural walls – stairwells, central interior walls, and ceiling cracks throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04124	**Johnson Hall**	**0076**	**264**	**Plaster system**	**Layer 1: White finish coat** Layer 2: White paint	**Surf.**	**35,000**	**SF**	**Concrete wall**	**Layer 1: 4% CHR** Layer 2: ND	**Yes**	**Concrete structural walls – stairwells, central interior walls, and ceiling cracks throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04125	Johnson Hall	0076	291	Wallboard system	Layer 1: White joint compound Layer 2: White joint compound Layer 3: White gypsum wallboard	Misc.	17,000	SF	**Sample P04126 has 2% CHR joint compound**	Layer 1: ND Layer 2: ND Layer 3: ND	Yes	Partition walls and corridor ceilings throughout
P04126	**Johnson Hall**	**0076**	**291**	**Wallboard system**	**Layer 1: White joint compound** Layer 2: White gypsum wallboard	**Misc.**	**17,000**	**SF**	**Renovated suite**	**Layer 1: 2% CHR** Layer 2: ND	**Yes**	Partition walls and corridor ceilings throughout
P04127	Johnson Hall	0076	291	Wallboard system	Layer 1: White joint compound Layer 2: White gypsum wallboard	Misc.	17,000	SF	**Sample P04126 has 2% CHR joint compound**	Layer 1: ND Layer 2: ND	Yes	Partition walls and corridor ceilings throughout
P04128	**Johnson Hall**	**0076**	**126**	**Laboratory countertop**	**Black laboratory countertop**	**Misc.**	**144**	**EA**	**Black with gray**	**19% CHR**	**Yes**	**Laboratories and classrooms throughout the building (See Figures 2,4,6,8)**
P04129	Johnson Hall	0076	190	Laboratory countertop	Black laboratory countertop	Misc.	144	EA	**Sample P04128 is 19% CHR**	ND	**Yes**	Laboratories and classrooms throughout the building (See Figures 2,4,6,8)
P04130	**Johnson Hall**	**0076**	**272**	**Floor tile**	Layer 1: 12-inch white with brown flecks vinyl floor tile **Layer 2: Yellow and black mastic**	**Misc.**	**2,100**	**SF**	**-**	Layer 1: ND **Layer 2: 3% CHR**	**Yes**	**Rooms 202, 204, 272**
P04131	**Johnson Hall**	**0076**	**204**	**Floor tile**	Layer 1: 12-inch white with brown flecks vinyl floor tile **Layer 2: Black mastic**	**Misc.**	**2,100**	**SF**	**-**	Layer 1: ND **Layer 2: 2% CHR**	**Yes**	**Rooms 202, 204, 272**
P04132	**Johnson Hall**	**0076**	**100 D**	**Window system**	**Gray window glazing**	**Misc.**	**105**	**EA**	-	**4% CHR**	**Yes**	**Windows throughout the annex and full-height windows in stairwells of the main building**
P04133	Johnson Hall	0076	364	Ceiling tile	2 ft. by 4 ft. etch-pinhole ceiling tile	Misc.	-	SF	-	ND	No	Laboratories and classrooms throughout the building
P04134	Johnson Hall	0076	204	Ceiling tile	2 ft. by 4 ft. etch-pinhole ceiling tile	Misc.	-	SF	-	ND	No	Laboratories and classrooms throughout the building
P04135	Johnson Hall	0076	288	Ceramic wall tile	Layer 1: Peach ceramic wall tile Layer 2: Gray mortar	Misc.	-	SF	-	ND	No	Bathroom and janitor closet wall tile
P04136	**Johnson Hall**	**0076**	**147**	**Drying rack**	**Gray laboratory drying racks**	**Misc.**	**26**	**EA**	-	**24% CHR**	**Yes**	**Laboratories and classrooms (see Figures 3, 5, 7, 9)**

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04137	**Johnson Hall**	**0076**	**272**	**Wallboard system**	Layer 1: 4-inch black cove base Layer 2: Tan cove base mastic **Layer 3: White joint compound** Layer 4: White gypsum wallboard	**Misc.**	**17,000**	**SF**	-	Layer 1: ND Layer 2: ND **Layer 3: 3% CHR** Layer 4: ND	**Yes**	**Partition walls and corridor ceilings throughout**
P04138	Johnson Hall	0076	75	Plaster system	Gray wall plaster	Surf.	2,000	SF	Cooler area: plaster-mesh system	ND	No	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
P04139	Johnson Hall	0076	77	Plaster system	Gray wall plaster	Surf.	2,000	SF	Cooler area: plaster-mesh system	ND	No	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
P04140	Johnson Hall	0076	42	Skim coat/paint	Thin white skim coat/paint on concrete	Surf.	35,000	SF	**Ceiling crack: Samples P04155, P04157 have 3% CHR**	ND	**Yes**	Concrete and masonry structural walls – stairwells, ceiling cracks, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks
P04141	**Johnson Hall**	**0076**	**42**	**Skim coat/paint**	**Thin white skim coat/paint on concrete**	**Surf.**	**35,000**	**SF**	**Structural wall**	**4% CHR**	**Yes**	**Concrete and masonry structural walls – stairwells, ceiling cracks, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04142	Johnson Hall	0076	42 B	Plaster system	Gray wall plaster	Surf.	2,000	SF	Cooler area: Plaster-mesh system	ND	No	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
P04143	Johnson Hall	0076	26 C	Ceiling tile	2 ft. by 4 ft. etch suspended ceiling tile with red backing	Misc.	-	SF	-	ND	No	Laboratories and classrooms throughout the building
P04144	Johnson Hall	0076	22	Ceiling tile	2 ft. by 4 ft. divot-pinhole suspended ceiling tile	Misc.	-	SF	-	ND	No	Laboratories and classrooms throughout the building
P04145	Johnson Hall	0076	22	Ceiling tile	2 ft. by 4 ft. divot-pinhole suspended ceiling tile	Misc.	-	SF	-	ND	No	Laboratories and classrooms throughout the building
P04146	Johnson Hall	0076	126	Ceiling tile	Layer 1: 12-inch small pinhole ceiling tile Layer 2: Brown puck mastic	Misc.	-	SF	-	ND	No	Laboratories and offices: 1st through 3rd floors
P04147	Johnson Hall	0076	126	Ceiling tile	12-inch small pinhole ceiling tile	Misc.	-	SF	Replacement tile	ND	No	Laboratories and offices: 1st through 3rd floors

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04148	**Johnson Hall**	**0076**	**124E**	**Floor tile**	Layer 1: Clear adhesive **Layer 2: 9-inch gray-green vinyl floor tile** **Layer 3: Black mastic**	**Misc.**	**110,000**	**SF**	**9-inch tile and mastic under carpet**	Layer 1: ND **Layer 2: 5% CHR** **Layer 3: 3% CHR**	**Yes**	**Dominant floor tile throughout building**
P04149	Johnson Hall	0076	172	Ceiling tile	Layer 1: 12-inch small pinhole ceiling tile Layer 2: Brown puck mastic	Misc.	-	SF	-	ND	No	Laboratories and offices: 1st through 3rd floors
P04150	Johnson Hall	0076	100 (hallway)	Ceiling tile	Layer 1: 12-inch white drill hole ceiling tile Layer 2: Brown puck mastic Layer 3: Tan paper and mastic	Misc.	-	SF	-	ND	No	Dominant ceiling tile throughout building
P04151	Johnson Hall	0076	10 EL	Floor mastic	Clear mastic	Misc.	-	SF	Under rubber laminate	ND	No	Elevators: West and east ends of building
P04152	**Johnson Hall**	**0076**	**212**	**Skim coat/paint**	**Thin white skim coat/paint on concrete**	**Surf.**	**35,000**	**SF**	**Structural wall**	**2% CHR**	**Yes**	**Concrete and masonry structural walls – stairwells, ceiling cracks, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04153	Johnson Hall	0076	200 (hallway)	Plaster system/cove base	Layer 1: White plaster finish coat Layer 2: Brown cove base mastic	Surf.	35,000	SF	-	Layer 1: ND Layer 2: ND	No	Common building plaster on structural walls in corridors and some interior walls in central laboratory rooms
P04154	**Johnson Hall**	**0076**	**230A**	**Floor tile**	Layer 1: 12-inch tan with brown and white streaks vinyl floor tile **Layer 2: Black mastic**	**Misc.**	**425**	**SF**	**-**	Layer 1: ND **Layer 2: 2% CHR**	**Yes**	**230A and 308A**
P04155	**Johnson Hall**	**0076**	**230**	**Skim coat/paint**	**Thin white skim coat/paint on concrete**	**Surf.**	**35,000**	**SF**	**Ceiling crack**	**3% CHR**	**Yes**	**Concrete structural walls – stairwells, ceiling cracks, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04156	Johnson Hall	0076	230	Pipe Insulation	Layer 1: Fiberglass pipe insulation (foil) Layer 2: White foil asphalt paper wrap	TSI	-	LF	Domestic water with ACM fittings	Layer 1: ND Layer 2: ND	No	Heating, laboratory water and domestic water distribution piping throughout building (3-inch to 6-inch diameter)
P04157	**Johnson Hall**	**0076**	**256A**	**Skim coat/paint**	**Thin white skim coat/paint on concrete**	**Surf.**	**35,000**	**SF**	**Ceiling crack**	**3% CHR**	**Yes**	**Concrete structural walls – stairwells, ceiling cracks, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04158	**Johnson Hall**	**0076**	**260**	**Duct insulation**	**White canvas wrap with mud**	**TSI**	**1,000/10**	**LF/SF**	**12-inch air supply duct**	**56% CHR**	**Yes**	**260**
P04159	Johnson Hall	0076	256	Duct insulation	Layer 1: White canvas wrap Layer 2: Orange insulation	TSI	-	LF	12-inch supply duct air line	ND	No	Central laboratories and offices

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04160	Johnson Hall	0076	B4	Tank insulation	Layer 1: White canvas wrap Layer 2: Red paper Layer 3: Brown cork insulation	TSI	-	SF	Tank sidewalls	Layer 1: ND Layer 2: ND Layer 3: ND	No	B4 (3500-gallon water tanks)
P04161	Johnson Hall	0076	B4	Tank insulation	Layer 1: White canvas wrap Layer 2: Red paper Layer 3: Brown cork insulation	TSI	-	SF	Tank sidewalls	Layer 1: ND Layer 2: ND Layer 3: ND	No	B4 (3500-gallon water tanks)
P04162	Johnson Hall	0076	34T	Ceiling tile	2 ft. by 4 ft. divot-pinhole suspended ceiling tile	Misc.	-	SF	-	ND	No	22, 34T, 143
P04163	Johnson Hall	0076	30	Ceramic tile system	Layer 1: Peach ceramic wall tile Layer 2: Gray mortar	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Janitor and bathroom wall tile system
P04164	Johnson Hall	0076	Building exterior	Exterior cladding	Layer 1: Gray joint caulk Layer 2: Stone pebblecrete Layer 3: White concrete filler	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Exterior of building and annex
P04165	Johnson Hall	0076	Building exterior	Exterior cladding	Layer 1: Gray joint caulk Layer 2: Stone pebblecrete Layer 3: White concrete filler	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Exterior of building and annex
P04166	Johnson Hall	0076	Building exterior	Exterior cladding	Layer 1: Gray joint caulk Layer 2: Stone pebblecrete Layer 3: White concrete filler	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Exterior of building and annex
P04167	**Johnson Hall**	**0076**	**326**	**Plaster system**	Layer 1: Brown cove base mastic **Layer 2: Skim coat/paint** Layer 3: White plaster finish coat Layer 4: Gray sandy plaster base coat	**Surf.**	**35,000**	**SF**	**Structural wall with skim coat/paint**	Layer 1: ND **Layer 2: 2% CHR** Layer 3: ND Layer 4: ND	**Yes**	**Common building plaster on structural walls in corridors and some interior walls in central laboratory rooms**
P04168	Johnson Hall	0076	272	Skim coat/paint	Thin white skim coat/paint on concrete	Surf.	35,000	SF	**Ceiling crack: Sample P04169 has 2% CHR**	ND	**Yes**	Concrete and masonry structural walls – stairwells, ceiling cracks, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks
P04169	**Johnson Hall**	**0076**	**58**	**Skim coat/paint**	Layer 1: White paint **Layer 2: White/tan skim coat/paint**	**Surf.**	**35,000**	**SF**	**Ceiling crack**	Layer 1: ND **Layer 2: 2% CHR**	**Yes**	**Concrete and mastonry structural walls – stairwells, ceiling cracks, central interior walls throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04170	**Johnson Hall**	**0076**	**16**	**Ceiling tile**	Layer 1: 12-inch white drill hole ceiling tile Layer 2: Brown puck mastic **Layer 3: Joint compound**	**Misc.**	**35,000**	**SF**	**Joint compound on ceiling**	Layer 1: ND Layer 2: ND **Layer 3: 2% CHR**	**Yes**	**Partition walls and corridor ceilings throughout**
P04171	Johnson Hall	0076	143	Ceiling tile	2 ft. by 4 ft. divot-pinhole suspended ceiling tile	Misc.	-	SF	-	ND	No	22, 34T, 143,
P04172	**Johnson Hall**	**0076**	**143**	**Sheet vinyl flooring**	Layer 1: Pink-brown fleck sheet vinyl tile Layer 2: White paper backing/yellow mastic **Layer 3: Black mastic** Layer 3: Gray leveling compound	**Misc.**	**180**	**SF**	**Residual black mastic**	Layer 1: Layer 2: **Layer 3: 3% CHR** Layer 4: ND	**Yes**	**143**

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04173	Johnson Hall	0076	238T	Ceiling tile	Layer 1: 12-inch white drill hole ceiling tile Layer 2: White soft mastic Layer 3: Brown brittle puck mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Dominant ceiling tile throughout building
P04174	**Johnson Hall**	**0076**	**238T**	**Ceiling tile**	Layer 1: 12-inch white drill hole ceiling tile Layer 2: White soft mastic Layer 3: Brown brittle mastic **Layer 4: Joint compound with paper**	**Misc.**	**35,000**	**SF**	**Joint compound on ceiling**	Layer 1: ND Layer 2: ND Layer 3: ND **Layer 4: 2% CHR**	**Yes**	**Partition walls and corridor ceilings throughout**
P04175	Johnson Hall	0076	36 (duct chase)	Pipe Insulation	Layer 1: Fiberglass pipe insulation (foil) Layer 2: White foil asphalt paper wrap	TSI	-	LF	Hot water pipe	Layer 1: ND Layer 2: ND	No	Heating, laboratory water and domestic water distribution piping throughout building (3-inch to 6-inch diameter)
P04176	Johnson Hall	0076	24	Carpet mastic	Green carpet mastic	Misc.	-	SF	-	ND	No	24
P04177	**Johnson Hall**	**0076**	**158**	**Skim coat/paint**	Layer 1: White paint **Layer 2: White skim coat/paint**	**Surf.**	**35,000**	**SF**	**Structural wall**	Layer 1: ND **Layer 2: 3% CHR**	**Yes**	**Concrete structural walls – stairwells, central interior walls, and ceiling cracks throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04178	Johnson Hall	0076	24	Floor tile	Layer 1: Green carpet mastic Layer 1: 9-inch gray-green vinyl floor tile Layer 2: Black mastic	Misc.	110,000	SF	**Sample P04092 has 5% / 6% CHR tile and mastic**	Layer 1: ND Layer 2: ND Layer 3: ND	**Yes**	Dominant floor tile throughout building
P04179	Johnson Hall	0076	10 A (stairwell)	Floor tile	Layer 1: 12-inch gray streak vinyl floor tile Layer 2: Black mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Throughout stairwells: A, B, C
P04180	Johnson Hall	0076	Building exterior	Exterior cladding	Layer 1: Gray joint caulk Layer 2: Stone pebblecrete Layer 3: White concrete filler	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	Exterior of building and annex
P04181	Johnson Hall	0076	Building exterior	Exterior cladding	Layer 1: Gray joint caulk Layer 2: Stone pebblecrete	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND	No	Exterior of building and annex
P04182	Johnson Hall	0076	Building exterior	Exterior cladding	Layer 1: Brown pebblecrete Layer 2: Gray joint caulk	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND	No	Exterior of building and annex
P04183	**Johnson Hall**	**0076**	**139**	**Wallboard system**	Layer 1: White cove base mastic Layer 2: Brown cove base mastic **Layer 3: Joint compound with paint** **Layer 4: Joint compound with paper** Layer 5: White gypsum wallboard	**Misc.**	**17,000**	**SF**	**-**	Layer 1: ND Layer 2: ND **Layer 3: 2% CHR** **Layer 4: 3% CHR** Layer 4: ND	**Yes**	**Partition walls and corridor ceilings throughout**
P04184	**Johnson Hall**	**0076**	**34T**	**Wallboard system**	Layer 1: Paint **Layer 2: White joint compound**	**Misc.**	**17,000**	**SF**	**-**	Layer 1: ND **Layer 2: 3% CHR**	**Yes**	**Partition walls and corridor ceilings throughout**
P04185	Johnson Hall	0076	24	Carpet mastic	Green carpet mastic	Misc.	-	SF	-	ND	No	24

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04186	**Johnson Hall**	**0076**	**10A (stairwell)**	**Window system**	**Gray window glazing**	**Misc.**	**105**	**EA**	**Sample P04132 has 4% CHR glazing**	**<1% CHR**	**Yes**	**Windows throughout the annex and full-height windows in stairwells of the main building**
P04187	Johnson Hall	0076	200A (stairwell)	Floor tile	Layer 1: 12-inch gray streak vinyl floor tile Layer 2: Black mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Throughout stairwells: A, B, C
P04188	**Johnson Hall**	**0076**	**158**	**Skim coat/paint**	**Thin white skim coat/paint on concrete**	**Surf.**	**35,000**	**SF**	**Structural wall**	**2% CHR**	**Yes**	**Concrete structural walls – stairwells, central interior walls, and ceiling cracks throughout (except penthouse). Also applied as a patch material on ceiling cracks**
P04189	Johnson Hall	0076	36 (duct chase)	Pipe Insulation	Fiberglass pipe insulation with foil asphalt paper wrap	TSI	-	LF	Hot water pipe	ND	No	Duct chases throughout building
P04190	**Johnson Hall**	**0076**	**24**	**Floor tile**	Layer 1: Green carpet mastic **Layer 2: 9-inch gray-green vinyl floor tile** Layer 3: Black mastic	**Misc.**	**110,000**	**SF**	**9-inch tile under carpet**	Layer 1: ND **Layer 2: 2% CHR** Layer 3: ND	Yes	24
P04191	Johnson Hall Annex	0076	C12	Plaster system	Layer 1: 4-inch black cove base Layer 2: Brown cove base mastic Layer 3: Gray plaster	Misc.	-	SF	Black cove base: original building plaster	Layer 1: ND Layer 2: ND Layer 3: ND	No	Original building area: Connecting hallway and west half of annex
P04192	Johnson Hall Annex	0076	C12	Plaster system	Layer 1: Brown cove base mastic Layer 2: Gray plaster	Misc.	-	SF	Black cove base: original building plaster	Layer 1: ND Layer 2: ND	No	Original building area: Connecting hallway and west half of annex
P04193	Johnson Hall Annex	0076	C3M (mechanical room)	Insulation	Layer 1: Tan canvas wrap Layer 2: Orange insulation	TSI	-	LF	SF1A	Layer 1: ND Layer 2: ND	No	C3M
P04194	Johnson Hall Annex	0076	C3M (mechanical room)	Insulation	Layer 1: Tan canvas wrap Layer 2: Gray insulation (mud)	TSI	-	LF	SF1A	Layer 1: ND Layer 2: ND	No	C3M
P04195	**Johnson Hall Annex**	**0076**	**C3M (mechanical room)**	**Duct mastic**	**Yellow duct mastic**	**Misc.**	**25**	**SF**	**SF1A**	**5% CHR**	**Yes**	**C3M**
P04196	**Johnson Hall Annex**	**0076**	**C3M (mechanical room)**	**Duct mastic**	**Yellow duct mastic**	**Misc.**	**25**	**SF**	**SF1A**	**4% CHR**	**Yes**	**C3M**
P04197	Johnson Hall Annex	0076	C3M (mechanical room)	Pipe Insulation	Layer 1: White canvas/foil wrap Layer 2: Brown cork insulation	TSI	750	LF	**Previous samples contain 54%/56% CHR asbestos**	Layer 1: ND Layer 2: ND	**Yes**	Duct chases throughout main building and annex (C3M)
P04198	Johnson Hall Annex	0076	C3M (mechanical room)	Pipe Insulation	Layer 1: White canvas/foil wrap Layer 2: Brown cork insulation	TSI	750	LF	**Previous samples contain 54%/56% CHR asbestos**	Layer 1: ND Layer 2: ND	**Yes**	Duct chases throughout main building and annex (C3M)
P04199	Johnson Hall Annex	0076	C4	Ceiling tile	12-inch small drill hole CT	Misc.	-	SF	Nailed	ND	No	C4
P04200	Johnson Hall Annex	0076	C3	Ceiling tile	2 ft. by 4 ft. etch-pinhole suspended ceiling tile	Misc.	-	SF	-	ND	No	Dominant ceiling tile throughout annex

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04201	**Johnson Hall Annex**	**0076**	**C3**	**Window system**	**Gray window glazing**	**Misc.**	**105**	**EA**	**Classroom window**	**2% CHR**	**Yes**	**Windows throughout the annex and full-height windows in stairwells of the main building**
P04202	Johnson Hall Annex	0076	C22	Wallboard system	Layer 1: White joint compound Layer 2: White gypsum wallboard	Misc.	-	SF	New wallboard system	Layer 1: ND Layer 2: ND	No	Partition walls and hallways in east half of annex
P04203	Johnson Hall Annex	0076	C113	Ceiling tile	2 ft. by 4 ft. etch-pinhole suspended ceiling tile	Misc.	-	SF	-	ND	No	Dominant ceiling tile throughout annex
P04204	Johnson Hall Annex	0076	C113	Wallboard system	Layer 1: 4-inch gray cove base Layer 2: Yellow/tan cove base mastic Layer 3: White gypsum wallboard	Misc.	-	SF	New wallboard system	Layer 1: ND Layer 2: ND Layer 3: ND	No	Partition walls and hallways in east half of annex
P04205	Johnson Hall Annex	0076	C201 (mechanical room)	Insulation	Layer 1: Orange canvas wrap Layer 2: Yellow foam insulation	TSI	-	LF	Heat exchanger	Layer 1: ND Layer 2: ND	No	C201
P04206	Johnson Hall Annex	0076	C107 (upper level)	Flooring	Layer 1: Gray laminate flooring Layer 2: Brown mastic/woven backing	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	C107, C100, E100
P04207	Johnson Hall Annex	0076	C100	Flooring mastic	Tan laminate mastic	Misc.	-	SF	Ramp: Mastic under rubber laminate squares	ND	No	C100
P04208	Johnson Hall Annex	0076	C100	Ceiling tile	12-inch etch ceiling tile	Misc.	-	SF	-	ND	No	C100, E100
P04209	Johnson Hall Annex	0076	C105	Ceiling tile	2 ft. by 4 ft. etch-pinhole suspended ceiling tile	Misc.	-	SF	-	ND	No	Dominant ceiling tile throughout annex
P04210	Johnson Hall Annex	0076	C105	Wallboard system	Layer 1: Brown cove base mastic Layer 2: White paint and joint compound	Misc.	-	SF	New wallboard system	Layer 1: ND Layer 2: ND	No	Partition walls and hallways in east half of annex
P04211	Johnson Hall Annex	0076	C 100B	Window system	Gray window glazing	Misc.	105	EA	**Samples P04212/P04213 have 3%/5% CHR glazing**	ND	**Yes**	Windows throughout the annex and full-height windows in stairwells of the main building
P04212	**Johnson Hall Annex**	**0076**	**E100**	**Window system**	**Gray window glazing**	**Misc.**	**105**	**EA**	**-**	**3% CHR**	**Yes**	**Windows throughout the annex and full-height windows in stairwells of the main building**
P04213	**Johnson Hall Annex**	**0076**	**E100**	**Window system**	**Gray window glazing**	**Misc.**	**105**	**EA**	**-**	**5% CHR**	**Yes**	**Windows throughout the annex and full-height windows in stairwells of the main building**
P04214	Johnson Hall Annex	0076	E100	Ceiling tile	12-inch etch ceiling tile	Misc.	-	SF	-	ND	No	C100, E100
P04215	Johnson Hall Annex	0076	C100	Flooring	Layer 1: Gray laminate flooring Layer 2: Brown mastic/woven backing	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	C107, C100, E100
P04216	**Johnson Hall Annex**	**0076**	**C5**	**Floor tile**	Layer 1: 12-inch tan with burgundy streak vinyl floor tile **Layer 2: Black mastic**	**Misc.**	**200**	**SF**	**-**	Layer 1: ND **Layer 2: 2% CHR**	**Yes**	**Annex: C5 (storage)**

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04217	Johnson Hall Annex	0076	C112	Wallboard system	Layer 1: Tan cove base mastic Layer 2: Brown brittle cove base mastic Layer 3: White joint compound	Misc.	-	SF	New wallboard system	Layer 1: ND Layer 2: ND Layer 3: ND	No	Partition walls and hallways in east half of annex
P04218	Johnson Hall Annex	0076	C102A	Ceiling tile	12-inch white drill hole ceiling tile	Misc.	-	SF	-	ND	No	C102A, C1N
P04219	Johnson Hall Annex	0076	C106	Floor tile	Layer 1: 12-inch white with pink streak vinyl floor tile Layer 2: Clear adhesive Layer 3: Gray mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND Layer 3: ND	No	C106
P04220	Johnson Hall Annex	0076	C100	Plaster system	Layer 1: Brown cove base mastic Layer 2: White plaster finish coat Layer 3: Gray sandy plaster base coat	Misc.	-	SF	Black cove base: original building plaster	Layer 1: ND Layer 2: ND Layer 3: ND	No	Original building area: Connecting hallway and west half of annex
P04221	Johnson Hall Annex	0076	C100	Plaster system	Layer 1: Brown cove base mastic Layer 2: White plaster finish coat	Misc.	-	SF	Black cove base: original building plaster	Layer 1: ND Layer 2: ND	No	Original building area: Connecting hallway and west half of annex
P04222	Johnson Hall Annex	0076	C1N	Plaster system	Layer 1: Tan soft cove base mastic Layer 2: Brown cove base mastic Layer 3: White plaster finish coat Layer 4: Gray plaster base coat	Misc.	-	SF	Black cove base: original building plaster	Layer 1: ND Layer 2: ND Layer 3: ND Layer 4: ND	No	Original building area: Connecting hallway and west half of annex
P04223	Johnson Hall Annex	0076	C12	Plaster system	Layer 1: Brown cove base mastic Layer 2: Sandy plaster base coat	Misc.	-	SF	Black cove base: original building plaster	Layer 1: ND Layer 2: ND	No	Original building area: Connecting hallway and west half of annex
P04224	Johnson Hall Annex	0076	C100	Plaster system	Layer 1: Brown cove base mastic Layer 2: White plaster finish coat Layer 3: Gray plaster base coat	Misc.	-	SF	Black cove base: original building plaster	Layer 1: ND Layer 2: ND Layer 3: ND	No	Original building area: Connecting hallway and west half of annex
P04225	Johnson Hall Annex	0076	C113	Floor tile	Layer 1: 12-inch white with tan streak vinyl floor tile Layer 2: Yellow mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	C113
P04226	Johnson Hall Annex	0076	C100B	Floor tile	Layer 1: 12-inch white with light brown streaked vinyl floor tile Layer 2: Yellow mastic	Misc.	-	SF	Repair area: 12-inch floor tile on stair landing	Layer 1: ND Layer 2: ND	No	C100B
P04227	Johnson Hall Annex	0076	C100E	Wallboard system	Layer 1: 4-inch gray cove base Layer 2: Tan cove base mastic Layer 3: White joint compound	Misc.	-	SF	New building system	Layer 1: ND Layer 2: ND Layer 3: ND	No	Partition walls and hallways in east half of annex
P04228	**Johnson Hall Annex**	**0076**	**C10VS**	**Ceiling tile**	**2 ft. by 4 ft. etch-pinhole ceiling tile**	**Misc.**	**75**	**SF**	**Original ceiling tile**	**4% AMO**	**Yes**	**C10VS and C10B**
P04229	**Johnson Hall Annex**	**0076**	**C10B**	**Ceiling tile**	**2 ft. by 4 ft. etch-pinhole ceiling tile**	**Misc.**	**75**	**SF**	**Original ceiling tile**	**5% AMO**	**Yes**	**C10VS and C10B**
P04230	Johnson Hall Annex	0076	C100	Ceiling tile	12-inch etch ceiling tile	Misc.	-	SF	-	ND	No	C100 and E100
P04231	Johnson Hall Annex	0076	C1N	Ceiling tile	12-inch white drill hole wall tile	Misc.	-	SF	-	ND	No	C102A and C1N
P04232	Johnson Hall Annex	0076	C102A	Ceiling tile	Layer 1: Joint compound Layer 2: 12-inch white drill hole wall tile	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	C102A and C1N

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04233	Johnson Hall	0076	135	Ceiling tile	Layer 1: 12-inch small pinhole ceiling tile Layer 2: Brown puck mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Laboratories and offices: 1st through 3rd floors
P04234	Johnson Hall	0076	144	Ceiling tile	2 ft. by 4 ft. etch-pinhole ceiling tile	Misc.	-	SF	-	ND	No	Laboratories and classrooms throughout the building
P04235	Johnson Hall	0076	144A	Floor tile	Layer 1: 12-inch red-green streak vinyl floor tile Layer 2: Yellow mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	144, 144A, 144B
P04236	Johnson Hall	0076	130	Ceiling tile	2 ft. by 4 ft. etch-pinhole ceiling tile	Misc.	-	SF	-	ND	No	Laboratories and classrooms throughout the building
P04237	Johnson Hall	0076	130	Ceiling tile	2 ft. by 4 ft. etch-pinhole ceiling tile	Misc.	-	SF	Replacement tile	ND	No	Laboratories and classrooms throughout the building
P04238	Johnson Hall	0076	202	Floor tile	Layer 1: 12-inch white with brown streak vinyl floor tile Layer 2: Black mastic	Misc.	-	SF	**Other samples contain 3%/2% CHR black mastic**	Layer 1: ND Layer 2: ND	**Yes**	202
P04239	**Johnson Hall**	**0076**	**237**	**Floor tile**	Layer 1: 12-inch white-gray streaked vinyl floor tile **Layer 2: Black mastic**	**Misc.**	**3,375**	**SF**	**-**	Layer 1: ND **Layer 2: 4% CHR**	**Yes**	**224, 237, 268, 364, 386, 388**
P04240	Johnson Hall	0076	300	Plaster system	Layer 1: Brown cove base mastic Layer 2: White plaster finish coat	Misc.	35,000	SF	**-**	Layer 1: ND Layer 2: ND	No	Common building plaster on structural walls in corridors and some interior walls in central laboratory rooms
P04241	Johnson Hall	0076	300	Plaster system	White plaster finish coat	Misc.	35,000	SF	**-**	Layer 1: ND Layer 2: ND	No	Common building plaster on structural walls in corridors and some interior walls in central laboratory rooms
P04242	Johnson Hall	0076	Building exterior	Exterior cladding	Layer 1: Gray joint caulk Layer 2: Tan/brown stones and concrete filler	Surf.	30,000	SF	-	Layer 1: ND Layer 2: ND	No	Exterior of building and annex
P04243	Johnson Hall Annex	0076	C3M	Pipe Insulation	Layer 1: White canvas/foil wrap Layer 2: Brown cork insulation	TSI	750	LF	**Samples P04044/P04045 contain 54%/56% CHR**	Layer 1: ND Layer 2: ND	**Yes**	Duct chases throughout main building and annex (C3M)
P04244	Johnson Hall Annex	0076	C3M	Insulation	Layer 1: Tan canvas wrap Layer 2: Orange insulation	TSI	50	SF	SF1A	Layer 1: ND Layer 2: ND	No	Room C3M on SF1A
P04245	Johnson Hall Annex	0076	C201	Insulation	Layer 1: Orange canvas wrap Layer 2: Yellow foam insulation	TSI	25	LF	Heat exchanger	Layer 1: ND Layer 2: ND	No	C201
P04246	Johnson Hall Annex	0076	C201	Insulation	Layer 1: Orange canvas wrap Layer 2: Yellow foam insulation	TSI	25	LF	Heat exchanger	Layer 1: ND Layer 2: ND	No	C201
P04247	Johnson Hall Annex	0076	C1	Floor tile	Layer 1: 12-inch white with tan streak vinyl floor tile Layer 2: Yellow mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Ground, 1st, 2nd, 3rd floors
C1	Johnson Hall Annex	0076	C4	Ceiling tile	12-inch small drill hole ceiling tile	Misc.	-	SF	-	ND	No	C4

Sample #	Building Name	Building #	Sample Location	Material	Material Description/color	Type	Quantity	Quantity Descriptor	Comments	Sample Results	ACM?	Homogenous Material Location
P04249	Johnson Hall	0076	26C	Ceiling tile	Layer 1: 2 ft. by 4 ft. etch-divot suspended ceiling tile Layer 2: Red paper backing	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	26C
P04250	Johnson Hall	0076	144	Floor tile	Layer 1: 12-inch red-green streaked vinyl floor tile Layer 2: Yellow mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	144, 144A, 144
P04251	Johnson Hall	0076	272	Wallboard system	Layer 1: 4-inch black cove base Layer 2: White cove base mastic	Misc.	-	SF	-	Layer 1: ND Layer 2: ND	No	Partition walls and corridor ceilings throughout
P04252	**Johnson Hall**	**0076**	**300C**	**Plaster**	Layer 1: White skim coat **Layer 2: White plaster base coat**	**Surf.**	**25**	**SF**	**Point count: < 1% ACT**	Layer 1: ND **Layer 2: <1% ACT**	**No**	**Patch plaster in stairwells 100A only**
P04253	**Johnson Hall**	**0076**	**404A**	**Roofing system**	**Layer 1: White lightweight concrete** **Layer 2: Black mastic**	**Surf.**	**200**	**SF**	**Sample P04254/P04255: 7% CHR tar layer**	**Layer 1: <1% TREM/ACT** **Layer 2: < 1% CHR**	**Yes**	**Residual material found around fume hood exhaust roof penetrations**
P04254	**Johnson Hall**	**0076**	**404A**	**Roofing system**	**Layer 1: White lightweight concrete** **Layer 2: Black mastic**	**Surf.**	**200**	**SF**	**Roof underlayment**	**Layer 1: <1% TREM/ACT** **Layer 2: 7% CHR**	**Yes**	**Residual material found around fume hood exhaust roof penetrations**
P04255	**Johnson Hall**	**0076**	**404A**	**Roofing system**	**Layer 1: White lightweight concrete** **Layer 2: Black mastic**	**Surf.**	**200**	**SF**	**Roof underlayment**	**Layer 1: <1% TREM/ACT** **Layer 2: 7% CHR**	**Yes**	**Residual material found around fume hood exhaust roof penetrations**
P04256	Johnson Hall	0076	186	Duct mastic	Gray duct mastic	Misc.	-	SF	-	ND	No	186
P04257	Johnson Hall	0076	186	Duct mastic	Gray duct mastic	Misc.	-	SF	-	ND	No	186
P04258	Johnson Hall Annex	0076	C100	Flooring mastic	Tan/brown laminate mastic	Misc.	-	SF	Ramp: Mastic under rubber laminate squares	ND	No	C100
Previous WSU Sampling												
B4354	**Johnson Hall**	**0076**	**104 E**	**Pipe insulation**	**Elbow/fitting insulation**	**TSI**	**4,500**	**EA**	**-**	**5-10% CHR**	**Yes**	**Hot water distribution piping throughout building (3-inch to 6-inch diameter)**

Notes:
* = Indicates sample layer was analyzed by 400-point count using EPA Method 600R-93/116
CHR = Chrysotile asbestos
AMO = Amosite asbestos
ND = Asbestos was not detected in sample
SF = Square feet
EA = Each
LF = Linear feet
Misc. = Miscellaneous material
Surf. = Surfacing material
TSI = Thermal systems insulation
ACM = Asbestos-containing material
Bold = Sample contains asbestos

APPENDIX C

Table Summary of Homogeneous Sampling Areas

TABLE SUMMARY OF HOMOGENEOUS SAMPLING AREAS

HSA	Sample #'s	Homogenous Material Description	Homogeneous Material Location(s)
Ceiling Finishes			
1	P04064 P04080 P04098 P04109 P04150 P04170 P04173 P04174	12-inch white drill hole ceiling tile with brown puck mastic	Dominant ceiling tile throughout building
2	P04218 P04231 P04232	12-inch drill hole ceiling tile (nailed to wall and ceiling)	Annex: C102 A, C1N
3	P04086 P04120	White tectum ceiling tile	Stairwells throughout the building
4	P04062 P04133 P04134 P04234 P04236 P04237	2 ft. by 4 ft. etch-pinhole suspended ceiling tile	34T, 130, 130A,144, 201, 204, 364
5	P04146 P04149 P04233	12-inch small pinhole ceiling tile with brown puck mastic	Laboratories in the first through 3rd floor
6	P04147	12-inch small pinhole ceiling tile with brown puck mastic (replacement tile to above)	126
7	P04143 P04249	2 ft. by 4 ft. etch pinhole suspended ceiling tile with red backing	26C
8	P04144 P04145 P04162 P04171	2 ft. by 4 ft. divot pinhole suspended ceiling tile	22, 34T, 143
9	P04199 P04248	12-inch small drill hole ceiling tile	Annex: C4
10	P04200 P04203 P04209	2 ft. by 4 ft. etch-pinhole suspended ceiling tile	Annex: C3, C113, C105
11	P04208 P04214 P04230	12-inch etch ceiling tile	Annex: C100, E100
12	**P04228** **P04229**	**2 ft. by 4 ft. etch-pinhole suspended ceiling tile (original tile)**	**Annex: C10VS, C10B**

Wall Finishes			
13	P04043 P04085 P04102	Red concrete masonry and gray mortar	Structural concrete masonry throughout
14	P04078 P04079 P04105 P04122 P04153 P04167 P04240 P04241	Plaster (sandy base coat with white brittle finish coat)	Common building plaster on structural walls in corridors and some interior walls in central laboratory rooms
15	P04100 P04105 P04138 P04139 P04142	Plaster (sandy base coat only)	Walk-in cooler/freezer rooms: 3, 5, 6, 6A, 6B, 6C, 7, 9, 11, 67, 69, 71A, 72A, 72C, 72D, 72E, 72F, 75A, 75B, 75C, 81, 83, 85, 101C, 168D, 168E, 320A, 352, 352A, 352B, 390, 392, 394, 394A
16	P04191 P04192 P04223	Plaster (sandy base coat only)	Annex: C12
17	P04220 P04221 P04222 P04224	Plaster (sandy base coat and finish coat)	Annex: C100, C1N
18	P04087 **P04111** **P04112** **P04113** **P04117** P04118 P04119 **P04121** **P04123** **P04124** P04140 **P04141** **P04152** **P04155** **P04157** P04168 **P04169** **P04177** **P04188**	**Skim coat/paint**	**Concrete and masonry structural walls – stairwells, ceiling cracks in central interior walls throughout (except penthouse**)

19	P04042 **P04082** **P04090** P04091 P04099 P04107 **P04110** **P04111** **P04137** **P04183** **P04184**	**Gypsum wallboard and joint compound**	**Partition walls and corridor ceilings throughout**
20	P04084 P04135 P04163	Peach ceramic wall tile and gray mortar	Restrooms and janitor closets throughout
21	P04042 P04078 P04079 P04091 P04106 P04108 P04110 P04111 P04121 P04137 P04153 P04167 P04240	4-inch black cove base and associated brown mastic	Dominant cove base throughout building
22	P04137 P04251	4-inch black cove base and associated creamy white mastic	272
23	P04121 P04123 P04124	4-inch brown vinyl cove base and associated mastic	250, 264
24	P04191 P04192 P04210 P04220 P04221 P04222 P04223 P04224	4-inch black vinyl cove base and associated brown cove base mastic	Annex: C12, C105, C100
25	P04202 P04204 P04210 P04217	Gypsum wallboard with joint compound	Annex: Partition walls throughout annex C1 through C30 (renovated area)
26	P04204 P04217 P04227	4-inch gray cove base and associated tan cove base mastic	Annex: Dominant cove base throughout annex

27	P04125 **P04126** P04127	**Gypsum wallboard and joint compound**	**Renovated area: 291 hallway and adjacent rooms**
28	**P04087** **P04252**	**Lightweight patch plaster (vermiculite added)**	**Stairwell 300 C (25 SF) with ACM skim coat on top**
29	P04164 P04165 P04166 P04180 P04181 P04182 P04242	Pebblecrete exterior cladding	Exterior of buildings
Floor Finishes			
30	P04114 P04115 P04116 P04206 P04215	Gray rolled-on sheet vinyl with woven backing and mastic	All stairwells, E100, C100, C107
31	**P04130** **P04131** **P04238**	**12-inch white with brown fleck vinyl floor tile and associated black mastic**	**202, 204,272**
32	P04219 P04225 P04247	12-inch white with tan streaked vinyl floor tile and associated yellow mastic	Annex: Renovated classrooms, offices, and hallways
33	P04226	12-inch white with light brown streaked vinyl floor tile and associated yellow mastic	C100B (repair area)
34	**P04154**	**12-inch tan with brown-white streak vinyl floor tile and associated black mastic**	**230A and 308A**
35	**P04172**	Pink and brown fleck sheet vinyl tile with yellow masti**c/residual black mastic**	**143**
36	P04179 P04187	12-inch white-gray streaked vinyl floor tile and associated black mastic	Stairwell landings: A, B, C
37	**P04216**	12-inch tan with burgundy streak vinyl floor tile and **associated black mastic**	**Annex: C5 (storage)**
38	P04235 P04250	12-inch red and green streak vinyl floor tile and yellow mastic	144, 144A, 144B
39	P04089 P04151	Gray vinyl floor with gray mastic (new)	Elevators
40	**P04239**	12-inch white with gray fleck vinyl floor tile and **residual black mastic**	**224, 237, 268, 291D, 364, 386, 388**
41	**P04063** P04068 **P04092** **P04148** P04178 **P04190**	**9-inch gray-green streaked vinyl tile and associated black mastic**	**Dominant floor tile throughout building**

42	P04067 P04068 P04176 P04178 P04185 P04190	Green carpet mastic	24 (9-inch VAT underneath)
43	P04207 P04258	Tan rubber laminate squares (tan/brown mastic)	Annex: C100 (ramp)
Thermal System Insulation			
44	**P04044** **P04045** **P04059** P04197 P04198 P04243	**Pipe insulation: Brown cork insulation with paper/foil wrap**	**Chilled water piping in 62 (vertical length of chase), penthouse, near cooler locations, annex mechanical room**
45	P04048 P04049 P04156 P04175 **B4354**	**Pipe insulation: Mudded/plaster fittings with yellow fiberglass/canvas/foil wrap on straight runs**	**Heating and laboratory hot water piping throughout building (3-inch to 6-inch diameter)**
46	**P04158** P04159 P04051 P04052 P04053 P04057 **P04058**	**Fiberglass duct insulation: White canvas wrap with mudded seams**	**Supply air ductwork throughout building**
47	P04050 P04054	Pipe insulation: Black foam and white canvas wrap	12 to 14-inch chilled water supply piping in basement and mechanical penthouse
48	**P04073**	**Tank insulation: Canvas wrap and hard white magnesia-type insulation**	**Penthouse – water expansion tank**
49	**P04081** P04096	**Pipe insulation: 8-inch black horse hair with black paper and asphaltic coating**	**Roof drain piping visible in 300 (corridor), B10, and pipe chases throughout building**
50	P04095 P04160 P04161	Water tank insulation sidewalls: cork, red paper, canvas	B4 (two 3,500-gallon tanks)
51	**P04093** **P04094**	**Water tank insulation ends: canvas and hard white magnesia insulation**	**B4 (two 3,500 gallon tanks)**
52	P04193 P04194 P04244	Fiberglass duct insulation: Canvas wrap with insulation	Annex: SF1A in C3M
53	P04197 P04198	Pipe insulation: Cork insulation with paper/foil wrap	Annex: Chilled water lines in C3M

54	P04205 P04245 P04246	Heat exchanger: Orange canvas wrap and foam insulation	Annex C201: Mechanical room
Other Materials			
55	**P04046** **P04047**	**Red duct mastic/caulk**	**Applied to uninsulated ductwork and door frame caulk in 36 and 62 air shafts**
56	P04055 **P04056**	**Gray mastic on fiberglass insulation anchor pins**	**Fiberglass insulation anchors on SF-1, SF-2 (penthouse) ductwork**
57	**P04060** **P04077** **P04083**	**Black duct mastic**	**Penthouse: Applied to seams on metal supply fan ductwork** **Ground through 4th floor: Applied to some insulated supply ductwork and metal fume hood exhaust ducting**
58	**P04061**	**Gray gasket caulk**	**Penthouse: chilled water tower (BAC unit)**
59	P04069	Gray-black gasket putty	Fume hood exhaust system
60	P04074 P04075	Cork sound proofing board with black mastic	Penthouse east wall
61	**P04065** P04066	**Sink under coating**	**Laboratory sinks (See figures 2, 4, 6, 8)**
62	P04070 P04071 P04072	Fume hood exhaust system: clay piping with black caulk (painted gray)	F200, F400, F500 exhaust system (penthouse)
63	P04076	Gray caulk/mastic (newer patch material)	Penthouse - ductwork
64	P04101 P04103 P04104	Black vapor barrier paper	Cooler room areas throughout (between wood ceiling and foam insulation)
65	**P04088** **P04132** **P04186** **P04201** P04211 **P04212** **P04213**	**Gray window glazing**	**Windows throughout the annex and full-height windows in stairwells of the main building**
66	**P04097** P04101 P04103 P04104	**Black mastic**	**Applied to blue foam insulation board construction around coolers throughout building**
67	**P04103** P04104	**White insulation with black mastic and vapor barrier**	**10W (at room 81)**

68	**P04128**	**Black laboratory counter top and gray caulk**	**Laboratories and classrooms throughout the building (See figures 2, 4, 6, 8)**
	P04129		
69	**P04136**	**Black laboratory drying rack**	**Laboratories and classrooms (See figures 2, 4, 6, 8)**
70	P04164	Gray caulk	Applied to exterior pebblecrete cladding joints
	P04165		
	P04166		
	P04180		
	P04181		
	P04182		
	P04242		
71	**P04195**	**Yellow duct mastic**	**Annex: SF1A in Room C3M**
	P04196		
72	P04253	**White lightweight concrete with black asphaltic coating**	**Fume hood roof penetrations throughout**
	P04254		
	P04255		
73	P04256	Gray duct mastic (exhaust)	186
	P04257		

Note: Bold type indicates sample/material that contains asbestos

APPENDIX D

Table Summary of Lead Paint Sampling

TABLE SUMMARY OF LEAD PAINT SAMPLING
JOHNSON HALL

Sample #	Building Name	Building #	Sample Location (Room #)	Paint Color	Substrate	Component	Results (mg/cm^2)	Lead-containing
X-01	Johnson Hall	0076	B1	Blue	Metal	Rotary compressor	0.0	No
X-02	**Johnson Hall**	**0076**	**B3**	**Brown**	**Metal**	**Door frame**	**0.05**	**Yes**
X-03	**Johnson Hall**	**0076**	**B4**	**Red**	**Metal**	**Tank end**	**0.04**	**Yes**
X-04	**Johnson Hall**	**0076**	**B1 EL**	**Brown-red**	**Metal**	**Elevator frame**	**0.08**	**Yes**
X-05	**Johnson Hall**	**0076**	**63**	**White**	**Gypsum wallboard**	**Wall**	**0.10**	**Yes**
X-06	**Johnson Hall**	**0076**	**10 hallway at 22**	**White**	**Plaster**	**Wall**	**0.4**	**Yes**
X-07	Johnson Hall	0076	45	White	Metal	Door frame	0.0	No
X-08	**Johnson Hall**	**0076**	**36**	**White**	**Metal**	**Door hatch**	**0.27**	**Yes**
X-09	**Johnson Hall**	**0076**	**31 S**	**White**	**CMU**	**Wall**	**0.7**	**Yes**
X-10	**Johnson Hall**	**0076**	**100 hallway at 132**	**White**	**Plaster**	**Wall**	**0.10**	**Yes**
X-11	**Johnson Hall**	**0076**	**112 T**	**White**	**Wood**	**Door**	**0.03**	**Yes**
X-12	**Johnson Hall**	**0076**	**100 B (stairwell)**	**Brown-red**	**Metal**	**Handrail**	**0.15**	**Yes**
X-13	**Johnson Hall**	**0076**	**174**	**Peach**	**Metal**	**Divider**	**0.08**	**Yes**
X-14	**Johnson Hall**	**0076**	**174**	**Light peach**	**Ceramic tile**	**Wall**	**0.02**	**Yes**
X-15	**Johnson Hall**	**0076**	**100 EL**	**Burgundy**	**Metal**	**Elevator frame**	**0.09**	**Yes**
X-16	**Johnson Hall**	**0076**	**292**	**White**	**Plaster**	**Wall**	**0.4**	**Yes**
X-17	**Johnson Hall**	**0076**	**200 B**	**White**	**Metal**	**Fire door**	**0.11**	**Yes**
X-18	**Johnson Hall**	**0076**	**229**	**White**	**Metal**	**Door frame**	**0.20**	**Yes**
X-19	**Johnson Hall**	**0076**	**200 C**	**White**	**Metal**	**Fire water line**	**0.40**	**Yes**
X-20	**Johnson Hall**	**0076**	**239**	**White**	**Wood**	**Door**	**0.10**	**Yes**
X-21	**Johnson Hall**	**0076**	**300 hallway at 360**	**White**	**Plaster**	**Wall**	**0.19**	**Yes**
X-22	**Johnson Hall**	**0076**	**380**	**White**	**Metal**	**Door frame**	**0.08**	**Yes**
X-23	**Johnson Hall**	**0076**	**313**	**White**	**Metal**	**Door**	**0.04**	**Yes**
X-24	Johnson Hall	0076	334	Light peach	Ceramic tile	Wall	0.0	No
X-25	**Johnson Hall**	**0076**	**402**	**Gray**	**Metal**	**Door**	**0.08**	**Yes**
X-26	**Johnson Hall**	**0076**	**402**	**Off-white**	**Metal**	**Door**	**0.05**	**Yes**
X-27	Johnson Hall	0076	401	Gray	Metal	Fan system	0.0	No
X-28	Johnson Hall	0076	Northwest exterior	Green-yellow	Concrete	Wall	0.0	No
X-29	**Johnson Hall Annex**	**0076**	**C12**	**White**	**Plaster**	**Wall**	**0.09**	**Yes**
X-30	**Johnson Hall Annex**	**0076**	**C1N at C5**	**White**	**Gypsum wallboard**	**Wall**	**0.10**	**Yes**
X-31	Johnson Hall Annex	0076	Southwest exterior	Green-yellow	Concrete	Wall	0.0	No

Notes:

a) Results by x-ray fluorescence (XRF) analysis are reported in milligrams per square centimeter (mg/cm^2)

b) **Bold** type indicates samples that contain lead

APPENDIX E

Asbestos Chain-of-Custody Forms and Laboratory Analytical Results

March 17, 2017

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1704489.00

Client Project: 9356-2017
Location: Johnson Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 30 sample(s) submitted to our laboratory for analysis on 3/13/2017.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

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 calibrated 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.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

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,

Nick Ly, Technical Director

Enc.: Sample Results

Lab Code: 102063-0

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17022992 **Client Sample #: P04042**
Location: Johnson Hall
Comments: No joint compound present

Layer 1 of 2	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** White chalky material with paper and paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Gypsum/Binder, Paint	Cellulose	24%	**None Detected ND**

Lab ID: 17022993 **Client Sample #: P04043**
Location: Johnson Hall

Layer 1 of 2	**Description:** Red brick			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Brick, Binder/Filler, Mineral grains	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Gray sandy/brittle material with fibrous mesh			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Sand, Mineral grains	Spider silk	2%	**None Detected ND**
	Miscellaneous particles	Cellulose	1%	

Lab ID: 17022994 **Client Sample #: P04044**
Location: Johnson Hall

Layer 1 of 2	**Description:** White fibrous material with foil and yellow mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Mastic/Binder, Metal foil	Cellulose	10%	**Chrysotile 54%**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2 **Description:** Brown cork

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Cork, Binder/Filler	None Detected	ND	**None Detected ND**

Lab ID: 17022995 **Client Sample #: P04045**
Location: Johnson Hall
Comments: No cork present.

Layer 1 of 2 **Description:** Yellow soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Mastic/Binder	Cellulose	4%	**None Detected ND**

Layer 2 of 2 **Description:** White fibrous material with foil and black mastic

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Metal foil, Asphalt/Binder	Cellulose	7%	**Chrysotile 56%**

Lab ID: 17022996 **Client Sample #: P04046**
Location: Johnson Hall

Layer 1 of 1 **Description:** Red/gray soft mastic with caulking material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Caulking compound, Mastic/Binder	Cellulose	2%	**Chrysotile 3%**

Lab ID: 17022997 **Client Sample #: P04047**
Location: Johnson Hall

Layer 1 of 1 **Description:** Red/gray soft mastic with caulking material and paint

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Caulking compound, Paint	Cellulose	1%	**Chrysotile 2%**
Mastic/Binder	Talc fibers	3%	

Lab ID: 17022998 **Client Sample #: P04048**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Project Location: Johnson Hall

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Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** Silver foil			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Metal foil	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Tan paper with asphalt			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Binder/Filler	Cellulose	77%	**None Detected ND**

Lab ID: 17022999 **Client Sample #: P04049**
Location: Johnson Hall

Layer 1 of 2	**Description:** Yellow fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	Glass fibers	77%	**None Detected ND**
Layer 2 of 2	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder	Cellulose	67%	**None Detected ND**

Lab ID: 17023000 **Client Sample #: P04050**
Location: Johnson Hall

Layer 1 of 4	**Description:** Black brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Synthetic foam	None Detected	ND	**None Detected ND**
Layer 2 of 4	**Description:** White soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	Cellulose	2%	**None Detected ND**
Layer 3 of 4	**Description:** Layered white paper with foil, mastic and interwoven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder, Metal foil	Cellulose	66%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Project Location: Johnson Hall

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Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Glass fibers 14%

Layer 4 of 4 **Description:** Black asphaltic mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder	Cellulose 2%	**None Detected ND**

Lab ID: 17023001 **Client Sample #: P04051**
Location: Johnson Hall

Layer 1 of 3 **Description:** Off-white woven fibrous with mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Mastic/Binder	Cellulose 67%	**None Detected ND**

Layer 2 of 3 **Description:** Gray powdery/fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Calcareous particles, Glass beads	Glass fibers 22%	**None Detected ND**

Layer 3 of 3 **Description:** Yellow fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Glass beads	Glass fibers 77%	**None Detected ND**

Lab ID: 17023002 **Client Sample #: P04052**
Location: Johnson Hall

Layer 1 of 2 **Description:** White woven fibrous material with mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Mastic/Binder	Cellulose 65%	**None Detected ND**

Layer 2 of 2 **Description:** Gray powdery/fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Calcareous particles, Glass beads	Glass fibers 26%	**None Detected ND**

Lab ID: 17023003 **Client Sample #: P04053**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder	Cellulose	67%	**None Detected ND**
Layer 2 of 2	**Description:** Gray powdery/fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Calcareous particles, Glass beads	Glass fibers	24%	**None Detected ND**

Lab ID: 17023004 **Client Sample #: P04054**
Location: Johnson Hall

Layer 1 of 3	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder	Cellulose	67%	**None Detected ND**
Layer 2 of 3	**Description:** White paper with foil, mastic and interwoven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Metal foil, Mastic/Binder	Cellulose	65%	**None Detected ND**
		Glass fibers	11%	
Layer 3 of 3	**Description:** Black brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Synthetic foam	None Detected	ND	**None Detected ND**

Lab ID: 17023005 **Client Sample #: P04055**
Location: Johnson Hall

Layer 1 of 2	**Description:** Gray brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder	Cellulose	3%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2	**Description:** Yellow/orange fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	Glass fibers	77%	**None Detected ND**

Lab ID: 17023006 **Client Sample #: P04056**
Location: Johnson Hall
Comments: No orange duct insulation present.

Layer 1 of 1	**Description:** Gray soft mastic with rusted material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Metal	Cellulose	4%	**Chrysotile 3%**

Lab ID: 17023007 **Client Sample #: P04057**
Location: Johnson Hall
Comments: Unsure of correct layer sequence.

Layer 1 of 4	**Description:** Layered white paper with mastic and interwoven fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder, Metal foil	Cellulose	65%	**None Detected ND**
		Glass fibers	11%	
Layer 2 of 4	**Description:** White fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder	Cellulose	67%	**None Detected ND**
Layer 3 of 4	**Description:** Yellow fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	Glass fibers	66%	**None Detected ND**
Layer 4 of 4	**Description:** White woven fibrous material with powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Calcareous particles	Glass fibers	77%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17023008 **Client Sample #: P04058**
Location: Johnson Hall

Layer 1 of 3	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder	Cellulose	67%	**None Detected ND**
Layer 2 of 3	**Description:** Yellow fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Glass beads	Glass fibers	76%	**None Detected ND**
Layer 3 of 3	**Description:** Gray powdery material with fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Calcareous particles	Cellulose	5%	**Chrysotile 35%**
		Glass fibers	2%	**Amosite 2%**

Lab ID: 17023009 **Client Sample #: P04059**
Location: Johnson Hall

Layer 1 of 2	**Description:** Brown cork			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Layered white paper with foil and mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mastic/Binder, Metal foil	Cellulose	7%	**Chrysotile 54%**

Lab ID: 17023010 **Client Sample #: P04060**
Location: Johnson Hall

Layer 1 of 2	**Description:** Black soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	Cellulose	2%	**Chrysotile 2%**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2 **Description:** Trace yellow fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	Glass fibers 50%	**None Detected ND**

Lab ID: 17023011 **Client Sample #: P04061**
Location: Johnson Hall

Layer 1 of 1 **Description:** Gray soft caulking material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Caulking compound	Cellulose 2%	**Chrysotile 3%**

Lab ID: 17023012 **Client Sample #: P04062**
Location: Johnson Hall

Layer 1 of 1 **Description:** Gray fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Glass beads	Cellulose 35%	**None Detected ND**
	Glass fibers 31%	

Lab ID: 17023013 **Client Sample #: P04063**
Location: Johnson Hall

Layer 1 of 3 **Description:** Brown soft mastic with fibrous mesh

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Binder/Filler	Cellulose 3%	**None Detected ND**
	Synthetic fibers 4%	
	Glass fibers 2%	

Layer 2 of 3 **Description:** Gray/green vinyl tile with white streaks

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Mineral grains	Cellulose 2%	**Chrysotile 3%**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 3 of 3 **Description:** Black asphaltic mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder	Cellulose 2%	**Chrysotile 4%**

Lab ID: 17023014 **Client Sample #: P04064**
Location: Johnson Hall

Layer 1 of 1 **Description:** Tan fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Wood flakes, Paint	Cellulose 55%	**None Detected ND**
	Wood fibers 15%	

Lab ID: 17023015 **Client Sample #: P04065**
Location: Johnson Hall

Layer 1 of 1 **Description:** Black asphaltic flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Binder/Filler	Cellulose 3%	**Chrysotile 3%**

Lab ID: 17023016 **Client Sample #: P04066**
Location: Johnson Hall

Layer 1 of 1 **Description:** Black asphaltic flaky material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Binder/Filler	Cellulose 2%	**None Detected ND**

Lab ID: 17023017 **Client Sample #: P04067**
Location: Johnson Hall

Layer 1 of 1 **Description:** Green soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	Cellulose 2%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17023018 **Client Sample #: P04068**
Location: Johnson Hall

Layer 1 of 3 **Description:** Green soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Mastic/Binder	Synthetic fibers	2%	**None Detected ND**
	Cellulose	1%	

Layer 2 of 3 **Description:** Gray vinyl tile

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Vinyl/Binder, Mineral grains	Cellulose	2%	**None Detected ND**

Layer 3 of 3 **Description:** Black asphaltic mastic

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Asphalt/Binder	Cellulose	1%	**None Detected ND**
	Polyethylene fibers	5%	

Lab ID: 17023019 **Client Sample #: P04069**
Location: Johnson Hall

Layer 1 of 1 **Description:** Gray/black brittle putty material

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Binder/Filler, Putty Compound, Calcareous particles	Cellulose	2%	**None Detected ND**

Lab ID: 17023020 **Client Sample #: P04070**
Location: Johnson Hall

Layer 1 of 2 **Description:** Black brittle coating material with gray paint

Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
Asphalt/Binder, Binder/Filler, Paint	Cellulose	2%	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704489.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2	**Description:** Red brick			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Brick, Calcareous binder, Binder/Filler	None Detected	ND	**None Detected ND**

Lab ID: 17023021 **Client Sample #: P04071**
Location: Johnson Hall

Layer 1 of 2	**Description:** Black brittle coating material with white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Binder/Filler, Paint	Cellulose	1%	**None Detected ND**
Layer 2 of 2	**Description:** Red brick			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Brick, Binder/Filler, Calcareous binder	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Lori Tseng **Date:** 03/16/2017
Reviewed by: Nick Ly **Date:** 03/17/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1704489.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 3/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	17022992	P04042		A
2	17022993	P04043		A
3	17022994	P04044		A
4	17022995	P04045		A
5	17022996	P04046		A
6	17022997	P04047		A
7	17022998	P04048		A
8	17022999	P04049		A
9	17023000	P04050		A
10	17023001	P04051		A
11	17023002	P04052		A
12	17023003	P04053		A
13	17023004	P04054		A
14	17023005	P04055		A
15	17023006	P04056		A
16	17023007	P04057		A
17	17023008	P04058		A
18	17023009	P04059		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	3/13/17	0900
Analyzed by	Lori Tseng		NVL	3/16/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions: See Clients COC for Reporting Instructions

Date: 3/13/2017
Time: 1:39 PM
Entered By: Mohammed Jamal

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1704489.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 3/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	17023010	P04060		A
20	17023011	P04061		A
21	17023012	P04062		A
22	17023013	P04063		A
23	17023014	P04064		A
24	17023015	P04065		A
25	17023016	P04066		A
26	17023017	P04067		A
27	17023018	P04068		A
28	17023019	P04069		A
29	17023020	P04070		A
30	17023021	P04071		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	3/13/17	0900
Analyzed by	Lori Tseng		NVL	3/16/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions: See Clients COC for Reporting Instructions

Date: 3/13/2017
Time: 1:39 PM
Entered By: Mohammed Jamal

1704489

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ASBESTOS CHAIN OF CUSTODY

Turn Around Time
- ☐ 1 Hour
- ☐ 2 Hours
- ☐ 4 Hours
- ☐ 24 Hours
- ☐ 2 Days
- ☐ 3 Days
- ☐ 4 Days
- ☑ 5 Days
- ☐ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172, Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 9356-2017
Project Location: Johnson Hall

- ☐ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ☐ PLM Gravimetry (600/R-93-116)
- ☐ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ☐ TEM (NIOSH 7402)
- ☐ EPA 400 Points (600/R-93-116)
- ☐ Asbestos in Vermiculite (EPA 600/R-04/004)
- ☐ TEM (AHERA)
- ☐ Other
- ☐ TEM (EPA Level II Modified)
- ☐ EPA 1000Points (600/R-93-116)
- ☐ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
☐ Call ( ) - ☐ Fax ( ) - ☐ Email: mrmckibbin@wsu.edu

Total Number of Samples _____

	Sample ID	Description	A/R
1	P04042	see attached data sheets	
2			
3			
4			
5			
6			
7			
8			
9		P04099: analyze the sample by a composite and as separate	
10		layers.	
11			
12		P04107: analyze the sample by a composite and as separate layers.	
13			
14			
15	P04109		

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	3-9-17	14:30
Relinquish by	Stephan Gilley		WSU EH&S	3-10-17	08:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by			NVL Labs	3/13/17	9:00am fedex
Analyzed by					
Called by					
Faxed/Email by					

March 17, 2017

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

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Laboratory | Management | Training

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1704491.00

Client Project: 9356-2017
Location: Johnson Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 38 sample(s) submitted to our laboratory for analysis on 3/13/2017.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

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 calibrated 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.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

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,

Lori Tseng, Laboratory Analyst

Enc.: Sample Results

NVLAP Lab Code: 102063-0

1.888.NVL.LABS
1.888.(685.5227)
www.nvllabs.com

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704491.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 38
Samples Analyzed: 38
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17023023 **Client Sample #: P04072**
Location: Johnson Hall
Comments: Unsure of correct layer sequence.

Layer 1 of 3	**Description:** Black brittle asphaltic material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Asphalt/Binder, Fine particles, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Black tar			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Asphalt/Binder	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Red brick			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler	None Detected	ND	**None Detected ND**

Lab ID: 17023024 **Client Sample #: P04073**
Location: Johnson Hall

Layer 1 of 2	**Description:** White woven fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Paint	Cellulose	90%	**None Detected ND**
Layer 2 of 2	**Description:** Off-white fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler	None Detected	ND	**Chrysotile 55%**
				Amosite 4%

Lab ID: 17023025 **Client Sample #: P04074**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704491.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 38
Samples Analyzed: 38
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Brown soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork	None Detected	ND	**None Detected ND**

Lab ID: 17023026 **Client Sample #: P04075**
Location: Johnson Hall

Layer 1 of 2	**Description:** Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Brown soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork	None Detected	ND	**None Detected ND**

Lab ID: 17023027 **Client Sample #: P04076**
Location: Johnson Hall

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

Lab ID: 17023028 **Client Sample #: P04077**
Location: Johnson Hall

Layer 1 of 1	**Description:** Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	Cellulose	1%	**Chrysotile 5%**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

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

Lab ID: 17023029 **Client Sample #: P04078**
Location: Johnson Hall

Layer 1 of 4	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Talc fibers	3%	**None Detected ND**
Layer 2 of 4	**Description:** White brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**
Layer 3 of 4	**Description:** Off-white brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Perlite	Cellulose	4%	**None Detected ND**
Layer 4 of 4	**Description:** Gray sandy material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Sand	None Detected	ND	**None Detected ND**

Lab ID: 17023030 **Client Sample #: P04079**
Location: Johnson Hall

Layer 1 of 4	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 4	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Talc fibers	4%	**None Detected ND**
Layer 3 of 4	**Description:** White brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

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

Layer 4 of 4 **Description:** Off-white brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Binder/Filler, Perlite	Cellulose 2%	**None Detected ND**

Lab ID: 17023031 **Client Sample #: P04080**
Location: Johnson Hall

Layer 1 of 2 **Description:** Brown compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Adhesive/Binder, Paint	Cellulose 95%	**None Detected ND**

Layer 2 of 2 **Description:** Dark brown brittle mastic

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

Lab ID: 17023032 **Client Sample #: P04081**
Location: Johnson Hall

Layer 1 of 3 **Description:** Black asphaltic fibrous paper

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder	Cellulose 70%	**None Detected ND**

Layer 2 of 3 **Description:** Black asphaltic mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Mastic/Binder	Cellulose 3%	**Chrysotile 4%**

Layer 3 of 3 **Description:** Brown fibrous material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine grains	Hair 90%	**None Detected ND**
	Cellulose 7%	

Lab ID: 17023033 **Client Sample #: P04082**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

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Samples Analyzed: 38
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

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

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous particles, Binder/Filler	Cellulose 52%	**Chrysotile 3%**

Layer 2 of 2 **Description:** White chalky material with paper

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Gypsum/Binder, Mica	Cellulose 17%	**None Detected ND**
	Glass fibers 3%	

Lab ID: 17023034 **Client Sample #: P04083**
Location: Johnson Hall

Layer 1 of 1 **Description:** Black soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	None Detected ND	**Chrysotile 5%**

Lab ID: 17023035 **Client Sample #: P04084**
Location: Johnson Hall

Layer 1 of 1 **Description:** Gray brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Mineral grains, Mica	None Detected ND	**None Detected ND**

Lab ID: 17023036 **Client Sample #: P04085**
Location: Johnson Hall

Layer 1 of 2 **Description:** Red brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** Gray brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Mineral grains, Mica	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

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

Lab ID: 17023037 **Client Sample #: P04086**
Location: Johnson Hall

Layer 1 of 1	**Description:** Beige bundles fibrous material with gray coating and paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	Cellulose	80%	**None Detected ND**

Lab ID: 17023038 **Client Sample #: P04087**
Location: Johnson Hall

Layer 1 of 3	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler, Perlite	None Detected	ND	**None Detected ND**
	Paint			
Layer 2 of 3	**Description:** White brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Paint	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Off-white brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Vermiculite	None Detected	ND	**Actinolite <1%**

Lab ID: 17023039 **Client Sample #: P04088**
Location: Johnson Hall

Layer 1 of 2	**Description:** Gray soft putty material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler	None Detected	ND	**Chrysotile 6%**
Layer 2 of 2	**Description:** Gray putty material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

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

Lab ID: 17023040 **Client Sample #: P04089**
Location: Johnson Hall

Layer 1 of 2	**Description:** White soft mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder	Cellulose	3%	**None Detected**	**ND**
Layer 2 of 2	**Description:** Gray crumbly material with trace brown fibrous material				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Calcareous particles, Binder/Filler, Fine particles	Cellulose	8%	**None Detected**	**ND**

Lab ID: 17023041 **Client Sample #: P04090**
Location: Johnson Hall

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	**Chrysotile**	**2%**
Layer 2 of 2	**Description:** White chalky material with paper				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Fine particles, Gypsum/Binder, Mica	Cellulose	17%	**None Detected**	**ND**
		Glass fibers	4%		

Lab ID: 17023042 **Client Sample #: P04091**
Location: Johnson Hall

Layer 1 of 3	**Description:** Black rubbery material with trace adhesive				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Rubber/Binder, Adhesive/Binder	None Detected	ND	**None Detected**	**ND**
Layer 2 of 3	**Description:** Brown brittle mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder	Cellulose	1%	**None Detected**	**ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

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			Talc fibers 3%	
Layer 3 of 3	**Description:** Trace 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**

Lab ID: 17023043 **Client Sample #: P04092**
Location: Johnson Hall

Layer 1 of 2	**Description:** Gray tile			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Vinyl/Binder, Calcareous particles	None Detected ND		**Chrysotile 5%**
Layer 2 of 2	**Description:** Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	None Detected ND		**Chrysotile 6%**

Lab ID: 17023044 **Client Sample #: P04093**
Location: Johnson Hall

Layer 1 of 3	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose 80%		**None Detected ND**
Layer 2 of 3	**Description:** White fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler, Mastic/Binder	None Detected ND		**Chrysotile 60%**
Layer 3 of 3	**Description:** Brown soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork	None Detected ND		**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

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

Lab ID: 17023045 **Client Sample #: P04094**
Location: Johnson Hall
Comments: Unsure of correct layer sequence.

Layer 1 of 3	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose	85%	**None Detected ND**
Layer 2 of 3	**Description:** White/light gray fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler, Glass beads	Glass fibers	15%	**Chrysotile 48%**
Layer 3 of 3	**Description:** Brown soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork	None Detected	ND	**None Detected ND**

Lab ID: 17023046 **Client Sample #: P04095**
Location: Johnson Hall

Layer 1 of 2	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose	87%	**None Detected ND**
Layer 2 of 2	**Description:** Pink fibrous paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Adhesive/Binder	Cellulose	90%	**None Detected ND**
		Hair	5%	

Lab ID: 17023047 **Client Sample #: P04096**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

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Layer 1 of 2	**Description:** Black asphaltic fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder	Cellulose	78%	**None Detected ND**
Layer 2 of 2	**Description:** Brown fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles	Hair	98%	**None Detected ND**

Lab ID: 17023048 **Client Sample #: P04097**
Location: Johnson Hall

Layer 1 of 2	**Description:** Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	None Detected	ND	**Chrysotile 4%**
Layer 2 of 2	**Description:** White foamy material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Synthetic foam	None Detected	ND	**None Detected ND**

Lab ID: 17023049 **Client Sample #: P04098**
Location: Johnson Hall

Layer 1 of 2	**Description:** Tan compressed fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Adhesive/Binder	Cellulose	98%	**None Detected ND**
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: 17023050 **Client Sample #: P04099**
Location: Johnson Hall

Comments: Composite result (per client request) for whole sample is less than 1% asbestos.

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704491.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 38
Samples Analyzed: 38
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 3	**Description:** Trace off-white compacted powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous particles, Binder/Filler	None Detected	ND	**Chrysotile 2%**
Layer 2 of 3	**Description:** Off-white compacted powdery material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous particles, Binder/Filler	Cellulose	35%	**Chrysotile 3%**
Layer 3 of 3	**Description:** White chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Gypsum/Binder, Mica	Cellulose	18%	**None Detected ND**
		Glass fibers	4%	

Lab ID: 17023051 **Client Sample #: P04100**
Location: Johnson Hall

Layer 1 of 2	**Description:** Brown paper with fibrous mesh and black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Asphalt/Binder, Mastic/Binder	Cellulose	65%	**None Detected ND**
		Glass fibers	8%	
Layer 2 of 2	**Description:** White brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler, Perlite	Cellulose	4%	**None Detected ND**
		Glass fibers	3%	

Lab ID: 17023052 **Client Sample #: P04101**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Address: PO Box 641172
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Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704491.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 38
Samples Analyzed: 38
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** Tan paper with black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Asphalt/Binder, Mastic/Binder	Cellulose	80%	**None Detected ND**
Layer 2 of 2	**Description:** Silver foil with thin yellow mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Metal foil, Mastic/Binder	None Detected	ND	**None Detected ND**

Lab ID: 17023053 **Client Sample #: P04102**
Location: Johnson Hall

Layer 1 of 2	**Description:** Dark red hard brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Light gray brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mineral grains	None Detected	ND	**None Detected ND**

Lab ID: 17023054 **Client Sample #: P04103**
Location: Johnson Hall
Comments: Unsure of correct layer sequence.

Layer 1 of 3	**Description:** Brown paper with fibrous mesh and black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Asphalt/Binder, Mastic/Binder	Cellulose	55%	**None Detected ND**
		Glass fibers	12%	
Layer 2 of 3	**Description:** Trace white brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Binder/Filler, Perlite	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704491.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 38
Samples Analyzed: 38
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 3 of 3 **Description:** White foamy material with black asphaltic mastic

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

Lab ID: 17023055 **Client Sample #: P04104**
Location: Johnson Hall

Layer 1 of 3 **Description:** Brown paper with fibrous mesh and black asphaltic mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Asphalt/Binder, Mastic/Binder	Cellulose 60%	**None Detected ND**
	Glass fibers 10%	

Layer 2 of 3 **Description:** Black asphaltic mastic

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

Layer 3 of 3 **Description:** White foamy material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Synthetic/Binder	None Detected ND	**None Detected ND**

Lab ID: 17023056 **Client Sample #: P04105**
Location: Johnson Hall

Layer 1 of 2 **Description:** White brittle material with trace paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Binder/Filler, Paint	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** Off-white brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Binder/Filler, Perlite	None Detected ND	**None Detected ND**

Lab ID: 17023057 **Client Sample #: P04106**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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By Polarized Light Microscopy

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Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704491.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 38
Samples Analyzed: 38
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 3	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Clear soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Brown brittle mastic with layered paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Paint	Wollastonite	3%	**None Detected ND**

Lab ID: 17023058 **Client Sample #: P04107**
Location: Johnson Hall
Comments: Composite result (per client request) for whole sample is less than 1% asbestos.

Layer 1 of 2	**Description:** Off-white compacted powdery material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous particles, Binder/Filler	Cellulose	30%	**Chrysotile 2%**
Layer 2 of 2	**Description:** White chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Gypsum/Binder, Mica	Cellulose	14%	**None Detected ND**
		Glass fibers	5%	

Lab ID: 17023059 **Client Sample #: P04108**
Location: Johnson Hall

Layer 1 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1704491.00
Client Project #: 9356-2017
Date Received: 3/13/2017
Samples Received: 38
Samples Analyzed: 38
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2 **Description:** Tan paper with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Adhesive/Binder, Paint	Cellulose 96%	**None Detected ND**

Lab ID: 17023060 **Client Sample #: P04109**

Location: Johnson Hall

Layer 1 of 2 **Description:** Tan compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Adhesive/Binder, Paint	Cellulose 95%	**None Detected ND**

Layer 2 of 2 **Description:** Brown brittle mastic

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

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 03/17/2017
Reviewed by: Lori Tseng **Date:** 03/17/2017

Lori Tseng, Laboratory Analyst

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1704491.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 3/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 38 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	17023023	P04072		A
2	17023024	P04073		A
3	17023025	P04074		A
4	17023026	P04075		A
5	17023027	P04076		A
6	17023028	P04077		A
7	17023029	P04078		A
8	17023030	P04079		A
9	17023031	P04080		A
10	17023032	P04081		A
11	17023033	P04082		A
12	17023034	P04083		A
13	17023035	P04084		A
14	17023036	P04085		A
15	17023037	P04086		A
16	17023038	P04087		A
17	17023039	P04088		A
18	17023040	P04089		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	3/13/17	0900
Analyzed by	Nadezhda		NVL	3/17/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions: See Client COC

Date: 3/13/2017
Time: 1:51 PM
Entered By: Mohammed Jamal

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1704491.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 3/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 38 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	17023041	P04090		A
20	17023042	P04091		A
21	17023043	P04092		A
22	17023044	P04093		A
23	17023045	P04094		A
24	17023046	P04095		A
25	17023047	P04096		A
26	17023048	P04097		A
27	17023049	P04098		A
28	17023050	P04099		A
29	17023051	P04100		A
30	17023052	P04101		A
31	17023053	P04102		A
32	17023054	P04103		A
33	17023055	P04104		A
34	17023056	P04105		A
35	17023057	P04106		A
36	17023058	P04107		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	3/13/17	0900
Analyzed by	Nadezhda		NVL	3/17/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions: See Client COC

Date: 3/13/2017
Time: 1:51 PM
Entered By: Mohammed Jamal

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Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1704491.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 3/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 38 Rush Samples

	Lab ID	Sample ID	Description	A/R
37	17023059	P04108		A
38	17023060	P04109		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	3/13/17	0900
Analyzed by	Nadezhda		NVL	3/17/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions: See Client COC

Date: 3/13/2017
Time: 1:51 PM
Entered By: Mohammed Jamal

April 12, 2017

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1705869.00

Client Project: 9356-2017
Location: Johnson Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 30 sample(s) submitted to our laboratory for analysis on 4/3/2017.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

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 calibrated 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.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

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,

Nick Ly, Technical Director

Enc.: Sample Results

Lab Code: 102063-0

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1705869.00
Client Project #: 9356-2017
Date Received: 4/3/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17030615 **Client Sample #: P04110**
Location: Johnson Hall

Layer 1 of 3	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Brittle brown mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Cellulose	<1%	**None Detected ND**
Layer 3 of 3	**Description:** Off-white compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Paint	None Detected	ND	**Chrysotile 2%**

Lab ID: 17030616 **Client Sample #: P04111**
Location: Johnson Hall

Layer 1 of 2	**Description:** Crumbly brown mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Paint	None Detected	ND	**Chrysotile 3%**

Lab ID: 17030617 **Client Sample #: P04112**
Location: Johnson Hall

Layer 1 of 1	**Description:** White compacted brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Fine particles, Organic debris	Cellulose	2%	**Chrysotile 2%**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1705869.00
Client Project #: 9356-2017
Date Received: 4/3/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Lab ID: 17030618 **Client Sample #: P04113**
Location: Johnson Hall

Layer 1 of 1 **Description:** White compacted powdery material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous binder, Paint, Fine grains	Cellulose <1%	**Chrysotile 3%**
Cementitious particles, Organic debris		

Lab ID: 17030619 **Client Sample #: P04114**
Location: Johnson Hall

Layer 1 of 1 **Description:** Grey crumbly vinyl with tan woven embedded crumbly fibrous mesh

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine grains, Miscellaneous particles	Cellulose 36%	**None Detected ND**
Organic debris		

Lab ID: 17030620 **Client Sample #: P04115**
Location: Johnson Hall

Layer 1 of 1 **Description:** Grey crumbly vinyl

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine grains	Cellulose 5%	**None Detected ND**

Lab ID: 17030621 **Client Sample #: P04116**
Location: Johnson Hall

Layer 1 of 1 **Description:** Grey crumbly vinyl with tan woven fibrous mesh

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Fine grains, Fine particles	Cellulose 25%	**None Detected ND**
Miscellaneous particles		

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1705869.00
Client Project #: 9356-2017
Date Received: 4/3/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17030622 **Client Sample #: P04117**
Location: Johnson Hall

Layer 1 of 2	**Description:** White compacted brittle material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Calcareous binder, Paint	None Detected	ND	**None Detected**	**ND**
Layer 2 of 2	**Description:** White compacted powdery material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Calcareous binder, Paint	None Detected	ND	**Chrysotile**	**4%**

Lab ID: 17030623 **Client Sample #: P04118**
Location: Johnson Hall

Layer 1 of 1	**Description:** White compacted brittle material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Calcareous binder, Paint, Fine grains	None Detected	ND	**None Detected**	**ND**
	Fine particles				

Lab ID: 17030624 **Client Sample #: P04119**
Location: Johnson Hall

Layer 1 of 2	**Description:** Crumbly brittle mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder	None Detected	ND	**None Detected**	**ND**
Layer 2 of 2	**Description:** White brittle sandy material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Calcareous binder, Paint, Sand	None Detected	ND	**None Detected**	**ND**
	Fine grains, Fine particles				

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1705869.00
Client Project #: 9356-2017
Date Received: 4/3/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17030625 **Client Sample #: P04120**
Location: Johnson Hall

Layer 1 of 1	**Description:** Tan/grey crumbly fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Paint, Fine grains	Wood fibers	40%	**None Detected ND**

Lab ID: 17030626 **Client Sample #: P04121**
Location: Johnson Hall

Layer 1 of 3	**Description:** Brittle brown mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Paint	None Detected	ND	**Chrysotile 2%**
Layer 3 of 3	**Description:** Grey brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Cement/Binder, Fine grains, Mineral grains	None Detected	ND	**None Detected ND**

Lab ID: 17030627 **Client Sample #: P04122**
Location: Johnson Hall

Layer 1 of 2	**Description:** White compacted brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Off-white crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Fine grains	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1705869.00
Client Project #: 9356-2017
Date Received: 4/3/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17030628 **Client Sample #: P04123**
Location: Johnson Hall

Layer 1 of 1	**Description:** Off-white compacted powdery material with paint		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous binder, Paint, Fine grains		**Chrysotile 2%**

Lab ID: 17030629 **Client Sample #: P04124**
Location: Johnson Hall

Layer 1 of 2	**Description:** White compacted powdery material with paint		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous binder, Paint	Cellulose <1%	**Chrysotile 4%**
Layer 2 of 2	**Description:** Grey brittle material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Cement/Binder, Mineral grains, Fine grains Calcareous particles	None Detected ND	**None Detected ND**

Lab ID: 17030630 **Client Sample #: P04125**
Location: Johnson Hall

Layer 1 of 3	**Description:** Off-white compacted powdery material		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous binder	None Detected ND	**None Detected ND**
Layer 2 of 3	**Description:** Off-white compacted powdery material with paper		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Calcareous binder	Cellulose 35%	**None Detected ND**
Layer 3 of 3	**Description:** White chalky material with paper		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Gypsum/Binder	Cellulose 12%	**None Detected ND**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1705869.00
Client Project #: 9356-2017
Date Received: 4/3/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

			Glass fibers 2%	

Lab ID: 17030631 **Client Sample #: P04126**
Location: Johnson Hall

Layer 1 of 2	**Description:** Off-white compacted powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder	Cellulose 1%		**Chrysotile 2%**
Layer 2 of 2	**Description:** Chalky white material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Gypsum/Binder	Cellulose 10%		**None Detected ND**
		Glass fibers 2%		

Lab ID: 17030632 **Client Sample #: P04127**
Location: Johnson Hall

Layer 1 of 2	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder, Paint	Cellulose 2%		**None Detected ND**
Layer 2 of 2	**Description:** Chalky white material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Gypsum/Binder	Cellulose 10%		**None Detected ND**
		Glass fibers 2%		

Lab ID: 17030633 **Client Sample #: P04128**
Location: Johnson Hall

Layer 1 of 1	**Description:** Loose grey crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine grains, Binder/Filler	None Detected ND		**Chrysotile 19%**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1705869.00
Client Project #: 9356-2017
Date Received: 4/3/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17030634 **Client Sample #: P04129**
Location: Johnson Hall

Layer 1 of 1	**Description:** Black brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine grains	Glass fibers	2%	**None Detected ND**

Lab ID: 17030635 **Client Sample #: P04130**
Location: Johnson Hall
Comments: Unable to separate mastics for analysis. Asbestos primarily concentrated in black mastic.

Layer 1 of 2	**Description:** Light grey vinyl tile			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder, Mineral grains	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Soft sticky yellow translucent mastic with crumbly black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Asphalt/Binder	Cellulose	<1%	**Chrysotile 3%**

Lab ID: 17030636 **Client Sample #: P04131**
Location: Johnson Hall

Layer 1 of 2	**Description:** Light grey vinyl tile			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder, Mineral grains	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Soft sticky black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Asphalt/Binder	Cellulose	<1%	**Chrysotile 2%**

Lab ID: 17030637 **Client Sample #: P04132**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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Client Project #: 9356-2017
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Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 1 **Description:** Grey crumbly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains	None Detected ND	**Chrysotile 4%**

Lab ID: 17030638 **Client Sample #: P04133**
Location: Johnson Hall

Layer 1 of 1 **Description:** Grey crumbly fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Perlite	Cellulose 60%	**None Detected ND**
Calcareous particles	Glass fibers 7%	

Lab ID: 17030639 **Client Sample #: P04134**
Location: Johnson Hall

Layer 1 of 1 **Description:** Crumbly grey fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Perlite	Cellulose 64%	**None Detected ND**
	Glass fibers 8%	

Lab ID: 17030640 **Client Sample #: P04135**
Location: Johnson Hall

Layer 1 of 2 **Description:** Tan brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Ceramic/Binder, Fine grains	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** Grey crumbly sandy material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Cement/Binder, Fine grains, Sand	Cellulose <1%	**None Detected ND**
	Synthetic fibers 3%	

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17030641 **Client Sample #: P04136**
Location: Johnson Hall

Layer 1 of 1	**Description:** Grey crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cement/Binder, Fine grains	None Detected	ND	**Chrysotile 24%**

Lab ID: 17030642 **Client Sample #: P04137**
Location: Johnson Hall

Layer 1 of 4	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Rubber/Binder, Fine grains	None Detected	ND	**None Detected ND**
Layer 2 of 4	**Description:** Tacky yellow mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 3 of 4	**Description:** Off-white crumbly powdery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder	Cellulose	1%	**Chrysotile 3%**
Layer 4 of 4	**Description:** White chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Gypsum/Binder	Cellulose	11%	**None Detected ND**
		Glass fibers	2%	

Lab ID: 17030643 **Client Sample #: P04138**
Location: Johnson Hall

Layer 1 of 1	**Description:** Off-white sandy brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder, Sand, Mineral grains	Cellulose	2%	**None Detected ND**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1705869.00
Client Project #: 9356-2017
Date Received: 4/3/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116
& EPA/600/M4-82-020

Fine grains, Miscellaneous particles, Fine particles

Lab ID: 17030644 **Client Sample #: P04139**
Location: Johnson Hall

Layer 1 of 1 **Description:** Light grey sandy brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous binder, Sand, Mineral grains	Cellulose 1%	**None Detected ND**
Fine particles		

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/07/2017
Reviewed by: Nick Ly **Date:** 04/12/2017

Nick Ly, Technical Director

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1705869.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/10/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	17030615	P04110		A
2	17030616	P04111		A
3	17030617	P04112		A
4	17030618	P04113		A
5	17030619	P04114		A
6	17030620	P04115		A
7	17030621	P04116		A
8	17030622	P04117		A
9	17030623	P04118		A
10	17030624	P04119		A
11	17030625	P04120		A
12	17030626	P04121		A
13	17030627	P04122		A
14	17030628	P04123		A
15	17030629	P04124		A
16	17030630	P04125		A
17	17030631	P04126		A
18	17030632	P04127		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/3/17	0900
Analyzed by	Matt Macfarlane		NVL	4/7/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/3/2017
Time: 12:20 PM
Entered By: Umer Khan

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p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1705869.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/10/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	17030633	P04128		A
20	17030634	P04129		A
21	17030635	P04130		A
22	17030636	P04131		A
23	17030637	P04132		A
24	17030638	P04133		A
25	17030639	P04134		A
26	17030640	P04135		A
27	17030641	P04136		A
28	17030642	P04137		A
29	17030643	P04138		A
30	17030644	P04139		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/3/17	0900
Analyzed by	Matt Macfarlane		NVL	4/7/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/3/2017
Time: 12:20 PM
Entered By: Umer Khan

1705869

NVL LABS INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

Turn Around Time
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 24 Hours
- ❑ 2 Days
- ❑ 3 Days
- ❑ 4 Days
- ☑ 5 Days
- ❑ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 9356-2017
Project Location: Johnson Hall

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email: mrmckibbin@wsu.edu

Total Number of Samples _____

	Sample ID	Description	A/R
1	P04110	see attached data sheets	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15	P04159		

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	3-29-17	11:30
Relinquish by	Stephan Gilley		WSU EH&S	3-30-17	14:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Mohamed J		NVL	4/3/17	9:00 Fedex
Analyzed by					
Called by					
Faxed/Email by					

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1705869.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/10/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	17030615	P04110		A
2	17030616	P04111		A
3	17030617	P04112		A
4	17030618	P04113		A
5	17030619	P04114		A
6	17030620	P04115		A
7	17030621	P04116		A
8	17030622	P04117		A
9	17030623	P04118		A
10	17030624	P04119		A
11	17030625	P04120		A
12	17030626	P04121		A
13	17030627	P04122		A
14	17030628	P04123		A
15	17030629	P04124		A
16	17030630	P04125		A
17	17030631	P04126		A
18	17030632	P04127		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/3/17	0900
Analyzed by	Matt Macfarlane		NVL	4/7/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/3/2017
Time: 12:20 PM
Entered By: Umer Khan

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1705869.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/10/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	17030633	P04128		A
20	17030634	P04129		A
21	17030635	P04130		A
22	17030636	P04131		A
23	17030637	P04132		A
24	17030638	P04133		A
25	17030639	P04134		A
26	17030640	P04135		A
27	17030641	P04136		A
28	17030642	P04137		A
29	17030643	P04138		A
30	17030644	P04139		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/3/17	0900
Analyzed by	Matt Macfarlane		NVL	4/7/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/3/2017
Time: 12:20 PM
Entered By: Umer Khan

1705869

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

Turn Around Time
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 24 Hours
- ❑ 2 Days
- ❑ 3 Days
- ❑ 4 Days
- ☑ 5 Days
- ❑ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 9356-2017
Project Location: Johnson Hall

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) -
❑ Fax ( ) -
❑ Email: mrmckibbin@wsu.edu

Total Number of Samples _____

	Sample ID	Description	A/R
1	P04110	see attached data sheets	
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14			
15	P04159		

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	3-29-17	11:30
Relinquish by	Stephan Gilley		WSU EH&S	3-30-17	14:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Mohamed J		NVL	4/3/17	9:00 Fedex
Analyzed by					
Called by					
Faxed/Email by					

1705874

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

Turn Arc
- ☐ 1 Hour
- ☐ 2 Hours
- ☐ 4 Hours
- ☐ 24 Hours
- ☐ 2 Days
- ☐ 3 Days
- ☐ 4 Days
- ☑ 5 Days
- ☐ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu; stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 9356-2017
Project Location: Johnson Hall

- ☐ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ☐ PLM Gravimetry (600/R-93-116)
- ☐ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ☐ TEM (NIOSH 7402)
- ☐ EPA 400 Points (600/R-93-116)
- ☐ Asbestos in Vermiculite (EPA 600/R-04/004)
- ☐ TEM (AHERA)
- ☐ Other
- ☐ TEM (EPA Level II Modified)
- ☐ EPA 1000Points (600/R-93-116)
- ☐ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
☐ Call ( ) - ☐ Fax ( ) - ☐ Email: mrmckibbin@wsu.edu

Total Number of Samples _____

	Sample ID	Description	A/R
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14			
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	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	3-29-17	11:30
Relinquish by	Stephan Gilley		WSU EH&S	3-30-17	14:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Mohamed J		NVL	4/3/17	9:00 Fedex
Analyzed by					
Called by					
Faxed/Email by					

April 19, 2017

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1706549.00

Client Project: 9356-2017
Location: Johnson Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 25 sample(s) submitted to our laboratory for analysis on 4/13/2017.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

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 calibrated 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.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

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,

Nick Ly, Technical Director

Enc.: Sample Results

Lab Code: 102063-0

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17034260 **Client Sample #: P04160**
Location: Johnson Hall

Layer 1 of 3	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose	85%	**None Detected ND**
Layer 2 of 3	**Description:** Pink paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Adhesive/Binder	Cellulose	98%	**None Detected ND**
Layer 3 of 3	**Description:** Brown soft material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork, Mastic/Binder	None Detected	ND	**None Detected ND**

Lab ID: 17034261 **Client Sample #: P04161**
Location: Johnson Hall

Layer 1 of 3	**Description:** White woven fibrous material with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose	80%	**None Detected ND**
Layer 2 of 3	**Description:** Pink paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Adhesive/Binder	Cellulose	98%	**None Detected ND**
Layer 3 of 3	**Description:** Brown soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork	None Detected	ND	**None Detected ND**

Lab ID: 17034262 **Client Sample #: P04162**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

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 48%	**None Detected ND**
Paint	Glass fibers 30%	

Lab ID: 17034263 **Client Sample #: P04163**
Location: Johnson Hall

Layer 1 of 2 **Description:** Peach hard material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains	None Detected ND	**None Detected ND**

Layer 2 of 2 **Description:** Gray sandy material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Sand	None Detected ND	**None Detected ND**

Lab ID: 17034264 **Client Sample #: P04164**
Location: Johnson Hall
Comments: Unsure of correct layer sequence.

Layer 1 of 3 **Description:** Gray caulking material with trace paint

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

Layer 2 of 3 **Description:** Brown/dark red pebble hard material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler	None Detected ND	**None Detected ND**

Layer 3 of 3 **Description:** White brittle material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Binder/Filler, Mineral grains	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17034265 **Client Sample #: P04165**
Location: Johnson Hall

Layer 1 of 3	**Description:** Gray/silver caulking material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Brown/dark red hard material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** White brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Mineral grains	None Detected	ND	**None Detected ND**

Lab ID: 17034266 **Client Sample #: P04166**
Location: Johnson Hall

Layer 1 of 3	**Description:** Gray caulking material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Brown/dark red hard material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** White brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Mineral grains	None Detected	ND	**None Detected ND**

Lab ID: 17034267 **Client Sample #: P04167**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 4	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	Talc fibers	3%	**None Detected ND**
Layer 2 of 4	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler, Paint	None Detected	ND	**Chrysotile 2%**
Layer 3 of 4	**Description:** White brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler	Cellulose	1%	**None Detected ND**
Layer 4 of 4	**Description:** Gray sandy/brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Sand	None Detected	ND	**None Detected ND**

Lab ID: 17034268 **Client Sample #: P04168**
Location: Johnson Hall

Layer 1 of 1	**Description:** Off-white/light tan compacted powdery material with white paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Binder/Filler, Mica Paint	Cellulose	4%	**None Detected ND**

Lab ID: 17034269 **Client Sample #: P04169**
Location: Johnson Hall

Layer 1 of 2	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles/Binder, Paint	None Detected	ND	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2 **Description:** Off-white compacted powdery material with thin paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous particles, Binder/Filler, Paint	None Detected ND	**Chrysotile 2%**

Lab ID: 17034270 **Client Sample #: P04170**
Location: Johnson Hall

Layer 1 of 3 **Description:** Brown compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Fine particles, Adhesive/Binder, Paint	Cellulose 95%	**None Detected ND**

Layer 2 of 3 **Description:** Brown brittle mastic

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

Layer 3 of 3 **Description:** Off-white thin compacted powdery material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous particles, Binder/Filler, Paint	None Detected ND	**Chrysotile 2%**

Lab ID: 17034271 **Client Sample #: P04171**
Location: Johnson Hall

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 53%	**None Detected ND**
Paint	Glass fibers 20%	

Lab ID: 17034272 **Client Sample #: P04172**
Location: Johnson Hall

Layer 1 of 4 **Description:** Brown/pink sheet vinyl

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Vinyl/Binder, Calcareous particles	Glass fibers 7%	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 4	**Description:** White fibrous backing with yellow mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Synthetic fibers	70%	**None Detected ND**
Layer 3 of 4	**Description:** Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	Cellulose	5%	**Chrysotile 3%**
Layer 4 of 4	**Description:** Gray brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mineral grains, Gravel	None Detected	ND	**None Detected ND**

Lab ID: 17034273 **Client Sample #: P04173**
Location: Johnson Hall

Layer 1 of 3	**Description:** Brown compressed fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Adhesive/Binder, Paint	Cellulose	94%	**None Detected ND**
Layer 2 of 3	**Description:** White soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Brown paper with brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Mastic/Binder	Cellulose	30%	**None Detected ND**

Lab ID: 17034274 **Client Sample #: P04174**
Location: Johnson Hall

Layer 1 of 4	**Description:** Brown compressed fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Adhesive/Binder, Paint	Cellulose	96%	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 4	**Description:** White soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Calcareous particles	Cellulose	1%	**None Detected ND**
Layer 3 of 4	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 4 of 4	**Description:** Off-white compacted powdery material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous particles, Binder/Filler	Cellulose	48%	**Chrysotile 2%**

Lab ID: 17034275 **Client Sample #: P04175**
Location: Johnson Hall

Layer 1 of 2	**Description:** Tan paper with black asphaltic mastic and foil			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles, Asphalt/Binder, Mastic/Binder	Cellulose	65%	**None Detected ND**
	Metal foil			
Layer 2 of 2	**Description:** Yellow/gray fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles	Glass fibers	98%	**None Detected ND**

Lab ID: 17034276 **Client Sample #: P04176**
Location: Johnson Hall

Layer 1 of 1	**Description:** Green soft carpet mastic with trace paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Paint	Synthetic fibers	<1%	**None Detected ND**

Lab ID: 17034277 **Client Sample #: P04177**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** Trace off-white soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 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	**Chrysotile 3%**

Lab ID: 17034278 **Client Sample #: P04178**
Location: Johnson Hall

Layer 1 of 3	**Description:** Green soft carpet mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Tan tile			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	Polyethylene fibers	4%	**None Detected ND**

Lab ID: 17034279 **Client Sample #: P04179**
Location: Johnson Hall

Layer 1 of 2	**Description:** Beige /gray tile			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Black asphaltic mastic with brown mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	Cellulose	6%	**None Detected ND**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17034280 **Client Sample #: P04180**
Location: Johnson Hall
Comments: Unsure of correct layer sequence.

Layer 1 of 3	**Description:** Brown/white hard material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mineral grains, Fine particles	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Gray brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mineral grains	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Gray/silver soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	None Detected	ND	**None Detected ND**

Lab ID: 17034281 **Client Sample #: P04181**
Location: Johnson Hall

Layer 1 of 2	**Description:** Brown/white hard material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Mineral grains, Fine particles	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Gray/silver soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler	None Detected	ND	**None Detected ND**

Lab ID: 17034282 **Client Sample #: P04182**
Location: Johnson Hall

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

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

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

Lab ID: 17034283 **Client Sample #: P04183**
Location: Johnson Hall

Layer 1 of 5	**Description:** Trace off-white soft mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 5	**Description:** Brown brittle mastic with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Paint	None Detected	ND	**None Detected ND**
Layer 3 of 5	**Description:** Off-white compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler, Paint	None Detected	ND	**Chrysotile 2%**
Layer 4 of 5	**Description:** Off-white compacted powdery material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler	Cellulose	37%	**Chrysotile 3%**
Layer 5 of 5	**Description:** White chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Fine particles, Gypsum/Binder	Cellulose	12%	**None Detected ND**
		Glass fibers	3%	

Lab ID: 17034284 **Client Sample #: P04184**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706549.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 25
Samples Analyzed: 25
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** 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:** Off-white compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous particles, Binder/Filler, Paint	None Detected	ND	**Chrysotile 3%**

Sampled by: Client
Analyzed by: Nadezhda Prysyazhnyuk **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/19/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1706549.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 25 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	17034260	P04160		A
2	17034261	P04161		A
3	17034262	P04162		A
4	17034263	P04163		A
5	17034264	P04164		A
6	17034265	P04165		A
7	17034266	P04166		A
8	17034267	P04167		A
9	17034268	P04168		A
10	17034269	P04169		A
11	17034270	P04170		A
12	17034271	P04171		A
13	17034272	P04172		A
14	17034273	P04173		A
15	17034274	P04174		A
16	17034275	P04175		A
17	17034276	P04176		A
18	17034277	P04177		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/13/17	0900
Analyzed by	Nadezhda		NVL	4/19/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/13/2017
Time: 11:21 AM
Entered By: Mohammed Jamal

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1706549.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 25 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	17034278	P04178		A
20	17034279	P04179		A
21	17034280	P04180		A
22	17034281	P04181		A
23	17034282	P04182		A
24	17034283	P04183		A
25	17034284	P04184		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/13/17	0900
Analyzed by	Nadezhda		NVL	4/19/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/13/2017
Time: 11:21 AM
Entered By: Mohammed Jamal

1706549

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ASBESTOS CHAIN OF CUSTODY

Turn Around Ti
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 24 Hours
- ❑ 2 Days
- ❑ 3 Days
- ❑ 4 Days
- ☑ 5 Days
- ❑ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 9356-2017
Project Location: Johnson Hall

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email: mrmckibbin@wsu.edu

Total Number of Samples _____

	Sample ID	Description	A/R
1	P04160-P04184	see attached data sheets	
2	P04191-P04242	"	
3			
4			
5			
6			
7			
8			
9			
10	P04160 → P04184		
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	4-10-17	10:30
Relinquish by	Stephan Gilley		WSU EH&S	4-12-17	15:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Mohamad T		NVL	4-13-17	9:00
Analyzed by					
Called by					
Faxed/Email by					

Fed

1706549

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

ASBESTOS CHAIN OF CUSTODY

Turn Around Tir
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 24 Hours
- ❑ 2 Days
- ❑ 3 Days
- ❑ 4 Days
- ☑ 5 Days
- ❑ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172
Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 9356-2017
Project Location: Johnson Hall

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) -
❑ Fax ( ) -
❑ Email: mrmckibbin@wsu.edu

Total Number of Samples

	Sample ID	Description	A/R
1	P04160-P04184	see attached data sheets	
2	P04191-P04242	"	
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	4-10-17	10:30
Relinquish by	Stephan Gilley		WSU EH&S	4-12-17	15:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Mohammad J		NVL	4-13-17	9:00 FedEx
Analyzed by					
Called by					
Faxed/Email by					

April 21, 2017

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1706553.00

Client Project: 9356-2017
Location: Johnson Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 30 sample(s) submitted to our laboratory for analysis on 4/13/2017.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

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 calibrated 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.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

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,

Nick Ly, Technical Director

Enc.: Sample Results

Lab Code: 102063-0

1.888.NVL.LABS
1.888.(685.5227)
www.nvllabs.com

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

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Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706553.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17034286 **Client Sample #: P04191**
Location: Johnson Hall

Layer 1 of 3	**Description:** Black rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Rubber/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Crumbly grey material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Cement/Binder, Fine grains, Mineral grains	Wood fibers	1%	**None Detected ND**

Lab ID: 17034287 **Client Sample #: P04192**
Location: Johnson Hall

Layer 1 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Grey crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Cement/Binder, Sand, Mineral grains	Cellulose	<1%	**None Detected ND**
	Fine grains, Fine particles			

Lab ID: 17034288 **Client Sample #: P04193**
Location: Johnson Hall

Layer 1 of 2	**Description:** Tan woven fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Paint	Cellulose	66%	**None Detected ND**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706553.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 30
Samples Analyzed: 30
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

			Glass fibers <1%	
Layer 2 of 2	**Description:** Loose orange crumbly fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Fine particles		Glass fibers 99%	**None Detected ND**

Lab ID: 17034289 **Client Sample #: P04194**
Location: Johnson Hall

Layer 1 of 2	**Description:** Off-white woven fibrous material w/ paint & crumbly off-white mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Paint, Fine particles		Cellulose 50%	**None Detected ND**
Layer 2 of 2	**Description:** Loose grey fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Glass debris, Fine particles, Calcareous particles		Glass fibers 96%	**None Detected ND**

Lab ID: 17034290 **Client Sample #: P04195**
Location: Johnson Hall

Layer 1 of 1	**Description:** Tan crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Rust		Glass fibers <1%	**Chrysotile 5%**
	Fine grains, Miscellaneous particles		Cellulose <1%	

Lab ID: 17034291 **Client Sample #: P04196**
Location: Johnson Hall

Layer 1 of 1	**Description:** Tan crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Rust, Miscellaneous particles		None Detected ND	**Chrysotile 4%**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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Lab ID: 17034292 **Client Sample #: P04197**
Location: Johnson Hall

Layer 1 of 2	**Description:** Tan woven fibrous material w/ silver foil & brown mastic & paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Paint, Metal foil	Cellulose	55%	**None Detected ND**
Layer 2 of 2	**Description:** Brown crumbly material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork, Paint	None Detected	ND	**None Detected ND**

Lab ID: 17034293 **Client Sample #: P04198**
Location: Johnson Hall

Layer 1 of 2	**Description:** Tan woven fibrous material w/ silver foil & brown mastic & paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Paint, Metal foil	Cellulose	62%	**None Detected ND**
Layer 2 of 2	**Description:** Brown crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Cork, Fine particles	Cellulose	<1%	**None Detected ND**

Lab ID: 17034294 **Client Sample #: P04199**
Location: Johnson Hall

Layer 1 of 1	**Description:** Brown fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Paint	Cellulose	86%	**None Detected ND**

Lab ID: 17034295 **Client Sample #: P04200**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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Layer 1 of 1 **Description:** Light grey crumbly fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Perlite	Cellulose 62%	**None Detected ND**
Calcareous particles	Glass fibers 10%	

Lab ID: 17034296 **Client Sample #: P04201**
Location: Johnson Hall

Layer 1 of 1 **Description:** Soft grey crumbly material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine grains, Fine particles	None Detected ND	**Chrysotile 2%**

Lab ID: 17034297 **Client Sample #: P04202**
Location: Johnson Hall

Layer 1 of 2 **Description:** White compacted powdery material with paper

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous binder	Cellulose 30%	**None Detected ND**

Layer 2 of 2 **Description:** Chalky white material with paper

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Gypsum/Binder	Cellulose 17%	**None Detected ND**
	Glass fibers 2%	

Lab ID: 17034298 **Client Sample #: P04203**
Location: Johnson Hall

Layer 1 of 1 **Description:** Off-white crumbly fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Perlite	Cellulose 62%	**None Detected ND**
Calcareous particles	Glass fibers 8%	

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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Lab ID: 17034299 **Client Sample #: P04204**
Location: Johnson Hall

Layer 1 of 3	**Description:** Grey rubbery material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Rubber/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Soft yellow mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Calcareous particles	Cellulose	<1%	**None Detected ND**
Layer 3 of 3	**Description:** White chalky material with paper			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Gypsum/Binder	Cellulose	12%	**None Detected ND**
		Glass fibers	2%	

Lab ID: 17034300 **Client Sample #: P04205**
Location: Johnson Hall

Layer 1 of 2	**Description:** White woven fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Paint	Cellulose	65%	**None Detected ND**
Layer 2 of 2	**Description:** Loose yellow fibrous material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder, Fine particles	Glass fibers	98%	**None Detected ND**

Lab ID: 17034301 **Client Sample #: P04206**
Location: Johnson Hall

Layer 1 of 2	**Description:** Grey crumbly vinyl			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Vinyl/Binder, Fine grains	Cellulose	5%	**None Detected ND**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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

Layer 2 of 2 **Description:** Brown crumbly mastic with tan woven fibers

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder	Cellulose 80%	**None Detected ND**

Lab ID: 17034302 **Client Sample #: P04207**
Location: Johnson Hall

Layer 1 of 1 **Description:** Soft tan mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Miscellaneous particles, Organic debris	Cellulose <1%	**None Detected ND**
Fine particles	Synthetic fibers 1%	

Lab ID: 17034303 **Client Sample #: P04208**
Location: Johnson Hall

Layer 1 of 1 **Description:** White crumbly fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Glass debris	Glass fibers 85%	**None Detected ND**
Calcareous particles, Fine particles		

Lab ID: 17034304 **Client Sample #: P04209**
Location: Johnson Hall

Layer 1 of 1 **Description:** Beige crumbly fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Paint, Perlite	Cellulose 65%	**None Detected ND**
	Glass fibers 7%	

Lab ID: 17034305 **Client Sample #: P04210**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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

Layer 1 of 2	**Description:** Brittle brown mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** White compacted brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Paint, Fine particles	None Detected	ND	**None Detected ND**

Lab ID: 17034306 **Client Sample #: P04211**
Location: Johnson Hall

Layer 1 of 1	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Paint, Miscellaneous particles	Cellulose	3%	**None Detected ND**
	Fine particles			

Lab ID: 17034307 **Client Sample #: P04212**
Location: Johnson Hall

Layer 1 of 1	**Description:** Grey crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine grains	None Detected	ND	**Chrysotile 3%**

Lab ID: 17034308 **Client Sample #: P04213**
Location: Johnson Hall

Layer 1 of 1	**Description:** Grey crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine grains	None Detected	ND	**Chrysotile 5%**

Lab ID: 17034309 **Client Sample #: P04214**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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Layer 1 of 1	**Description:** White crumbly fibrous material with paint		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Binder/Filler, Paint, Glass debris	Glass fibers 90%	**None Detected ND**

Lab ID: 17034310 **Client Sample #: P04215**
Location: Johnson Hall

Layer 1 of 2	**Description:** Grey crumbly vinyl		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Vinyl/Binder, Fine grains	Cellulose 2%	**None Detected ND**
Layer 2 of 2	**Description:** Brown crumbly mastic with tan woven fibers		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Mastic/Binder	Cellulose 45%	**None Detected ND**

Lab ID: 17034311 **Client Sample #: P04216**
Location: Johnson Hall

Layer 1 of 2	**Description:** Tan vinyl tile		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Vinyl/Binder, Mineral grains	None Detected ND	**None Detected ND**
Layer 2 of 2	**Description:** Soft sticky black asphaltic mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Asphalt/Binder	Cellulose 1%	**Chrysotile 2%**

Lab ID: 17034312 **Client Sample #: P04217**
Location: Johnson Hall

Layer 1 of 3	**Description:** Tan tacky mastic		
	Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
	Mastic/Binder, Calcareous particles	None Detected ND	**None Detected ND**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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Layer 2 of 3	**Description:** Brittle brown mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** White compacted brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Calcareous binder, Paint	None Detected	ND	**None Detected ND**

Lab ID: 17034313 **Client Sample #: P04218**
Location: Johnson Hall

Layer 1 of 1	**Description:** Tan fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Paint, Calcareous particles	Cellulose	84%	**None Detected ND**

Lab ID: 17034314 **Client Sample #: P04219**
Location: Johnson Hall

Layer 1 of 3	**Description:** Off-white vinyl tile			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder, Mineral grains	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** Soft clear sticky adhesive			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Adhesive/Binder	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Soft grey crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Cement/Binder, Fine grains, Mineral grains	Cellulose	<1%	**None Detected ND**

Lab ID: 17034315 **Client Sample #: P04220**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

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& EPA/600/M4-82-020

Layer 1 of 3	**Description:** Brittle brown mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder	None Detected	ND	**None Detected ND**
Layer 2 of 3	**Description:** White brittle material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder, Paint	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Off-white sandy crumbly material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder, Sand, Mineral grains	Cellulose	<1%	**None Detected ND**

Sampled by: Client
Analyzed by: Matt Macfarlane **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/21/2017

Nick Ly, Technical Director

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ASBESTOS LABORATORY SERVICES

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NVL Batch Number **1706553.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	17034286	P04191		A
2	17034287	P04192		A
3	17034288	P04193		A
4	17034289	P04194		A
5	17034290	P04195		A
6	17034291	P04196		A
7	17034292	P04197		A
8	17034293	P04198		A
9	17034294	P04199		A
10	17034295	P04200		A
11	17034296	P04201		A
12	17034297	P04202		A
13	17034298	P04203		A
14	17034299	P04204		A
15	17034300	P04205		A
16	17034301	P04206		A
17	17034302	P04207		A
18	17034303	P04208		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/13/17	0900
Analyzed by	Matt Macfarlane		NVL	4/19/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/13/2017
Time: 11:38 AM
Entered By: Mohammed Jamal

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ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1706553.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 30 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	17034304	P04209		A
20	17034305	P04210		A
21	17034306	P04211		A
22	17034307	P04212		A
23	17034308	P04213		A
24	17034309	P04214		A
25	17034310	P04215		A
26	17034311	P04216		A
27	17034312	P04217		A
28	17034313	P04218		A
29	17034314	P04219		A
30	17034315	P04220		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/13/17	0900
Analyzed by	Matt Macfarlane		NVL	4/19/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/13/2017
Time: 11:38 AM
Entered By: Mohammed Jamal

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ASBESTOS CHAIN OF CUSTODY

1706553

Turn Around Time
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 2 Days
- ❑ 3 Days
- ☑ 5 Days
- ❑ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172, Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 9356-2017
Project Location: Johnson Hall

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email mrmckibbin@wsu.edu

Total Number of Samples _____

	Sample ID	Description	A/R
1	P04160-P04184	see attached data sheets	
2	P04191-P04242	"	
3			
4			
5		P04191 ⇒ P04220	
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	4-10-17	10:30
Relinquish by	Stephan Gilley		WSU EH&S	4-12-17	15:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Mohammad T		NVL	4-13-17	9:00 FedEx
Analyzed by					
Called by					
Faxed/Email by					

April 20, 2017

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

RE: Bulk Asbestos Fiber Analysis; NVL Batch # 1706554.00

Client Project: 9356-2017
Location: Johnson Hall

Dear Mr. McKibbin,

Enclosed please find test results for the 22 sample(s) submitted to our laboratory for analysis on 4/13/2017.

Examination of these samples was conducted for the presence of identifiable asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with both **EPA 600/M4-82-020**, Interim Method for the Determination of Asbestos in Bulk Insulation Samples and **EPA 600/R-93/116** Method for the Determination of Asbestos in Bulk Building Materials.

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 calibrated 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.

The detection limit for the calibrated visual estimation is <1%, 400 point counts is 0.25% and 1000 point counts is 0.1%

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,

Nick Ly, Technical Director

Enc.: Sample Results

Lab Code: 102063-0

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706554.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 22
Samples Analyzed: 22
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17034316 **Client Sample #: P04221**
Location: Johnson Hall

Layer 1 of 2	**Description:** Brown brittle mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder, Fine particles	Wollastonite	3%	**None Detected ND**	
Layer 2 of 2	**Description:** White textured powdery material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**	

Lab ID: 17034317 **Client Sample #: P04222**
Location: Johnson Hall

Layer 1 of 4	**Description:** Tan soft mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder	None Detected	ND	**None Detected ND**	
Layer 2 of 4	**Description:** Brown brittle mastic				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Mastic/Binder, Fine particles	Wollastonite	2%	**None Detected ND**	
Layer 3 of 4	**Description:** White textured powdery material with paint				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**	
Layer 4 of 4	**Description:** Gray brittle material				
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**	
	Binder/Filler, Fine particles, Mineral grains	None Detected	ND	**None Detected ND**	
	Mica				

Lab ID: 17034318 **Client Sample #: P04223**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Welly Hsieh **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/20/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706554.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 22
Samples Analyzed: 22
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Fine particles	Wollastonite	4%	**None Detected ND**
Layer 2 of 2	**Description:** Gray brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Mineral grains	None Detected	ND	**None Detected ND**
	Mica			

Lab ID: 17034319 **Client Sample #: P04224**
Location: Johnson Hall

Layer 1 of 3	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Fine particles	Wollastonite	2%	**None Detected ND**
Layer 2 of 3	**Description:** White textured powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	None Detected	ND	**None Detected ND**
Layer 3 of 3	**Description:** Light gray brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Mineral grains	None Detected	ND	**None Detected ND**
	Perlite, Mica			

Lab ID: 17034320 **Client Sample #: P04225**
Location: Johnson Hall

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

Sampled by: Client
Analyzed by: Welly Hsieh **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/20/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706554.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 22
Samples Analyzed: 22
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2 **Description:** Yellow soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Fine particles	Synthetic fibers 2%	**None Detected ND**

Lab ID: 17034321 **Client Sample #: P04226**

Location: Johnson Hall

Layer 1 of 2 **Description:** Light gray vinyl tile

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

Layer 2 of 2 **Description:** Yellow soft mastic

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

Lab ID: 17034322 **Client Sample #: P04227**

Location: Johnson Hall

Comments: No GWB present

Layer 1 of 3 **Description:** Gray rubbery material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Rubber/Binder	None Detected ND	**None Detected ND**

Layer 2 of 3 **Description:** Tan soft mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Mastic/Binder, Fine particles	Cellulose 2%	**None Detected ND**

Layer 3 of 3 **Description:** White textured powdery material

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Calcareous binder	None Detected ND	**None Detected ND**

Lab ID: 17034323 **Client Sample #: P04228**

Location: Johnson Hall

Sampled by: Client
Analyzed by: Welly Hsieh **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/20/2017

Nick Ly, Technical Director

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706554.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 22
Samples Analyzed: 22
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 1 **Description:** Gray compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Glass beads	Glass fibers 61%	**Amosite 4%**
Paint	Cellulose 3%	

Lab ID: 17034324 **Client Sample #: P04229**
Location: Johnson Hall

Layer 1 of 1 **Description:** Gray compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Glass beads	Glass fibers 68%	**Amosite 5%**
Paint		

Lab ID: 17034325 **Client Sample #: P04230**
Location: Johnson Hall

Layer 1 of 1 **Description:** Gray compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Glass beads	Glass fibers 69%	**None Detected ND**
Paint	Cellulose <1%	

Lab ID: 17034326 **Client Sample #: P04231**
Location: Johnson Hall

Layer 1 of 1 **Description:** Tan fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Wood flakes	Cellulose 73%	**None Detected ND**
Paint		

Lab ID: 17034327 **Client Sample #: P04232**
Location: Johnson Hall

Sampled by: Client
Analyzed by: Welly Hsieh **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/20/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706554.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 22
Samples Analyzed: 22
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 1 of 2	**Description:** White compacted powdery material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Calcareous binder, Paint	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Tan fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Paint, Wood flakes	Cellulose	71%	**None Detected ND**

Lab ID: 17034328 **Client Sample #: P04233**
Location: Johnson Hall

Layer 1 of 2	**Description:** Tan fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Paint	Cellulose	75%	**None Detected ND**
Layer 2 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Mastic/Binder, Fine particles	Cellulose	<1%	**None Detected ND**

Lab ID: 17034329 **Client Sample #: P04234**
Location: Johnson Hall

Layer 1 of 1	**Description:** Gray compressed fibrous material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%		**Asbestos Type: %**
	Binder/Filler, Fine particles, Perlite	Glass fibers	4%	**None Detected ND**
	Paint	Cellulose	63%	

Lab ID: 17034330 **Client Sample #: P04235**
Location: Johnson Hall

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

Sampled by: Client
Analyzed by: Welly Hsieh **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/20/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706554.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 22
Samples Analyzed: 22
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Layer 2 of 2 **Description:** Yellow soft mastic

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

Lab ID: 17034331 **Client Sample #: P04236**
Location: Johnson Hall

Layer 1 of 1 **Description:** Gray compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Glass beads	Cellulose 45%	**None Detected ND**
Paint, Perlite	Glass fibers 31%	

Lab ID: 17034332 **Client Sample #: P04237**
Location: Johnson Hall

Layer 1 of 1 **Description:** Gray compressed fibrous material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Binder/Filler, Fine particles, Glass beads	Cellulose 42%	**None Detected ND**
Perlite, Paint	Glass fibers 36%	

Lab ID: 17034333 **Client Sample #: P04238**
Location: Johnson Hall

Layer 1 of 2 **Description:** Light gray vinyl tile

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

Layer 2 of 2 **Description:** Black asphaltic mastic

Non-Fibrous Materials:	Other Fibrous Materials:%	**Asbestos Type: %**
Asphalt/Binder, Mastic/Binder, Fine particles	Polyethylene fibers 5%	**None Detected ND**
	Synthetic fibers <1%	

Sampled by: Client
Analyzed by: Welly Hsieh **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/20/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706554.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 22
Samples Analyzed: 22
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17034334 **Client Sample #: P04239**
Location: Johnson Hall

Layer 1 of 2	**Description:** Gray vinyl tile			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Vinyl/Binder, Calcareous particles	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Black asphaltic mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Asphalt/Binder, Mastic/Binder	Cellulose	2%	**Chrysotile 4%**

Lab ID: 17034335 **Client Sample #: P04240**
Location: Johnson Hall
Comments: No plaster present

Layer 1 of 2	**Description:** Brown brittle mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Mastic/Binder, Fine particles	Wollastonite	2%	**None Detected ND**
Layer 2 of 2	**Description:** White chalky material paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Gypsum/Binder, Binder/Filler, Paint	None Detected	ND	**None Detected ND**

Lab ID: 17034336 **Client Sample #: P04241**
Location: Johnson Hall
Comments: No plaster present

Layer 1 of 1	**Description:** White chalky material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Perlite	None Detected	ND	**None Detected ND**
	Paint			

Sampled by: Client
Analyzed by: Welly Hsieh **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/20/2017

Nick Ly, Technical Director

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Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: Washington State University EH&S
Address: PO Box 641172
Pullman, WA 99164-1172

Attention: Mr. Matt McKibbin
Project Location: Johnson Hall

Batch #: 1706554.00
Client Project #: 9356-2017
Date Received: 4/13/2017
Samples Received: 22
Samples Analyzed: 22
Method: EPA/600/R-93/116 & EPA/600/M4-82-020

Lab ID: 17034337 **Client Sample #: P04242**
Location: Johnson Hall

Layer 1 of 2	**Description:** Gray soft material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles	None Detected	ND	**None Detected ND**
Layer 2 of 2	**Description:** Tan brittle material			
	Non-Fibrous Materials:	Other Fibrous Materials:	%	**Asbestos Type: %**
	Binder/Filler, Fine particles, Mineral grains	None Detected	ND	**None Detected ND**
	Rocks			

Sampled by: Client
Analyzed by: Welly Hsieh **Date:** 04/19/2017
Reviewed by: Nick Ly **Date:** 04/20/2017

Nick Ly, Technical Director

Note: If samples are not homogeneous, then subsamples of the components were analyzed separately. All bulk samples are analyzed using both EPA 600/R-93/116 and 600/M4-82-020 Methods 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
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1706554.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 22 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	17034316	P04221		A
2	17034317	P04222		A
3	17034318	P04223		A
4	17034319	P04224		A
5	17034320	P04225		A
6	17034321	P04226		A
7	17034322	P04227		A
8	17034323	P04228		A
9	17034324	P04229		A
10	17034325	P04230		A
11	17034326	P04231		A
12	17034327	P04232		A
13	17034328	P04233		A
14	17034329	P04234		A
15	17034330	P04235		A
16	17034331	P04236		A
17	17034332	P04237		A
18	17034333	P04238		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/13/17	0900
Analyzed by	Welly Hsieh		NVL	4/19/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/13/2017
Time: 11:46 AM
Entered By: Mohammed Jamal

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1706554.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/20/2017 **Time** 9:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-02 EPA 600/R-93-116 Asbestos by PLM <bulk>

Total Number of Samples 22 Rush Samples

	Lab ID	Sample ID	Description	A/R
19	17034334	P04239		A
20	17034335	P04240		A
21	17034336	P04241		A
22	17034337	P04242		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Federal Express				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Mohammed Jamal		NVL	4/13/17	0900
Analyzed by	Welly Hsieh		NVL	4/19/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 4/13/2017
Time: 11:46 AM
Entered By: Mohammed Jamal

1706554

NVL LABS
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ASBESTOS CHAIN OF CUSTODY

Turn Around Time
- ❑ 1 Hour
- ❑ 2 Hours
- ❑ 4 Hours
- ❑ 24 Hours
- ❑ 2 Days
- ❑ 3 Days
- ❑ 4 Days
- ☑ 5 Days
- ❑ 10 Days

Please call for TAT less than 24 Hours

Company: Washington St. University EH&S
Address: PO Box 641172, Pullman, WA 99164
Phone: 509-335-5604

Project Manager: Matt McKibbin
Cell: (509) 730 - 5548
Email: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu
Fax: ( ) -

Project Name/Number: 9356-2017
Project Location: Johnson Hall

- ❑ PCM Air (NIOSH 7400)
- ☑ PLM (EPA 600/R-93-116)
- ❑ PLM Gravimetry (600/R-93-116)
- ❑ Asbestos Friable/Non-Friable (EPA 600/R-93/116)
- ❑ TEM (NIOSH 7402)
- ❑ EPA 400 Points (600/R-93-116)
- ❑ Asbestos in Vermiculite (EPA 600/R-04/004)
- ❑ TEM (AHERA)
- ❑ Other
- ❑ TEM (EPA Level II Modified)
- ❑ EPA 1000Points (600/R-93-116)
- ❑ Asbestos in Sediment (EPA 1900 Points)

Reporting Instructions: email
❑ Call ( ) - ❑ Fax ( ) - ❑ Email: mrmckibbin@wsu.edu

Total Number of Samples _____

	Sample ID	Description	A/R
1	P04160-P04184	see attached data sheets	
2	P04191-P04242	"	
3			
4			
5		P04221 ⇒ P04242	
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Matt McKibbin		WSU EH&S	4-10-17	10:30
Relinquish by	Stephan Gilley		WSU EH&S	4-12-17	15:30

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	Mohammad T		NVL	4-13-17	9:00
Analyzed by					
Called by					
Faxed/Email by					

Fed

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 17-04-01688

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

Received Date: 04/13/2017
Analyzed Date: 04/15/2017
Reported Date: 04/17/2017

Project/Test Address: Johnson Hall; 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
17-04-01688-001	P04185		Blue Adhesive; Homogeneous	NAD	1% Cellulose 99% Non-Fibrous
17-04-01688-002	P04186		Gray Brittle; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
17-04-01688-003A	P04187	Tile	Gray Vinyl; Homogeneous	NAD	100% Non-Fibrous
17-04-01688-003B	P04187	Mastic	Black Tar; Homogeneous	NAD	8% Cellulose 92% Non-Fibrous
17-04-01688-004	P04188		Tan Granular; Homogeneous	2% Chrysotile	98% Non-Fibrous
			Total Asbestos:	2%	

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 17-04-01688

Project/Test Address: Johnson Hall; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
17-04-01688-005	P04189		Tan Fibrous; Black Tar; Silver Foil; Inhomogeneous	NAD	33% Cellulose 67% Non-Fibrous
17-04-01688-006A	P04190	Mastic I	Blue Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
17-04-01688-006B	P04190	Tile	Brown Vinyl; Homogeneous	2% Chrysotile	98% Non-Fibrous
			Total Asbestos:	2%	
17-04-01688-006C	P04190	Mastic II	Black Tar; Homogeneous	NAD	7% Cellulose 93% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 17-04-01688

Project/Test Address: Johnson Hall; Pullman, WA

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

QC Sample: 85-M22013-2

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: Melissa Kanode

Missy Kanode
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 VELAP 460172. 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

6 PM

Asbestos Chain-of-Custody

17-04-01688

Due Date:
04/18/2017
(Tuesday)
AE M Inv

EHS Laboratories™

Environmental Hazards Services, LLC

www.leadlab.com
(800)347-4010
(804)275-4907 (fax)

7469 Whitepine Rd
Richmond, VA
23237

Company Name: Washington State University EH&S Address: P.O. Box 641172 City/State/Zip: Pullman, WA 99164

Phone: (509) 335-5604 Fax: ( ) E-mail: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu Acct. Number:

Project Name / Testing Address: Johnson Hall **City/State (Required):** Pullman, WA

Collected by: Stephan Gilley Purchase Order Number: 9356-2017

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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P04185	4-10-17	✓												
2	P04186		✓												
3	P04187		✓												
4	P04188		✓												
5	P04189		✓												
6	P04190		✓												
7															
8															
9															
10															

Released by: Stephan Gilley Signature: Date/Time: 4-12-17 12:45

Received by: Signature: Date/Time: 4/13/17 11:45

1688

WSU EH&S EHS

Asbestos Sampling Data Sheet

Sheet 1 of 1

Project Name/Job Number: Johnson Hall — Project Manager: Matt M.

Building: 0076 9356-2017 — Inspector: Stephan Gilley

Client Contact: — Date: 4-7-17 — Signature:

Sample No.	Material Type	Sample Location	Condition	Friable	Est. Quantity	Lab Results (%)
P04 / 85	Layer 1: Green carpet mastic Layer 2: Layer 3:	24	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04 / 86	Layer 1: Gray window glazing Layer 2: Layer 3:	10 A stairwell	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04 / 87	Layer 1: 12-inch beige-gray str. VAT Layer 2: Black mastic Layer 3:	10 A stairwell	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04 / 88	Layer 1: White paint Layer 2: white skim coat Layer 3:	158 structural wall	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04 / 89	Layer 1: fiberglass pipe insulation (foil) Layer 2: tan foil paper asphaltic wrap Layer 3:	36	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04 / 90	Layer 1: Green carpet mastic Layer 2: 9-inch tan-brown VAT Layer 3: Black mastic	24	☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	
P04	Layer 1: Layer 2: Layer 3:		☐ GOOD ☐ FAIR ☐ POOR	☐ YES ☐ NO	☐ SF ☐ LF ☐ EA	

Asbestos Bulk Analysis Report

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Report Number: 17-05-00299

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

Received Date: 05/02/2017
Analyzed Date: 05/02/2017
Reported Date: 05/03/2017

Project/Test Address: Johnson Hall; 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
17-05-00299-001	P04243		Brown Cork; Tan Paint-Like; White Fibrous; Silver Foil; Inhomogeneous	NAD	18% Cellulose 82% Non-Fibrous
17-05-00299-002	P04244		Gray Paint-Like; White/Yellow/Orange Fibrous; Tan Adhesive; Inhomogeneous	NAD	22% Cellulose 55% Fibrous Glass 23% Non-Fibrous
17-05-00299-003	P04245		Orange Paint-Like; White/Yellow Fibrous; Inhomogeneous	NAD	28% Cellulose 52% Fibrous Glass 20% Non-Fibrous
17-05-00299-004	P04246		Orange Paint-Like; White/Yellow Fibrous; Inhomogeneous	NAD	35% Cellulose 42% Fibrous Glass 23% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 17-05-00299

Project/Test Address: Johnson Hall; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
17-05-00299-005A	P04247	Tile	White/Tan Vinyl; Homogeneous	NAD	100% Non-Fibrous
17-05-00299-005B	P04247	Mastic	Yellow Adhesive; Homogeneous	NAD	100% Non-Fibrous
17-05-00299-006	P04248		White Paint-Like; Brown Fibrous; Inhomogeneous	NAD	92% Cellulose 8% Non-Fibrous
17-05-00299-007	P04249		White Paint-Like; Gray/Red Fibrous; Inhomogeneous	NAD	30% Cellulose 50% Fibrous Glass 20% Non-Fibrous
17-05-00299-008A	P04250	Tile	Tan/Green Vinyl; Homogeneous	NAD	100% Non-Fibrous
17-05-00299-008B	P04250	Mastic	Yellow Adhesive; Homogeneous	NAD	100% Non-Fibrous
17-05-00299-009A	P04251	Cove Base	Black Vinyl; Homogeneous	NAD	100% Non-Fibrous
17-05-00299-009B	P04251	Mastic	Tan/Brown Adhesive; Inhomogeneous	NAD	100% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 17-05-00299

Project/Test Address: Johnson Hall; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
17-05-00299-010	P04252		White/Gray Granular; Inhomogeneous	Trace <1% Trem/Actin*	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
*Tremolite/Actinolite Series Asbestos present in gray granular material.					
17-05-00299-011A	P04253	Concrete	Gray Granular; Homogeneous	Trace <1% Trem/Actin*	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
*Tremolite/Actinolite Series Asbestos.					
17-05-00299-011B	P04253	Tar	Black Tar-Like; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
17-05-00299-012A	P04254	Concrete	Gray Granular; Homogeneous	Trace <1% Trem/Actin*	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
*Tremolite/Actinolite Series Asbestos.					
17-05-00299-012B	P04254	Tar	Black Tar-Like; Homogeneous	7% Chrysotile	93% Non-Fibrous
			Total Asbestos:	7%	
17-05-00299-013A	P04255	Concrete	Gray Granular; Homogeneous	Trace <1% Trem/Actin*	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
*Tremolite/Actinolite Series Asbestos.					
17-05-00299-013B	P04255	Tar	Black Tar-Like; Homogeneous	7% Chrysotile	93% Non-Fibrous
			Total Asbestos:	7%	
17-05-00299-014	P04256		Gray Adhesive; Homogeneous	NAD	100% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 17-05-00299

Project/Test Address: Johnson Hall; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
17-05-00299-015	P04257		Gray Adhesive; Homogeneous	NAD	100% Non-Fibrous
17-05-00299-016	P04258		Brown Adhesive; Homogeneous	NAD	3% Cellulose 97% Non-Fibrous

QC Sample: 90-M22014-4

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

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

Analyst: Sami Hosn

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 VELAP 460172. 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

EHS Laboratories™

16 PLM

Asbestos Chain-of-Custody

17-05-00299

Due Date: 05/03/2017 (Wednesday) AE M Inv S

Environmental Hazards Services, LLC

www.leadlab.com
(800)347-4010
(804)275-4907 (fax)

7469 Whitepine Rd
Richmond, VA
23237

Company Name: Washington State University EH&S Address: P.O. Box 641172 City/State/Zip: Pullman, WA 99164

Phone: (509) 335-5604 Fax: ( ) E-mail: mrmckibbin@wsu.edu, stephan.gilley@wsu.edu Acct. Number:

Project Name / Testing Address: Johnson Hall **City/State (Required):** Pullman, WA

Collected by: Stephan Gilley Purchase Order Number: 9356-2017

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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P04243	5-1-17	✓												
2			✓												
3			✓												
4			✓												
5			✓												
6			✓												
7			✓												
8			✓												
9			✓												
10	P04258	5-1-17	✓												

Released by: Stephan Gilley Signature: Date/Time: 5-1-17 12:45

Received by: Stone Signature: J Stone Date/Time: 5/2/17 11:57am

April 10, 2017

Matt McKibbin
Washington State University EH&S
PO Box 641172
Pullman, WA 99164-1172

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

RE: Bulk Asbestos Fiber Concentration by Point Count
NVL Batch # 1705854

Client Project: 9356-2017
Location: Johnson Hall

Dear Mr. McKibbin,

At your request, NVL Laboratories conducted analysis of your sample to determine the asbestos concentration using point count procedures.

The sample was analyzed for the presence of asbestos fibers using polarized light microscopy (PLM) with dispersion staining in accordance with U.S. EPA method 600/R -93/116.

Eight slides of thoroughly homogenized material are prepared for any given sample that requires point counting. In order to be counted as a point, the crosshairs of the microscope must center on either a fiber or a particle. The analyst counts at least 50 points per slide preparation. A minimum of 400 non-empty points are counted, then the number of counted asbestos fibers are divided by the total number of points counted to arrive at the percentage of asbestos in the sample.

Please see the conclusion section of the lab reports for point count results.

It has been a pleasure to be of service to you. Please feel free to call if there is anything further we can assist you with.

Sincerely,

Nick Ly, Technical Director

NVLAP®
Lab Code:102063

Enc.: Sample Results

1.888.NVL.LABS
1.888.(685.5227)
www.nvllabs.com

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

ASBESTOS LABORATORY SERVICES

Company Washington State University EH&S
Address PO Box 641172
Pullman, WA 99164-1172
Project Manager Mr. Matt McKibbin
Phone (509) 335-3041
Direct (509) 335-5311

NVL Batch Number **1705854.00**
TAT 5 Days **AH** No
Rush TAT
Due Date 4/10/2017 **Time** 8:00 AM
Email mrmckibbin@wsu.edu
Fax (509) 730-5548

Project Name/Number: 9356-2017 **Project Location:** Johnson Hall

Subcategory PLM Bulk
Item Code ASB-03 EPA 600/R-93-116 Asbestos by PLM (400 points) <bulk>

Total Number of Samples 1 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	17030520	P04087 Layer 3 of 3		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Emailed by Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	4/3/17	0800
Analyzed by	Nadezhda		NVL	4/7/17	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions: Sample originally from batch #1704491

Date: 4/3/2017
Time: 11:20 AM
Entered By: Mohammed Jamal

1705854

Fatima Khan

From: Gilley, Stephan Alexis <stephan.gilley@wsu.edu>
Sent: Sunday, April 02, 2017 7:56 PM
To: Client Services
Subject: Point Count: Batch 17023038 Sample P04087

Follow Up Flag: Follow up
Flag Status: Flagged

Could you do a point count for the actinolite <1% Sample P04087, Layer 3 of 3? A 5-day turn around will work.

Thanks.....

Stephan Gilley
Environmental Health and Safety
Environmental Control Technician-3
Office: 509-335-5604

APPENDIX F

Contractor Non-Use of Asbestos Materials in Roof

COBRA
Building Envelope Contractors

Letter of Non-Asbestos Containing Materials.

Owner: Washington State University
225 SE Idaho Street
Pullman, WA 99164

RE: Johnson Hall Roof Replacement Project # WSU-4385-2009

New EPDM Membrane Roof System Johnson Hall;
Cobra has not supplied or installed roofing materials that contain asbestos on the project.

Company: Cobra Building Envelope Contractors

By: Scott Laufenberg

Title: Project Manager

Cobra BEC, Inc. - Spokane
7211 W. Flightline Blvd. Ste 108
Spokane, WA 99224

www.cobraresults.com
P (509) 455-4043
F (509) 455-4594

APPENDIX G

Laboratory Accreditations and Certificates

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:

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 Communique dated January 2009).

2016-10-01 through 2017-09-30

Effective Dates

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

NVL Laboratories, Inc.
4708 Aurora Avenue N.
Seattle, WA 98103
Mr. Nghiep Vi Ly
Phone: 206-547-0100 Fax: 206-634-1936
Email: nick.l@nvllabs.com
http://www.nvllabs.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102063-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101882-0

Environmental Hazards Services, L.L.C.

N. Chesterfield, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2017-01-01 through 2017-12-31

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Environmental Hazards Services, L.L.C.
7469 Whitepine Road
N. Chesterfield, VA 23237-2261
Ms. Julie Dickerson
Phone: 804-275-4788 Fax: 804-275-4907
Email: jdickerson@leadlab.com
http://www.leadlab.com

ASBESTOS FIBER ANALYSIS — NVLAP LAB CODE 101882-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

APPENDIX H

Building Inspector Training Certificates

KYRON

Certificate of Completion

Stephan Gilley

has successfully completed

4-Hr AHERA Certified Building Inspector Refresher Training

In compliance with TSCA Title II AHERA 40 CFR Part 763

US EPA Region 10 RGA Accreditation #792

Date of Training: April 26, 2016 in Pullman, WA

Certificate # BIR20160426-04

RGA ENVIRONMENTAL
A Terracon COMPANY
3317 3rd Avenue S, Suite D | Seattle, WA 98134

Tim Brady, Instructor

Expires: 04/26/2017

10 N Post Street, Suite 218 | Spokane, Washington 99201 | PHONE 509.252.8880 | FAX 509.252.8877 | WEB kyronehs.com

KYRON

Certificate of Completion

Matthew McKibbin

has successfully completed

4-Hr AHERA Certified Building Inspector Refresher Training

In compliance with TSCA Title II AHERA 40 CFR Part 763

US EPA Region 10 RGA Accreditation #792

Date of Training: April 26, 2016 in Pullman, WA

Certificate # BIR20160426-03

RGA ENVIRONMENTAL
A Terracon COMPANY
3317 3rd Avenue S, Suite D | Seattle, WA 98134

Tim Brady, Instructor

Expires: 04/26/2017

WASHINGTON STATE UNIVERSITY

Environmental Health and Safety

Good Faith Survey Update
Clark Hall (0099)
Washington State University, Pullman, Washington

July 17, 2013

Prepared by:

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

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1 INTRODUCTION

Asbestos sampling was conducted at Clark Hall by The Empirical Company (Empirical) in a Limited Hazardous Materials Inspection Report dated March 15, 2011. Washington State University (WSU) Environmental Health and Safety (EH&S) conducted additional sampling to satisfy good faith survey requirements for the entire building in March through June of 2013. Results of the previous survey and EH&S sampling are compiled below in this survey update. Additional regulated materials including polychlorinated biphenyl (PCB) caulk, lead-containing coatings and radon were addressed as part of Empirical' s 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. 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 March through June 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 March 15, 2011 by Empirical 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 Clark Hall. 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 Empirical 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:

<u>Thermal System Insulation</u>

- 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 Empirical and WSU EH&S. EH&S sample locations are provided on Figures 1 through 6. 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 Empirical's 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 Empirical's survey and EH&S sampling:

Material	Location(s) of ACM	Approximate Quantity
Mudded pipe fitting insulation (3"-8" O.D.)	Throughout mechanical spaces, ceiling spaces and wall cavities of Clark Hall	800 EA
Mudded seams on fiberglass insulated ducting (3' O.D.)	Basement mechanical room 11 – supply fans	300 SF
Hard pipe insulation runs (Orange, green and blue lagging)	Basement mechanical room 11	275 LF
Cement asbestos board	Basement mechanical room 11 - Plant growth units	300 SF
Cement asbestos board (2'x2' wall panels)	Behind radiant heaters under windows of perimeter walls	600 SF
12" White multi tan color vinyl floor tile with black mastic	Dominate flooring throughout Clark Hall	70,000 SF
Black mastic under non asbestos-containing 12" multi cream colored vinyl floor tile	Rooms 204, 209, 209A, 222, 273B, 326, 326A, 342, 346, 352, 359, 364, 406, 407, 414, 416, 418	10,000 SF

Continued on Page 3

Continued from Page 2

Material	Location(s) of ACM	Approximate Quantity
White/gray pebble pattern sheet vinyl flooring	Rooms 221A, 221B, 221C, 266, 449	500 SF
Gray sink undercoating	Rooms 116A, 299A, 318, 331A, 424, 429	6 EA
Black sink undercoating	Rooms 221, 221A, 221B, 266, 312, 332, 344, 416, 446, 449, 451	11 EA
Silver coat on built-up roof	Roof	23,000 SF
Gray, black and green flange gaskets	Flange gaskets throughout Clark Hall	150 EA
White gasket putty	Cooling tower #3 in mechanical penthouse room 501	25 LF
Fume hoods with cement asbestos boards	Rooms 134, 172, 204, 226, 228, 234, 247, 258, 262, 264, 300W, 306, 311, 312, 318, 321, 332, 346, 352, 372, 405, 429, 433, 435, 443, 461, 463	30 EA
Black laboratory countertop	Rooms 300W, 318, 321, 352, 372, 463	14 EA
Black glassware drying rack	Rooms 134, 212, 311, 312, 318, 352	8 EA

The following materials contain <1% asbestos:

Material	Location(s)	Approximate Quantity
Gypsum wallboard system (joint compound contains 2% asbestos)	Throughout Clark Hall	170,000 SF
Stucco	Mechanical penthouse walls (Room 501)	4,000 SF

The following materials are assumed to contain asbestos:

Material	Location(s) of ACM	Approximate Quantity
Fire doors	Throughout Clark Hall	25 EA
Mirror mastic	Restrooms throughout Clark Hall	14 EA

4 CONCLUSIONS AND RECOMMENDATIONS

Laboratory analysis revealed that a number of building materials in Clark Hall contain regulated quantities of asbestos (see Results Section 3.1 and Appendix A). 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.

Other regulated materials were sampled as part of the previous Limited Hazardous Materials Inspection Report by Empirical dated March 15, 2011 which is provided in Appendix B. Specific asbestos-containing materials are discussed below.

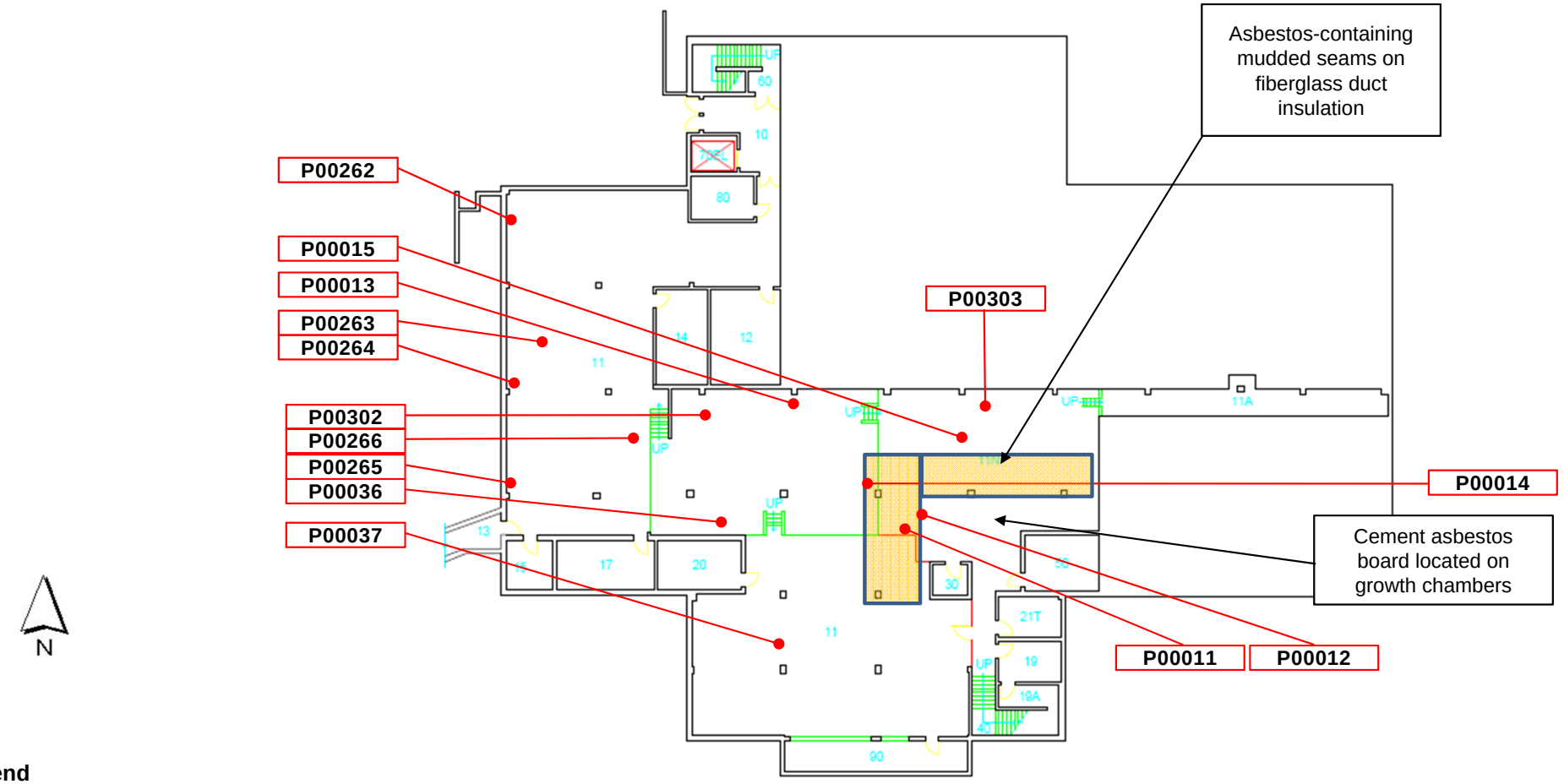
Roofing
Asbestos-containing silver coat was identified on the built-up roofing system throughout Clark Hall. Underlying roofing felts, insulations and vapor barriers were not sampled and are assumed to contain asbestos until further characterized.

Flooring
Asbestos-containing black mastic was found under both the original white multi tan color asbestos-containing 12" vinyl floor tiles and various colored non-asbestos replacement floor tiles throughout Clark Hall (See Figures 2 through 5). All sheet vinyl flooring was found to contain asbestos except a brown pebble pattern replacement sheet vinyl in room 221.

Gypsum Wallboard Systems
Gypsum wallboard systems were found to contain 2% asbestos in the joint compound (<1% asbestos as a composite of the wallboard system) throughout Clark Hall. Refer to WISHA Regional Directive 23.30 for training, respiratory protection and work practice requirements of asbestos-containing joint compound in wallboard systems.

FIGURES

Figure 1 – Basement – Clark Hall
ACM Locations and EH&S Sample Locations
(best viewed in color)



Legend

Asbestos-containing Materials (ACM)

Fiberglass duct insulation with mudded seams (4' O.D. ducting)

ACM (not shown)

- Mudded pipe fitting insulation (throughout Clark Hall)
- Hard pipe run insulation (throughout mechanical room 11)
- Hard mudded tank insulation (throughout mechanical room 11)
- Flange gaskets
- Cement asbestos boards on growth chambers (room 11N)

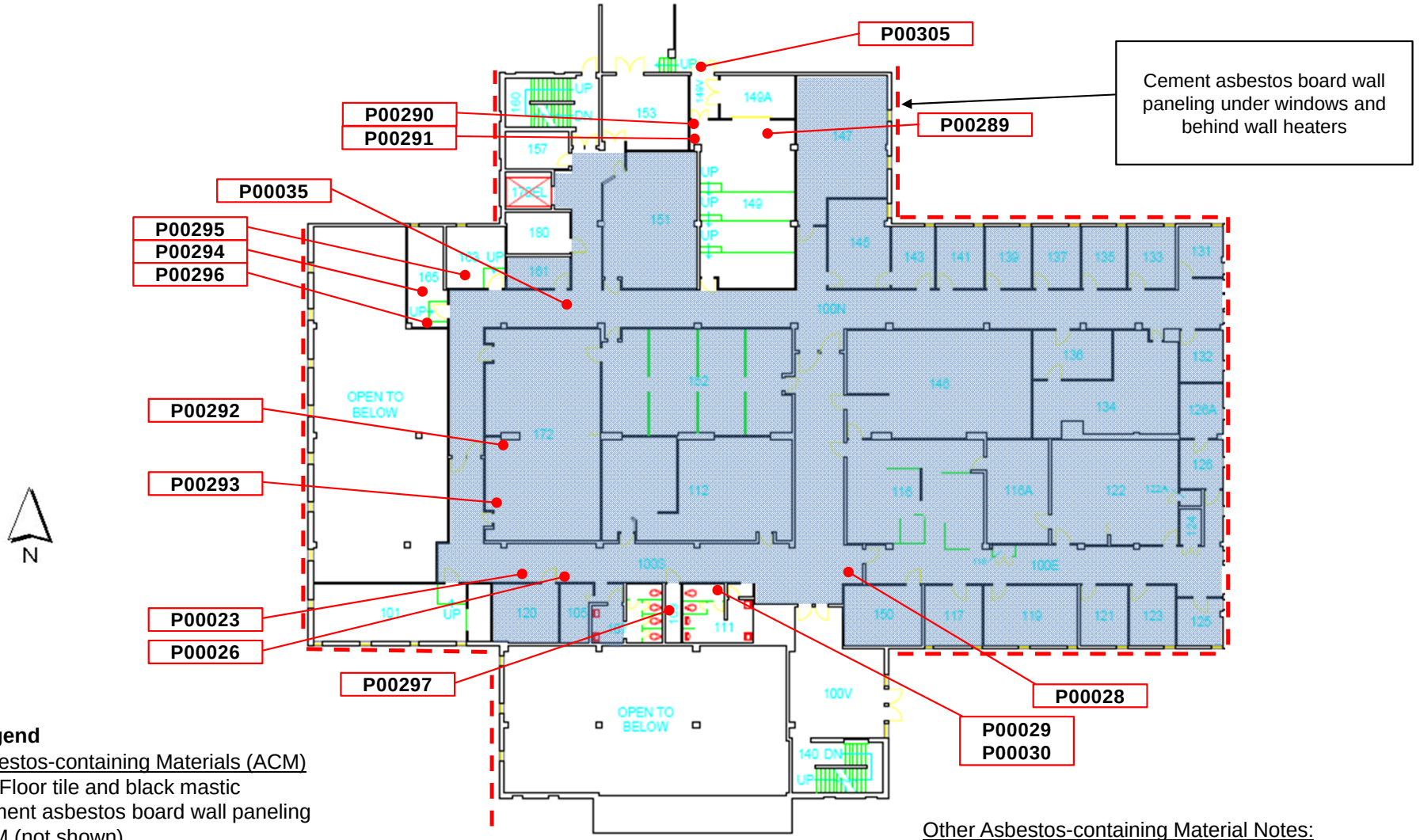
Other Asbestos-containing Material Notes:

Wallboard/joint compound system contains <1% asbestos throughout Clark Hall (joint compound contains 2% asbestos)

Assumed Asbestos-containing Materials:

Mirror mastic in restrooms and fire doors have not been sampled and are assumed to contain asbestos

Figure 2 – 1st Floor - Clark Hall
ACM Locations and EH&S Sample Locations
(best viewed in color)



Legend

Asbestos-containing Materials (ACM)

- 12” Floor tile and black mastic
- Cement asbestos board wall paneling

ACM (not shown)

- Mudded fitting insulation on fiberglass pipe runs found throughout ceiling spaces and wall cavities
- Laboratory countertops
- Laboratory fume hoods
- Laboratory glassware drying racks

P##### = Asbestos bulk sample location

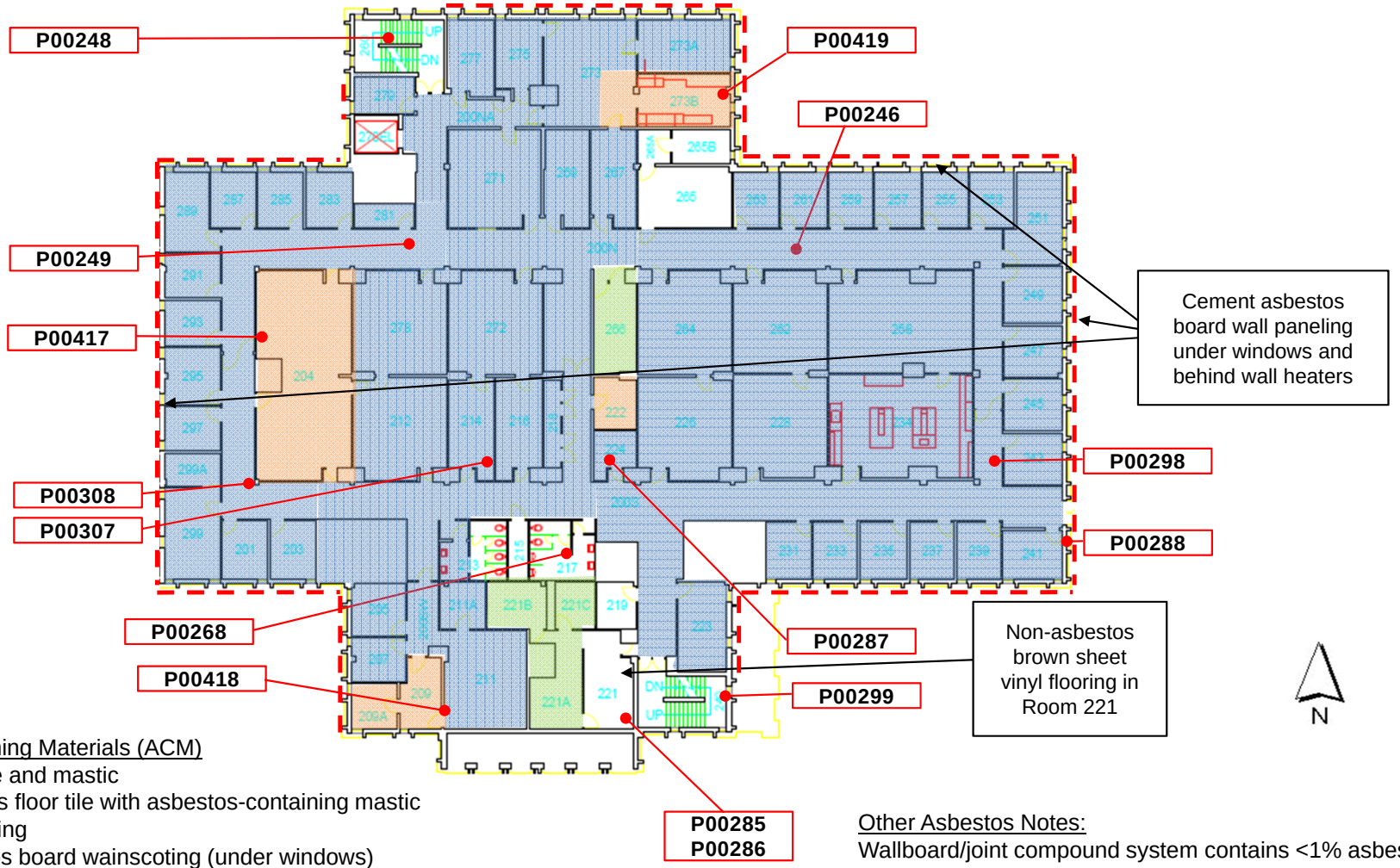
Other Asbestos-containing Material Notes:

Wallboard/joint compound system contains <1% asbestos throughout Clark Hall (joint compound contains 2% asbestos)

Assumed Asbestos-containing Materials Notes:

Mirror mastic in restrooms and fire doors have not been sampled and are assumed to contain asbestos

Figure 3 – 2nd Floor - Clark Hall
ACM Locations and EH&S Sample Locations
(best viewed in color)



Legend

Asbestos-containing Materials (ACM)

- 12” Vinyl floor tile and mastic
- 12” Non-asbestos floor tile with asbestos-containing mastic
- Sheet vinyl flooring
- Cement asbestos board wainscoting (under windows)

ACM (not shown)

- Mudded fitting insulation on fiberglass pipe runs found throughout ceiling spaces and wall cavities
- Laboratory countertops
- Laboratory fume hoods
- Laboratory glassware drying racks

P##### = Asbestos bulk sample location

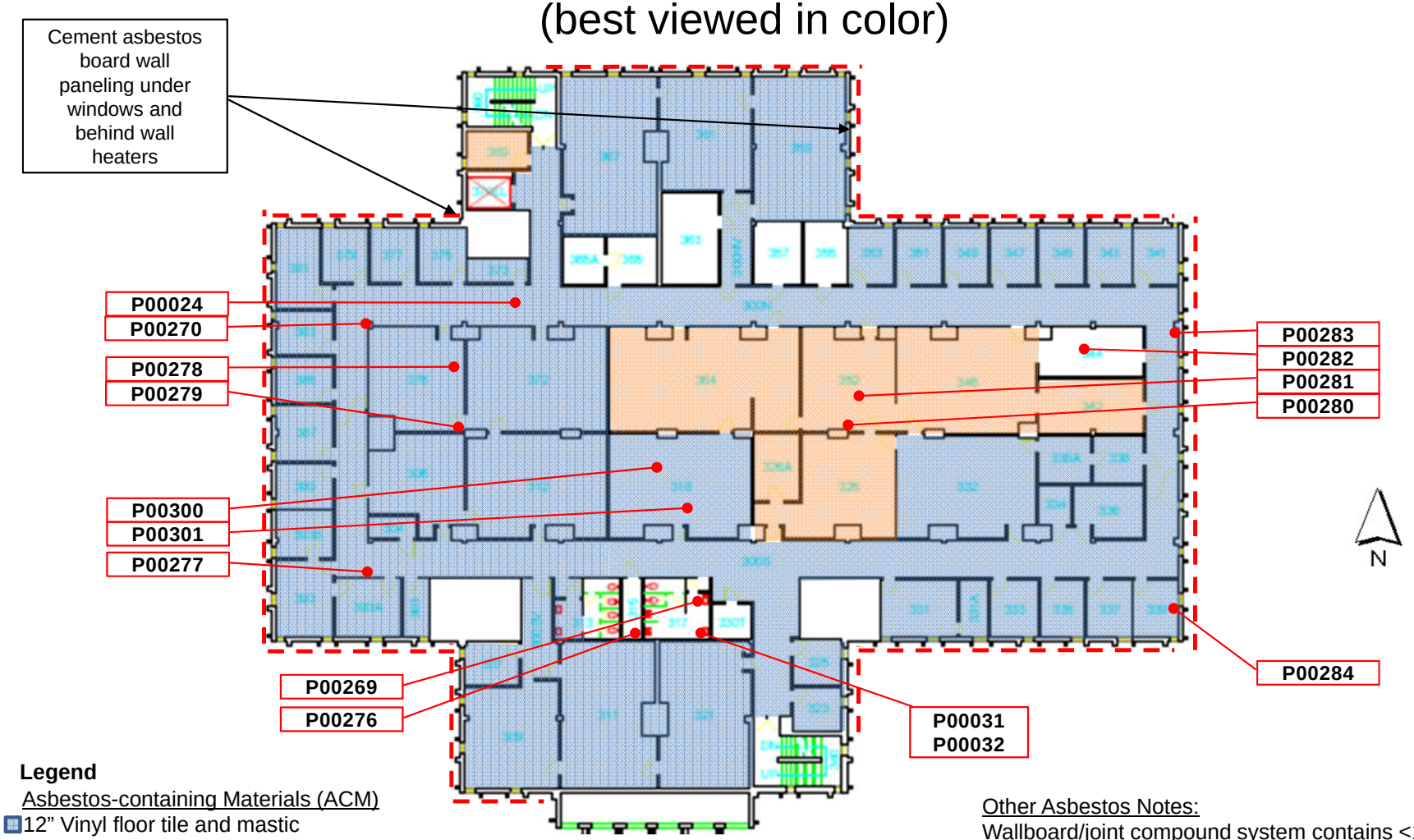
Other Asbestos Notes:

Wallboard/joint compound system contains <1% asbestos throughout Clark Hall (joint compound contains 2% asbestos)

Assumed Asbestos-containing Materials Notes:

Mirror mastic in restrooms and fire doors have not been sampled and are assumed to contain asbestos

Figure 4 – 3rd Floor - Clark Hall
ACM Locations and EH&S Sample Locations
(best viewed in color)



Legend

Asbestos-containing Materials (ACM)

- 12” Vinyl floor tile and mastic
- 12” Non-asbestos vinyl floor tile with asbestos-containing mastic
- Cement asbestos board wall paneling under windows and behind wall heaters

ACM (not shown)

- Mudded fitting insulation on fiberglass pipe runs found throughout ceiling spaces and wall cavities
- Laboratory countertops
- Laboratory fume hoods
- Laboratory glassware drying racks

P##### = Asbestos bulk sample location

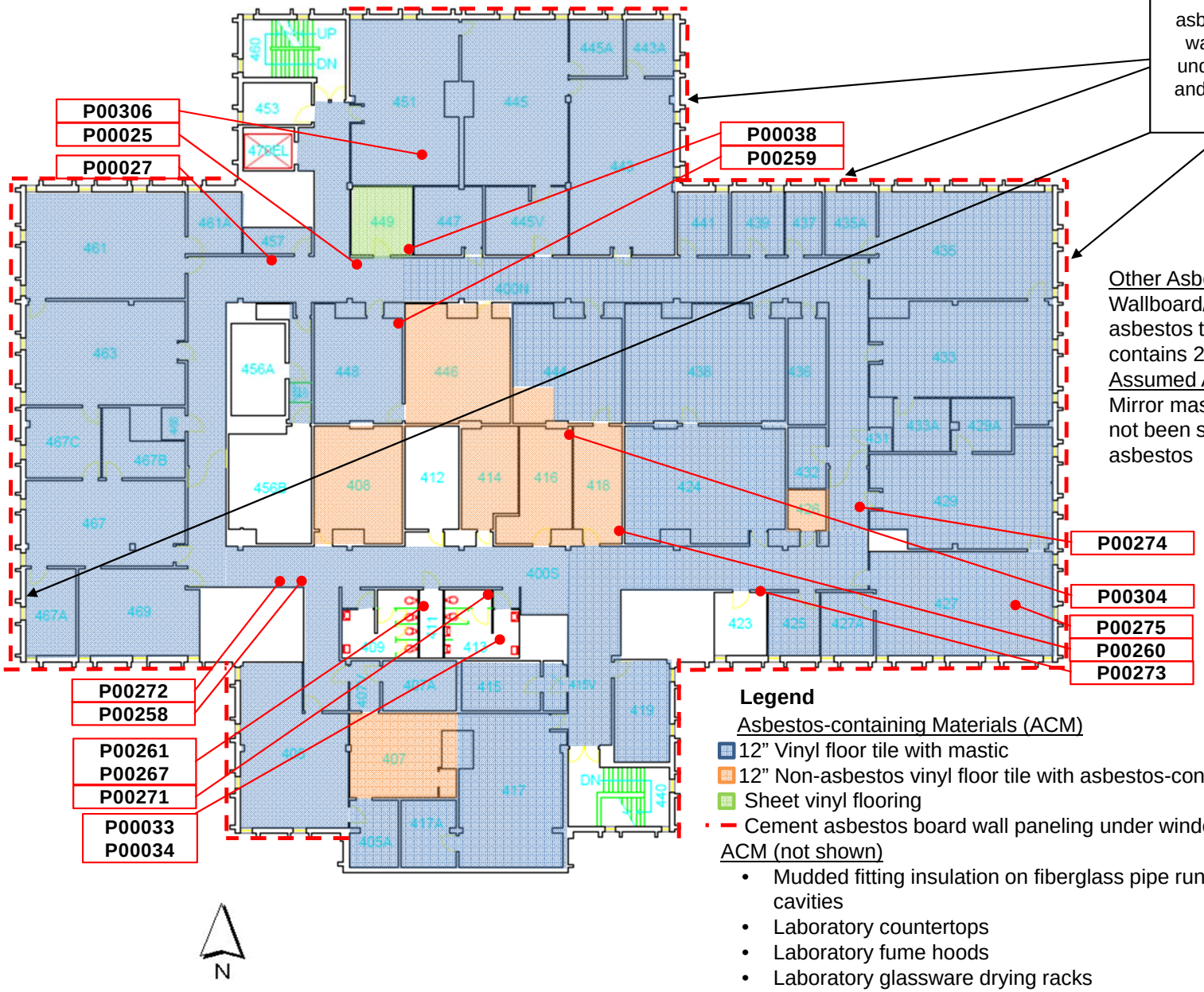
Other Asbestos Notes:

Wallboard/joint compound system contains <1% asbestos throughout Clark Hall (joint compound contains 2% asbestos)

Assumed Asbestos-containing Materials Notes:

Mirror mastic in restrooms and fire doors have not been sampled and are assumed to contain asbestos

Figure 5 – 4th Floor - Clark Hall
ACM Locations and EH&S Sample Locations
(best viewed in color)



Other Asbestos Notes:
Wallboard/joint compound system contains <1% asbestos throughout Clark Hall (joint compound contains 2% asbestos)
Assumed Asbestos-containing Materials Notes:
Mirror mastic in restrooms and fire doors have not been sampled and are assumed to contain asbestos

Legend

Asbestos-containing Materials (ACM)

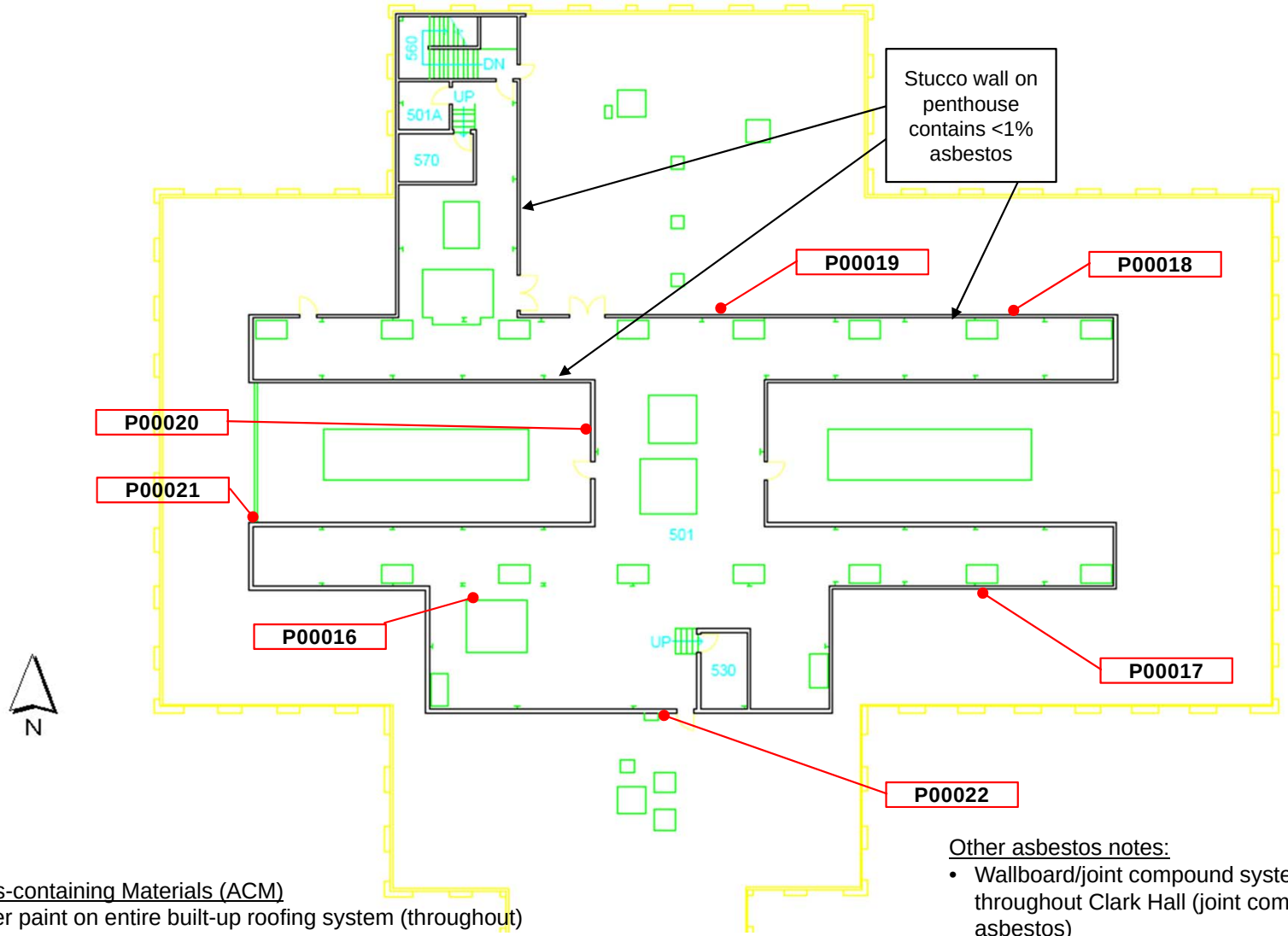
- 12” Vinyl floor tile with mastic
- 12” Non-asbestos vinyl floor tile with asbestos-containing mastic
- Sheet vinyl flooring
- Cement asbestos board wall paneling under windows and behind wall heaters

ACM (not shown)

- Mudded fitting insulation on fiberglass pipe runs found throughout ceiling spaces and wall cavities
- Laboratory countertops
- Laboratory fume hoods
- Laboratory glassware drying racks

P##### = Asbestos bulk sample location

Figure 6 – Roof/Penthouse - Clark Hall
ACM Locations and EH&S Sample Locations
(best viewed in color)



Legend

Asbestos-containing Materials (ACM)

- Silver paint on entire built-up roofing system (throughout)
- Flange gaskets
- Mudded pipe fittings on fiberglass insulated pipe runs
- Gasket putty on cooling tower #3 (inside penthouse)

P##### = Asbestos bulk sample location

Other asbestos notes:

- Wallboard/joint compound system contains <1% asbestos throughout Clark Hall (joint compound contains 2% asbestos)
- Stucco wall system on mechanical penthouse contains <1% asbestos.

Assumed asbestos-containing materials notes:

Fire doors have not been sampled and are assumed to contain asbestos

TABLES

TABLE 1 – HOMOGENEOUS SAMPLING AREAS

HSA	Empirical and EH&S Sample #'s	Material	Location(s)
A	P00262, P00263, P00264, P00265, P00266	White spray-applied fireproofing	Basement mechanical room 11
B	CH-AB-122810-2A; CH-AB-122910-15A	Mudded pipe fitting insulation (3"-8" O.D.)	Throughout mechanical spaces, ceiling spaces and wall cavities of Clark Hall
C	CH-AB-122810-3A, 4A, 5A, 6A, 7A; CH-AB-122910-10A	Hard pipe insulation runs (Orange, green and blue lagging)	Basement mechanical room 11
D	CH-AB-122910-11A	12" White multi tan color vinyl floor tile with black mastic	Dominate flooring throughout Clark Hall
E	CH-AB-122910-12A, 12B; CH-AB-123010-12C; CH-AB-122910-21A	Gypsum wallboard with joint compound	Throughout Clark Hall
F	CH-AB-122910-13A, 13B; CH-AB-123010-13C; CH-AB-122910-14A, 14B; CH-AB-123010-14C	4" Black vinyl cove base with brown mastic	Throughout Clark Hall
H	CH-AB-122910-16A,B; CH-AB-010311-15C	2'x4' White suspended ceiling tile with small random holes	Throughout Clark Hall
I	CH-AB-122910-17A,B; CH-AB-010311-17C	2'x4' White suspended ceiling tile with large random holes	Throughout Clark Hall
J	P00282, P00290, CH-AB-122910-18A,B;19A,B; 20A,B	6" Red ceramic floor tile with gray grout and tan mastic	Rooms 149, 344, 407A
K	CH-AB-122910-23A	Cement boards in laboratory fume hoods	Rooms 134, 172, 204, 226, 228, 234, 247, 258, 262, 264, 300W, 306, 311, 312, 318, 321, 332, 346, 352, 372, 405, 429, 433, 435, 443, 461, 463
L	CH-AB-122910-24A	Gray sink undercoating	116A, 299A, 318, 331A, 424, 429
M	CH-AB-010311-39A	Black sink undercoat	221
N	CH-AB-010311-42A; P00038	White mosaic pattern sheet vinyl flooring	Rooms 221A, 221B, 221C, 266, 249
O	P00281, P00417, P00418	12" White vinyl floor tile with tan streaks and black mastic	Rooms 204, 209, 209A,326, 326A, 342, 346, 352, 364
P	P00283	Cement asbestos board under windows and behind wall heaters	Perimeter interior walls throughout offices
Q	P00288	Exterior tan color pebblecrete	Throughout exterior fascia
R	P00267, P00297	Black fiberglass wall insulation with brown glue dollop	Wall surrounding restrooms throughout
S	P00299	4" Brown ceramic floor tile with gray grout	Stairwells throughout and lobby
T	CH-AB-123010-25A, 26/A, CH-AB-010311-44A, 45/A, P00260, P00300, P000304	12" White vinyl floor tile with multi-colored streaks and black mastic	Rooms 222, 369, 406, 407, 414, 416, 418, 426, 446

HSA	Empirical and EH&S Sample #'s	Material	Location(s)
U	P00285	Brown pebble pattern sheet vinyl flooring with tan mastic (newer)	Room 221
V	P00289	Black sink (solid)	Room 149
W	P00301	Black laboratory countertop	Rooms 300W, 318, 321, 352, 372, 463
X	P00294, P00295, P00302, P00303	Yellow fiberglass duct insulation with canvas duct wrap	Rooms 11, 163, 165
Y	P00305	Gray exterior caulk	Throughout exterior door and window frames
Z	CH-AB-011211-1A	Silver coat on roofing	Throughout roof
AA	P00036	4" O.D. Gray flange gasket	Basement mechanical room 11
BB	P00037	4" O.D. Black flange gasket	Basement mechanical room 11
CC	P00029, P00031, P00033	1" Ceramic floor tile with gray grout and thinset	Restrooms throughout
DD	P00030, P00032, P00034	4" Ceramic wall tile with yellow mastic and grout	Restrooms throughout
EE	P00028	White pipe thread sealant	Fire protection piping throughout
FF	P00026, P00027	Red fire stop caulk	Wall penetrations throughout
GG	P00023, P00024, P00025	White fiberglass pipe insulation run mastic	HVAC piping throughout ceiling spaces
HH	P00018, P00019, P00020, P00021, P00022	Exterior stucco	Mechanical penthouse walls
II	P00017	Gray caulk	Mechanical penthouse louver frames
JJ	P00011, P00012, P00014	Gray/green mastic on uninsulated duct seams	Basement mechanical room 11
KK	P00268, P0069, P0071	12" White pinhole pattern ceiling tile with brown glue dollop	Restrooms throughout
LL	P00270, P00272, P00293, P00308	2'x4' White random small pinhole pattern suspended ceiling tile	Throughout Clark Hall
MM	P00274, P00306, P00307	2'X4' White random pinhole with parallel etched pattern suspended ceiling tile	Throughout Clark Hall
NN	P00277, P00287, P00298	2'X4' White medium and small pinhole pattern suspended ceiling tile	Throughout Clark Hall
OO	P00275	Gray sink undercoat on metal laboratory sinks	427
PP	P00419	12" Gray streaked vinyl floor tile with yellow mastic and residual black mastic	273B
QQ	P00280	Black glassware drying rack	Rooms 134, 212, 311, 312, 318, 352

Table 2 - Summary of Sampling and Analytical Results													
Sample #	Building Name	Building #	Sample Location	Material	Material Description	Type	Color	Location Quantity	Quantity descriptor	Comments	Sample results	ACM?	Homogenous Material Location
2A	Clark Hall	0099	11	Pipe Insulation	Mudded fitting (6-8" O.D.)	TSI	Gray	800	EA	Sample 1 of 4	50% CHR, 10% AMO	Yes	Throughout Clark Hall
15A	Clark Hall	0099	151	Pipe Insulation	Mudded fitting (3-4" O.D.)	TSI	White	800	EA	Sample 2 of 4	2% CHR	Yes	Throughout Clark Hall
50A	Clark Hall	0099	218	Pipe Insulation	Mudded fitting (3-4" O.D.)	TSI	White	800	EA	Sample 3 of 4	2% CHR	Yes	Throughout Clark Hall
62A	Clark Hall	0099	375	Pipe Insulation	Mudded fitting (3-4" O.D.)	TSI	White	800	EA	Sample 4 of 4	2% CHR	Yes	Throughout Clark Hall
3A	Clark Hall	0099	11	Pipe Insulation	Mag-type pipe insulation runs (6"-24" O.D.)	TSI	Orange	275	LF	Sample 1 of 7	25% CHR, 5% AMO	Yes	Basement room 11
4A	Clark Hall	0099	11	Pipe Insulation	Mag-type pipe insulation runs (6"-24" O.D.)	TSI	Orange	275	LF	Sample 2 of 7	15% CHR, 5% AMO	Yes	Basement room 11
5A	Clark Hall	0099	11	Pipe Insulation	Mag-type pipe insulation runs (6"-24" O.D.)	TSI	Blue-Green	275	LF	Sample 3 of 7	Trace	Yes	Basement room 11
5C	Clark Hall	0099	11	Pipe Insulation	Mag-type pipe insulation runs (6"-24" O.D.)	TSI	Blue-Green	275	LF	Sample 4 of 7	2% CHR	Yes	Basement room 11
6A	Clark Hall	0099	11	Pipe Insulation	Mag-type pipe insulation runs (6"-24" O.D.)	TSI	Blue	275	LF	Sample 5 of 7	15% CHR, 2% AMO	Yes	Basement room 11
7A	Clark Hall	0099	11	Pipe Insulation	Mag-type pipe insulation runs (6"-24" O.D.)	TSI	Green	275	LF	Sample 6 of 7	Trace	Yes	Basement room 11
10A	Clark Hall	0099	11	Pipe Insulation	Mag-type pipe insulation runs (6"-24" O.D.)	TSI	Gray	275	LF	Sample 7 of 7	20% CHR, 15% AMO	Yes	Basement room 11
8A	Clark Hall	0099	11	Cement Board	Cement board paneling (transite)	Misc	Gray	300	SF	Sample 1 of 1	25% CHR	Yes	Basement room 11 - Growth chamber walls
11A/22A	Clark Hall	0099	151	12" Vinyl floor tile	12" Multi-tan vinyl floor tile with mastic	Misc	Multi Tan Color	70,000	SF	Sample 1 of 4	5% CHR (tile), 15% CHR (mastic)	Yes	Throughout floors 1 through 4
31A/32A	Clark Hall	0099	269	12" Vinyl floor tile	12" Multi-tan vinyl floor tile with black mastic	Misc	Multi Tan Color	70,000	SF	Sample 2 of 4	2% CHR (tile), 10% CHR (mastic)	Yes	Throughout floors 1 through 4
52A/53A	Clark Hall	0099	393	12" Vinyl floor tile	12" Multi-tan vinyl floor tile with black mastic	Misc	Multi Tan Color	70,000	SF	Sample 3 of 4	2% CHR (tile), 15% CHR (mastic)	Yes	Throughout floors 1 through 4
63A/64A	Clark Hall	0099	437	12" Vinyl floor tile	12" Multi-tan vinyl floor tile with black mastic	Misc	Multi Tan Color	70,000	SF	Sample 4 of 4	2% CHR (tile), 10% CHR (mastic)	Yes	Throughout floors 1 through 4

23A	Clark Hall	0099	134	Cement Board	Laboratory hood	Misc	Grey	30	EA	Sample 1 of 2	30% CHR	Yes	134, 172, 204, 226, 228, 234, 247, 258, 262, 264, 300W, 306, 311, 312, 318, 321, 332, 346, 352, 372, 405, 429, 433, 435, 443, 461, 463
49A	Clark Hall	0099	204	Cement Board	Laboratory hood	Misc	Grey	30	EA	Sample 2 of 2	20% CHR	Yes	134, 172, 204, 226, 228, 234, 247, 258, 262, 264, 300W, 306, 311, 312, 318, 321, 332, 346, 352, 372, 405, 429, 433, 435, 443, 461, 463
24A	Clark Hall	0099	116A	Sink Undercoating	Gray sink undercoating	Misc	Grey	6	EA	Sample 1 of 1	20% CHR	Yes	116A, 299A, 318, 331A, 424, 429
P00275	Clark Hall	0099	427	Sink Undercoating	Gray sink undercoating	Misc	Gray	1	EA	Sample 1 of 1	ND	Yes	427
25A/26A	Clark Hall	0099	112	12" Vinyl floor tile	12" White vinyl floor tile with multi-colored streaks and black mastic	Misc	Multi Cream Color	10,000	SF	Sample 1 of 5	ND (tile), 5% CHR (mastic)	Yes	222, 369, 406, 407, 414, 416, 418, 426, 446
44A/45A	Clark Hall	0099	209	12" Vinyl floor tile	12" White vinyl floor tile with multi-colored streaks and black mastic	Misc	Multi Cream Color	10,000	SF	Sample 2 of 5	ND (tile), 10% CHR (mastic)	Yes	222, 369, 406, 407, 414, 416, 418, 426, 446
P00300	Clark Hall	0099	318	12" Vinyl floor tile	12" White vinyl floor tile with multi-colored streaks	Misc	Multi Cream Color	10,000	SF	Sample 3 of 5	ND (tile), 10% CHR (mastic)	Yes	222, 369, 406, 407, 414, 416, 418, 426, 446
P00304	Clark Hall	0099	416	12" Vinyl floor tile	12" White vinyl floor tile with multi-colored streaks	Misc	Multi Cream Color	10,000	SF	Sample 4 of 5	ND (tile), 10% CHR (mastic)	Yes	222, 369, 406, 407, 414, 416, 418, 426, 446
P00260	Clark Hall	0099	418	12" Vinyl floor tile	12" White vinyl floor tile with multi-colored streaks	Misc	Multi Cream Color	10,000	SF	Sample 5 of 5	ND (tile), 10% CHR (mastic)	Yes	222, 369, 406, 407, 414, 416, 418, 426, 446
39A	Clark Hall	0099	221	Sink Coating	Black sink undercoating	Misc	Black	11	EA	Sample 1 of 1	5% CHR	Yes	221, 221A, 221B, 266, 312, 332, 344, 416, 446, 449, 451
42A	Clark Hall	0099	221	Sheet Vinyl Flooring	White mosaic pattern sheet vinyl flooring with paper backing and yellow mastic	Misc	Multi Cream Color	500	SF	Sample 1 of 2	20% CHR	Yes	221A, 221B, 221C, 266, 449
P00038	Clark Hall	0099	449	Sheet Vinyl Flooring	White mosaic pattern sheet vinyl flooring with paper backing and yellow mastic	Misc	Multi Cream Color	500	SF	Sample 2 of 2	20% CHR (paper backing), 2% CHR (mastic)	Yes	221A, 221B, 221C, 266, 449

21A	Clark Hall	0099	151	Gypsum wallboard system	Joint Compound	Misc	White	170,000	SF	Sample 1 of 10	2% CHR	Yes	Throughout Clark Hall
36A	Clark Hall	0099	269	Gypsum wallboard system	Joint Compound	Misc	White	170,000	SF	Sample 2 of 10	2% CHR	Yes	Throughout Clark Hall
57A	Clark Hall	0099	393	Gypsum wallboard system	Joint Compound	Misc	White	170,000	SF	Sample 3 of 10	2% CHR	Yes	Throughout Clark Hall
68A	Clark Hall	0099	437	Gypsum wallboard system	Joint Compound	Misc	Whtie	170,000	SF	Sample 4 of 10	2% CHR	Yes	Throughout Clark Hall
P00273	Clark Hall	0099	400S	Gypsum wallboard system	Gypsum wallboard with joint compound and seam tape	Misc	White	170,000	SF	Sample 5 of 10	ND (gypsum wallboard), 2% CHR (Joint compound)	Yes	Throughout Clark Hall
P00278	Clark Hall	0099	376	Gypsum wallboard system	Gypsum wallboard with joint compound and seam tape	Misc	White	170,000	SF	Sample 6 of 10	ND (gypsum wallboard), 2% CHR (Joint compound)	Yes	Throughout Clark Hall
P00291	Clark Hall	0099	149	Gypsum wallboard system	Gypsum wallboard with joint compound and seam tape	Misc	White	170,000	SF	Sample 7 of 10	ND (gypsum wallboard), 2% CHR (Joint compound)	Yes	Throughout Clark Hall
P00296	Clark Hall	0099	165	Gypsum wallboard system	Gypsum wallboard	Misc	White	170,000	SF	Sample 8 of 10	ND (gypsum wallboard only)	Yes	Throughout Clark Hall
P00261	Clark Hall	0099	411	Gypsum Wallboard	Gypsum wallboard with black paper backing	Misc	Brown	170,000	SF	Sample 9 of 10	ND (gypsum wallboard only)	Yes	Throughout Clark Hall
P00276	Clark Hall	0099	316	Gypsum wallboard	Gypsum wallboard	Misc	Brown	170,000	SF	Sample 10 of 10	ND (gypsum wallboard only)	Yes	Throughout Clark Hall
CH-AB-011211-1A	Clark Hall	0099	Roof	Roofing	Silver Coat	Misc	Silver and Black	23,000	SF	Sample 1 of 1	10% CHR	Yes	Throughout roofing system
P00011	Clark Hall	0099	11	Duct seam mastic	Gray/green mastic on un-insulated duct seams	Misc	Gray/green	400	LF	Sample 1 of 4	ND	No	Basement room 11, Supply fan ducting and mixing boxes in ceiling spaces
P00012	Clark Hall	0099	11	Duct seam mastic	Gray/green mastic on un-insulated duct seams	Misc	Gray/green	400	LF	Sample 2 of 4	ND	No	Basement room 11, Supply fan ducting and mixing boxes in ceiling spaces
P00014	Clark Hall	0099	11	Duct seam mastic	Gray/green mastic on un-insulated duct seams	Misc	Gray/green	400	LF	Sample 3 of 4	ND	No	Basement room 11, Supply fan ducting and mixing boxes in ceiling spaces

P00035	Clark Hall	0099	100N	Duct mastic	Gray/green mastic on un-insulated duct seams	Misc	Gray/green	400	LF	Sample 4 of 4	ND	No	Basement room 11, Supply fan ducting and mixing boxes in ceiling spaces
P00013	Clark Hall	0099	11	Duct insulation and seam mastic	Fiberglass duct insulation with canvas lagging and white seam mastic	Misc	White	500	SF	Sample 1 of 1	ND	No	4' O.D. Supply ducting in Basement room 11
P00015	Clark Hall	0099	11	Duct insulation	White mudded duct seams on fiberglass duct insulation	Misc	White	300	SF	Sample 1 of 1	ND (lagging); 2% CHR, 20% AMO (insulation)	Yes	4' O.D. Supply ducting in Basement room 11
P00016	Clark Hall	0099	Penthouse	Gasket putty	White gasket putty	Misc	White	25	LF	Sample 1 of 1	5% CHR	Yes	Mechanical penthouse (room 501) on cooling tower #3
P00017	Clark Hall	0099	Penthouse louver	Caulk	Gray caulk on exterior louver frame	Misc	Gray	150	LF	Sample 1 of 1	ND	No	Louvers on mechanical penthouse
P00018	Clark Hall	0099	Penthouse	Stucco	Exterior stucco wall with black vapor barrier paper	Surf	Gray	4,000	SF	Sample 1 of 5	0.25% CHR	No	Mechanical penthouse walls (room 501)
P00019	Clark Hall	0099	Penthouse	Stucco	Exterior stucco wall with black vapor barrier paper	Surf	Gray	4,000	SF	Sample 2 of 5	0.25% CHR	No	Mechanical penthouse walls (room 501)
P00020	Clark Hall	0099	Penthouse	Stucco	Exterior stucco wall with black vapor barrier paper	Surf	Gray	4,000	SF	Sample 3 of 5	0.25% CHR	No	Mechanical penthouse walls (room 501)
P00021	Clark Hall	0099	Penthouse	Stucco	Exterior stucco wall with black vapor barrier paper	Surf	Gray	4,000	SF	Sample 4 of 5	0.5% CHR	No	Mechanical penthouse walls (room 501)
P00022	Clark Hall	0099	Penthouse	Stucco	Exterior stucco wall with black vapor barrier paper	Surf	Gray	4,000	SF	Sample 5 of 5	0.75% CHR	No	Mechanical penthouse walls (room 501)
P00023	Clark Hall	0099	100S	Mastic	White fiberglass pipe run insulation mastic	Misc	White	500	SF	Sample 1 of 3	ND (all layers)	No	Exposed fiberglass ends throughout HVAC piping in ceiling spaces of floors 1-4
P00024	Clark Hall	0099	300N	Mastic	White fiberglass pipe run insulation mastic	Misc	White	500	SF	Sample 2 of 3	ND (all layers)	No	Exposed fiberglass ends throughout HVAC piping in ceiling spaces of floors 1-4
P00025	Clark Hall	0099	400N	Mastic	White fiberglass pipe run insulation mastic	Misc	White	500	SF	Sample 3 of 3	ND (all layers)	No	Exposed fiberglass ends throughout HVAC piping in ceiling spaces of floors 1-4

P00026	Clark Hall	0099	100S	Fire stop caulk	Red fire stop caulk on wall penetrations	Misc	Red	800	SF	Sample 1 of 2	ND	No	Throughout wall penetrations of Clark Hall
P00027	Clark Hall	0099	400N	Fire stop caulk	Red fire stop caulk on wall penetrations	Misc	Red	800	SF	Sample 2 of 2	ND	No	Throughout wall penetrations of Clark Hall
P00028	Clark Hall	0099	100S	Sealant	White pipe thread sealant on fire protection piping	Misc	White	500	EA	Sample 1 of 1	ND	No	Throughout fire protection system piping
P00029	Clark Hall	0099	111	Ceramic floor tile	1" Ceramic floor tile with gray grout and thinset	Misc	Gray	1,000	SF	Sample 1 of 3	ND (all layers)	No	Restrooms throughout
P00031	Clark Hall	0099	317	Ceramic floor tile	1" Ceramic floor tile with gray grout and thinset	Misc	Gray	1,000	SF	Sample 2 of 3	ND (all layers)	No	Restrooms throughout
P00033	Clark Hall	0099	413	Ceramic floor tile	1" Ceramic floor tile with gray grout and thinset	Misc	Gray	1,000	SF	Sample 3 of 3	ND (all layers)	No	Restrooms throughout
P00030	Clark Hall	0099	111	Ceramic wall tile	4" Ceramic wall tile with yellow mastic and grout	Misc	Gray	800	SF	Sample 1 of 3	ND (all layers)	No	Restrooms throughout
P00032	Clark Hall	0099	317	Ceramic wall tile	4" Ceramic wall tile with yellow mastic and grout	Misc	Gray	800	SF	Sample 2 of 3	ND (all layers)	No	Restrooms throughout
P00034	Clark Hall	0099	413	Ceramic wall tile	4" Ceramic wall tile with yellow mastic and grout	Misc	Gray	800	SF	Sample 3 of 3	ND (all layers)	No	Restrooms throughout
P00036	Clark Hall	0099	11	Flange gasket	4" Gray flange gasket	Misc	Gray	150	EA	Sample 1 of 1	75% CHR	Yes	Flange gaskets in Basement and Penthouse mechanical rooms
P00037	Clark Hall	0099	11	Flange gasket	4" Black flange gasket	Misc	Black	150	EA	Sample 1 of 1	65% CHR	Yes	Flange gaskets in Basement and Penthouse mechanical rooms
P00258	Clark Hall	0099	400S	4" Vinyl cove base	4" Dark brown vinyl cove base with brown mastic	Misc	Dark Brown	3,200	SF	Sample 1 of 6	ND	No	Throughout Clark Hall
P00259	Clark Hall	0099	448	4" Vinyl cove base	4" Dark brown vinyl cove base with brown mastic	Misc	Dark Brown	3,200	SF	Sample 2 of 6	ND	No	Throughout Clark Hall
P00279	Clark Hall	0099	376	4" Vinyl cove base	4" Dark brown vinyl cove base with brown mastic and gypsum wallboard	Misc	Dark Brown	3,200	SF	Sample 3 of 6	ND (all layers)	No	Throughout Clark Hall
P00284	Clark Hall	0099	339	4" Vinyl cove base	4" Dark brown vinyl cove base with brown mastic	Misc	Dark Brown	3,200	SF	Sample 4 of 6	ND	No	Throughout Clark Hall
P00286	Clark Hall	0099	221	4" Vinyl cove base	4" Dark brown vinyl cove base with brown mastic	Misc	Dark Brown	3,200	SF	Sample 5 of 6	ND	No	Throughout Clark Hall

P00292	Clark Hall	0099	172	4" Vinyl cove base	4" Dark brown vinyl cove base with brown mastic	Misc	Dark Brown	3,200	SF	Sample 6 of 6	ND	No	Throughout Clark Hall
P00299	Clark Hall	0099	240 Southeast stairwell	Ceramic floor tile	4" Brown ceramic floor tile with gray grout	Misc	Brown	200	SF	Sample 1 of 1	ND	No	Stairwells throughout
P00262	Clark Hall	0099	11	Fireproofing	White spray applied fireproofing	Surf	White	4,000	SF	Sample 1 of 5	ND	No	Basement room 11
P00263	Clark Hall	0099	11	Fireproofing	White spray applied fireproofing	Surf	White	4,000	SF	Sample 2 of 5	ND	No	Basement room 11
P00264	Clark Hall	0099	11	Fireproofing	White spray applied fireproofing	Surf	White	4,000	SF	Sample 3 of 5	ND	No	Basement room 11
P00265	Clark Hall	0099	11	Fireproofing	White spray applied fireproofing	Surf	White	4,000	SF	Sample 4 of 5	ND	No	Basement room 11
P00266	Clark Hall	0099	11	Fireproofing	White spray applied fireproofing	Surf	White	4,000	SF	Sample 5 of 5	ND	No	Basement room 11
P00267	Clark Hall	0099	411	Wall insulation and glue	Black fiberglass wall insulation with brown glue	Misc	Black/brown	400	SF	Sample 1 of 2	25% CHR (brown mastic)	Yes	Walls surrounding restrooms throughout
P00297	Clark Hall	0099	109	Wall insulation	Black fiberglass wall insulation with brown glue	Misc	Black/brown	400	SF	Sample 2 of 2	25% CHR (brown mastic)	Yes	Walls surrounding restrooms throughout
P00268	Clark Hall	0099	217	12" Ceiling tile	12" White random pinhole ceiling tile with brown glue dollop	Misc	White	1,000	SF	Sample 1 of 3	ND (all layers)	No	Restrooms throughout
P00269	Clark Hall	0099	317	12" Ceiling tile	12" White random pinhole ceiling tile with brown glue dollop	Misc	White	1,000	SF	Sample 2 of 3	ND (all layers)	No	Restrooms throughout
P00271	Clark Hall	0099	413	12" Ceiling tile	12" White random pinhole ceiling tile with brown glue dollop	Misc	White	1,000	SF	Sample 3 of 3	ND (all layers)	No	Restrooms throughout
P00270	Clark Hall	0099	300N	2'x4' Suspended ceiling tile	2'x4' White random small pinhole pattern suspended ceiling tile	Misc	White	63,000	SF	Sample 1 of 4	ND	No	Throughout Clark Hall
P00272	Clark Hall	0099	400S	2'x4' Suspended ceiling tile	2'x4' White random small pinhole pattern suspended ceiling tile	Misc	White	63,000	SF	Sample 2 of 4	ND	No	Throughout Clark Hall
P00293	Clark Hall	0099	172	2'x4' Suspended ceiling tile	2'x4' White random small pinhole pattern suspended ceiling tile	Misc	White	63,000	SF	Sample 3 of 4	ND	No	Throughout Clark Hall
P00308	Clark Hall	0099	200S	2'x4' Suspended ceiling tile	2'x4' White random small pinhole pattern suspended ceiling tile	Misc	White	63,000	SF	Sample 4 of 4	ND	No	Throughout Clark Hall

P00274	Clark Hall	0099	400S	2'x4' Suspended ceiling tile	2'x4' White random pinhole with parallel etched pattern suspended ceiling tile	Misc	White	9,000	SF	Sample 1 of 3	ND	No	Throughout Clark Hall
P00306	Clark Hall	0099	451	2'x4' Suspended ceiling tile	2'x4' White random pinhole with parallel etched pattern suspended ceiling tile	Misc	White	9,000	SF	Sample 2 of 3	ND	No	Throughout Clark Hall
P00307	Clark Hall	0099	214	2'x4' Suspended ceiling tile	2'x4' White random pinhole with parallel etched pattern suspended ceiling tile	Misc	White	9,000	SF	Sample 3 of 3	ND	No	Throughout Clark Hall
P00277	Clark Hall	0099	300S	2'x4' Suspended ceiling tile	2'x4' White medium and small pinhole pattern suspended ceiling tile	Misc	White	18,000	SF	Sample 1 of 3	ND	No	Throughout Clark Hall
P00287	Clark Hall	0099	224	2'x4' Suspended ceiling tile	2'x4' White medium and small pinhole pattern suspended ceiling tile	Misc	White	18,000	SF	Sample 2 of 3	ND	No	Throughout Clark Hall
P00298	Clark Hall	0099	200S	2'x4' Suspended ceiling tile	2'x4' White medium and small pinhole pattern suspended ceiling tile	Misc	White	18,000	SF	Sample 3 of 3	ND	No	Throughout Clark Hall
P00280	Clark Hall	0099	352	Glassware drying rack	Black wall-mounted glassware drying rack	Misc	Black	8	EA	Sample 1 of 1	18% CHR	No	134, 212, 311, 312, 318, 352
P00281	Clark Hall	0099	352	12" Vinyl floor tile	12" White with tan streaked pattern vinyl floor tile (replacement) with yellow mastic and residual black mastic	Misc	White	2,500	SF	Sample 1 of 3	ND (tile), 10% CHR (mastic)	Yes	204, 209, 209A,326, 326A, 342, 346, 352, 364
P000417	Clark Hall	0099	352	12" Vinyl floor tile	12" White with tan streaked pattern vinyl floor tile (replacement) with yellow mastic and residual black mastic	Misc	White	2,500	SF	Sample 2 of 3	ND (tile), 10% CHR (mastic)	Yes	204, 209, 209A,326, 326A, 342, 346, 352, 364
P000418	Clark Hall	0099	352	12" Vinyl floor tile	12" White with tan streaked pattern vinyl floor tile (replacement) with yellow mastic and residual black mastic	Misc	White	2,500	SF	Sample 3 of 3	ND (tile), 10% CHR (mastic)	Yes	204, 209, 209A,326, 326A, 342, 346, 352, 364
P00282	Clark Hall	0099	344	4" Ceramic floor tile	4" Red ceramic floor tile with gray grout and thinset	Misc	Red	250	SF	Sample 1 of 2	ND (all layers)	No	149, 344 and 407A

P00290	Clark Hall	0099	149	4" Ceramic floor tile	4" Red ceramic floor tile with gray grout and thinset	Misc	Red	250	SF	Sample 2 of 2	ND	No	149 and 344
P00283	Clark Hall	0099	300N (east wall)	Cement asbestos board	Cement asbestos board wainscoting	Misc	Gray/white	600	SF	Sample 1 of 1	18% CHR	Yes	Wall paneling under windows and behind heaters of perimeter walls
P00285	Clark Hall	0099	221	Sheet vinyl flooring	Newer brown pebble pattern sheet vinyl flooring with tan mastic	Misc	Brown	150	SF	Sample 1 of 1	ND	No	221
P00288	Clark Hall	0099	241	Exterior pebblecrete	Exterior tan color pebblecrete concrete facia	Misc	Tan	22,000	SF	Sample 1 of 1	ND	No	Throughout exterior walls
P00289	Clark Hall	0099	149	Sink	Black sink	Misc	Black		SF	Sample 1 of 1	ND	No	Laboratories throughout
P00302	Clark Hall	0099	11	Duct insulation	Yellow fiberglass duct insulation with canvas wrap	TSI	Gray	1,200	SF	Sample 1 of 4	ND	No	Basement room 11, 163 and 165
P00303	Clark Hall	0099	11	Duct insulation	Yellow fiberglass duct insulation with canvas wrap	TSI	Gray	1,200	SF	Sample 2 of 4	ND	No	Basement room 11, 163 and 165
P00294	Clark Hall	0099	165	Duct insulation	White canvast duct wrap with fiberglass, foil and mastic	TSI	White	1,200	SF	Sample 3 of 4	ND	No	Basement room 11, 163 and 165
P00295	Clark Hall	0099	163	Duct insulation	White canvast duct wrap with fiberglass, foil and mastic	TSI	White	1,200	SF	Sample 4 of 4	ND	No	Basement room 11, 163 and 165
P00301	Clark Hall	0099	318	Lab countertop	Black lab countertop	Misc	Black	15	EA	Sample 1 of 1	10% CHR	Yes	300W, 318, 321, 352, 372, 463
P00305	Clark Hall	0099	Exterior entrance to 149V	Exterior caulk	Gray door frame caulk	Misc	Gray	220	LF	Sample 1 of 1	ND	No	Exterior door frames throughout

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: 13-01-01912

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

Received Date: 01/21/2013
Analyzed Date: 01/23/2013
Reported Date: 01/24/2013

Project/Test Address: Clark Hall 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
13-01-01912-001	P00011		Gray/Green Brittle Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-002	P00012		Gray/Green Brittle Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-003A	P00013	Covering/ Jacket	White Adhesive; Fibrous; Inhomogeneous	NAD	100% Non-Fibrous
13-01-01912-003B	P00013	Insulation	Yellow Fibrous; Homogeneous	NAD	95% Fibrous Glass 5% Non-Fibrous
13-01-01912-004	P00014		Gray/Green Brittle Adhesive; Homogeneous	NAD	100% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-01-01912

Project/Test Address: Clark Hall Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-01-01912-005A	P00015	Covering/ Jacket	White Fibrous; Homogeneous	NAD	3% Fibrous Glass 97% Non-Fibrous
13-01-01912-005B	P00015	Insulation	White Powdery; Homogeneous	2% Chrysotile 20% Amosite	3% Fibrous Glass 75% Non-Fibrous
				Total Asbestos: 22%	
13-01-01912-006	P00016		White Powdery; Black/Gray Adhesive; Inhomogeneous	5% Chrysotile	95% Non-Fibrous
				Total Asbestos: 5%	
Chrysotile present in black/gray adhesive under white powdery material.					
13-01-01912-007	P00017		Gray Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-008A	P00018	Stucco	Gray Hard Cementitious; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
				Total Asbestos: Trace <1%	
13-01-01912-008B	P00018	Other *	Tan Fibrous; Black Tar-Like; Inhomogeneous	NAD	80% Cellulose 20% Non-Fibrous
Vapor Barrier					
13-01-01912-009A	P00019	Stucco	Gray Hard Cementitious; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
				Total Asbestos: Trace <1%	
13-01-01912-009B	P00019	Other *	Gray Fibrous; Homogeneous	NAD	90% Cellulose 10% Non-Fibrous
Vapor Barrier					

Client Number: 49-3308 Report Number: 13-01-01912

Project/Test Address: Clark Hall Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-01-01912-010A	P00020	Stucco	Gray Hard Cementitious; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
13-01-01912-010B	P00020	Other *	Gray Fibrous; Homogeneous	NAD	90% Cellulose 10% Non-Fibrous
Vapor Barrier					
13-01-01912-011	P00021		Gray Hard Cementitious; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
13-01-01912-012	P00022		Gray Hard Cementitious; Homogeneous	Trace <1% Chrysotile	100% Non-Fibrous
			Total Asbestos:	Trace <1%	
13-01-01912-013A	P00023	Seam Duct	White Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-013B	P00023	Duct Wrap	Tan Fibrous; Silver Foil; Inhomogeneous	NAD	40% Cellulose 30% Fibrous Glass 30% Non-Fibrous
13-01-01912-014A	P00024	Seam Duct	White Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-014B	P00024	Duct Wrap	Tan Fibrous; Silver Foil; Inhomogeneous	NAD	40% Cellulose 30% Fibrous Glass 30% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-01-01912

Project/Test Address: Clark Hall Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-01-01912-015A	P00025	Seam Duct	White Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-015B	P00025	Duct Wrap	Tan Fibrous; Silver Foil; Inhomogeneous	NAD	65% Cellulose 15% Fibrous Glass 20% Non-Fibrous
13-01-01912-016	P00026		Red Adhesive; Homogeneous	NAD	10% Synthetic 90% Non-Fibrous
13-01-01912-017	P00027		Red Adhesive; Homogeneous	NAD	10% Synthetic 90% Non-Fibrous
13-01-01912-018	P00028		Gray Pliable; Homogeneous	NAD	2% Cellulose 1% Synthetic 97% Non-Fibrous
13-01-01912-019A	P00029	Ceramic Tile	Gray Cementitious; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-019B	P00029	Grout	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-019C	P00029	Mortar	Gray Granular; Homogeneous	NAD	100% Non-Fibrous

Client Number: 49-3308 Report Number: 13-01-01912

Project/Test Address: Clark Hall Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-01-01912-019D	P00029	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-020A	P00030	Grout	White Granular; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-020B	P00030	Mastic	Tan Adhesive; Homogeneous	NAD	100% Non-Fibrous
No ceramic tile present.					
13-01-01912-021A	P00031	Ceramic Tile	Gray Cementitious; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-021B	P00031	Grout	Gray Granular; Homogeneous	NAD	1% Cellulose 99% Non-Fibrous
13-01-01912-021C	P00031	Mortar	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-021D	P00031	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-022A	P00032	Grout	White Granular; Homogeneous	NAD	100% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-01-01912

Project/Test Address: Clark Hall Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-01-01912-022B	P00032	Mastic	Tan Adhesive; Homogeneous	NAD	100% Non-Fibrous
No ceramic tile present.					
13-01-01912-023A	P00033	Ceramic Tile	Gray Cementitious; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-023B	P00033	Grout	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-023C	P00033	Mortar	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-023D	P00033	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-024A	P00034	Ceramic Tile	White Cementitious; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-024B	P00034	Grout	White Granular; Homogeneous	NAD	100% Non-Fibrous
13-01-01912-024C	P00034	Mastic	Tan Adhesive; Homogeneous	NAD	100% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-01-01912

Project/Test Address: Clark Hall Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-01-01912-025	P00035		Gray Brittle; Homogeneous	NAD	3% Cellulose 97% Non-Fibrous
13-01-01912-026	P00036		Gray Fibrous; Black Brittle; Inhomogeneous	75% Chrysotile	10% Cellulose 15% Non-Fibrous
				Total Asbestos: 75%	
Chrysotile present throughout sample.					
13-01-01912-027	P00037		Black Brittle; Fibrous; Inhomogeneous	65% Chrysotile	10% Cellulose 25% Non-Fibrous
				Total Asbestos: 65%	
Chrysotile present throughout sample.					
13-01-01912-028A	P00038	Linoleum	Beige Vinyl; White Fibrous; Inhomogeneous	20% Chrysotile	9% Cellulose 71% Non-Fibrous
				Total Asbestos: 20%	
Chrysotile present in fibrous backing.					
13-01-01912-028B	P00038	Mastic	Tan Adhesive; Homogeneous	2% Chrysotile	1% Cellulose 97% Non-Fibrous
				Total Asbestos: 2%	
Possible contamination from fibrous backing.					

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-01-01912

Project/Test Address: Clark Hall Full Building; Pullman, WA

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

QC Sample: 41-M1-1999-1, 63-NY-33-3478

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

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

Analyst: Sami Hosn, Vickie Holmes

Reviewed By Authorized Signatory: Tasha Eaddy

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

EHS Laboratories™

Environmental Hazards Services, LLC

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(800)347-4010
(804)275-4907 (fax)

7469 Whitepine Rd
Richmond, VA
23237

Asbestos Chain-of-Custody

28 PCM

13-01-01912

Due Date:
01/24/2013
(Thursday)
AE M S

Company Name: Washington State University/Environmental Health/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: Clark Hall Full Building City/State (Required): Pullman, WA

Collected by: Matthew McKibbin Purchase Order Number: 5545-2010

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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00011	12-19-12	X												
2	P00012		X												
3	P00013		X												
4	P00014		X												
5	P00015		X												
6	P00016		X												
7	P00017		X												
8	P00018		X												
9	P00019		X												
10	P00020	↓	X												

Released by: Matt McKibbin Signature: Date/Time: 1-17-13 1600

Received by: Signature: Date/Time: 1/21/13

Asbestos Chain-of-Custody

EHS Laboratories™

Environmental Hazards Services, LLC

www.leadlab.com
(800)347-4010
(804)275-4907 (fax)

7469 Whitepine Rd
Richmond, VA
23237

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1912

Company Name: Washington State University/Environmental Health/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: Clark Hall Full Building City/State (Required): Pullman, WA

Collected by: Matthew McKibbin Purchase Order Number: 5545-2010

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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00021	12-19-12	X												
2	P00022	↓	X												
3	P00023		X												
4	P00024		X												
5	P00025		X												
6	P00026		X												
7	P00027		X												
8	P00028		X												
9	P00029		X												
10	P00030		X												

Released by: Matt McKibbin Signature: Date/Time: 1-17-13, 1600

Received by: MSU IT Signature: Date/Time: 1/21/13

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Asbestos Chain-of-Custody

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Company Name: Washington State University/Environmental Health/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: Clark Hall Full Building City/State (Required): Pullman, WA

Collected by: Matthew McKibbin Purchase Order Number: 5545-2010

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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00031	12-19-12	X												
2	P00032		X												
3	P00033		X												
4	P00034		X												
5	P00035		X												
6	P00036		X												
7	P00037		X												
8	P00038		X												
9															
10															

Released by: Matt McKibbin Signature: Date/Time: 1-17-13 1600

Received by: MSU Signature: Date/Time: 1/21/13

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 13-04-03537

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

Received Date: 04/25/2013
Analyzed Date: 04/25/2013, 04/26/2013
Reported Date: 04/26/2013

Project/Test Address: Clark Hall; 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
13-04-03537-001	P00258		Brown Adhesive; White/Orange Brittle; Inhomogeneous	NAD	2% Cellulose 3% Talc 95% Non-Fibrous
13-04-03537-002A	P00259	Cove Base	Gray Vinyl-Like; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-002B	P00259	Mastic	Brown/Amber Adhesive; Inhomogeneous	NAD	1% Cellulose 2% Synthetic 1% Hair 4% Talc 92% Non-Fibrous
13-04-03537-003A	P00260	Flooring	Off-White/Pale Gray Granular; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-003B	P00260	Mastic	Black Adhesive; Homogeneous	NAD	15% Cellulose 85% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-004	P00261		Pale Brown Brittle; Tan to Dark Gray Fibrous; Inhomogeneous	NAD	22% Cellulose 78% Non-Fibrous
13-04-03537-005	P00262		White Fibrous; Homogeneous	NAD	3% Cellulose 92% Fibrous Glass 5% Non-Fibrous
13-04-03537-006	P00263		White Fibrous; Homogeneous	NAD	3% Cellulose 92% Fibrous Glass 5% Non-Fibrous
13-04-03537-007	P00264		White Fibrous; Homogeneous	NAD	3% Cellulose 92% Fibrous Glass 5% Non-Fibrous
13-04-03537-008	P00265		White Fibrous; Homogeneous	NAD	3% Cellulose 92% Fibrous Glass 5% Non-Fibrous
13-04-03537-009	P00266		White Fibrous; Homogeneous	NAD	3% Cellulose 92% Fibrous Glass 5% Non-Fibrous
13-04-03537-010	P00267		Brown to Gray Adhesive; Dark Gray/Tan Fibrous; Inhomogeneous	25% Chrysotile	15% Cellulose 40% Fibrous Glass 20% Non-Fibrous
			Total Asbestos:	25%	

Chrysotile present in brown to gray adhesive (main) layer.

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-011A	P00268	Ceiling Tile	Yellow Fibrous; White Brittle; inhomogeneous	NAD	3% Cellulose 85% Fibrous Glass 12% Non-Fibrous
13-04-03537-011B	P00268	Mastic	Brown Adhesive; Homogeneous	NAD	2% Cellulose 2% Fibrous Glass 4% Talc 92% Non-Fibrous
13-04-03537-012A	P00269	Ceiling Tile	Yellow Fibrous; White Brittle; inhomogeneous	NAD	3% Cellulose 85% Fibrous Glass 12% Non-Fibrous
13-04-03537-012B	P00269	Mastic	Brown Adhesive; Homogeneous	NAD	2% Cellulose 2% Fibrous Glass 4% Talc 92% Non-Fibrous
13-04-03537-013	P00270		Pale Gray Fibrous; White Brittle; Inhomogeneous	NAD	40% Cellulose 35% Fibrous Glass 25% Non-Fibrous
13-04-03537-014A	P00271	Ceiling Tile	Yellow Fibrous; White Brittle; Inhomogeneous	NAD	3% Cellulose 85% Fibrous Glass 12% Non-Fibrous
13-04-03537-014B	P00271	Mastic	Brown Adhesive; Homogeneous	NAD	1% Cellulose 3% Fibrous Glass 1% Synthetic 5% Talc 90% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-015	P00272		Pale Gray to Tan Fibrous; White Brittle; Inhomogeneous	NAD	40% Cellulose 35% Fibrous Glass 25% Non-Fibrous
13-04-03537-016	P00273		White Granular; Chalky; Brown Fibrous; Inhomogeneous	Trace <1% Chrysotile	20% Cellulose 4% Fibrous Glass 76% Non-Fibrous
				Total Asbestos: Trace <1%	
2% Chrysotile present in white granular material.					
13-04-03537-017	P00274		Gray Fibrous; White Paint-Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
13-04-03537-018	P00275		Gray Granular; Homogeneous	NAD	3% Cellulose 97% Non-Fibrous
13-04-03537-019	P00276		Brown Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 80% Non-Fibrous
13-04-03537-020	P00277		Brown Fibrous; White Paint Like; Inhomogeneous	NAD	60% Cellulose 10% Fibrous Glass 30% Non-Fibrous
13-04-03537-021	P00278		White Granular; Chalky; Brown Fibrous; Inhomogeneous	Trace <1% Chrysotile	20% Cellulose 4% Fibrous Glass 76% Non-Fibrous
				Total Asbestos: Trace <1%	
2% Chrysotile present in white granular material.					

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-022A	P00279	Drywall	White Granular; Chalky; Brown Fibrous; Inhomogeneous	NAD	20% Cellulose 2% Fibrous Glass 78% Non-Fibrous
13-04-03537-022B	P00279	Mastic	Brown Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-023	P00280		Black Cementitious; Homogeneous	18% Chrysotile	82% Non-Fibrous
			Total Asbestos:	18%	
13-04-03537-024A	P00281	Tile	Tan Vinyl; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-024B	P00281	Mastic	Tan Adhesive; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-025A	P00282	Brick	Red Cementitious; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-025B	P00282	Grout	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-026	P00283		Gray Cementitious; Homogeneous	18% Chrysotile	82% Non-Fibrous
			Total Asbestos:	18%	

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-027	P00284		Brown Brittle Adhesive; Homogeneous	NAD	2% Cellulose 2% Talc 96% Non-Fibrous
13-04-03537-028A	P00285	Linoleum	Beige Vinyl; Gray Fibrous; Inhomogeneous	NAD	10% Cellulose 5% Fibrous Glass 15% Synthetic 70% Non-Fibrous
13-04-03537-028B	P00285	Mastic	Yellow Adhesive; Homogeneous	NAD	2% Cellulose 98% Non-Fibrous
13-04-03537-029	P00286		Brown Brittle Adhesive; Homogeneous	NAD	1% Cellulose 2% Talc 97% Non-Fibrous
13-04-03537-030	P00287		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous
13-04-03537-031	P00288		Brown Granular; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-032	P00289		Black Cement.; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-033A	P00290	Ceramic Tile	Red Cement.; Homogeneous	NAD	100% Non-Fibrous

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-033B	P00290	Grout	Gray Granular; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-034	P00291		White Chalky; Brown Fibrous; Inhomogeneous	Trace <1% Chrysotile	8% Cellulose 2% Fibrous Glass 90% Non-Fibrous
				Total Asbestos: Trace <1%	
Chrysotile present in joint compound material. This material alone contains 2% Chrysotile					
13-04-03537-035A	P00292	Cove Base	Brown Vinyl; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-035B	P00292	Mastic	Brown Brittle Adhesive; Homogeneous	NAD	2% Talc 98% Non-Fibrous
13-04-03537-036	P00293		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous
13-04-03537-037A	P00294	Covering/ Jacket	White Fibrous; Silver Foil-Like; Inhomogeneous	NAD	97% Cellulose 3% Non-Fibrous
13-04-03537-037B	P00294	Mastic	Yellow Adhesive; Homogeneous	NAD	1% Cellulose 3% Fibrous Glass 96% Non-Fibrous
13-04-03537-038A	P00295	Covering/ Jacket	White Fibrous; White Paint-Like; Inhomogeneous	NAD	97% Cellulose 3% Non-Fibrous

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-038B	P00295	Mastic	Yellow Adhesive; Silver Foil-Like; Inhomogeneous	NAD	4% Cellulose 15% Fibrous Glass 81% Non-Fibrous
13-04-03537-039	P00296		White Chalky; Brown Fibrous; Inhomogeneous	NAD	65% Cellulose 2% Fibrous Glass 33% Non-Fibrous
13-04-03537-040A	P00297	Insulation	Black Fibrous; Homogeneous	NAD	99% Fibrous Glass 1% Non-Fibrous
13-04-03537-040B	P00297	Mastic	Brown Adhesive; Brown Fibrous; Inhomogeneous	25% Chrysotile	5% Cellulose 5% Fibrous Glass 65% Non-Fibrous
			Total Asbestos:	25%	
Chrysotile present in brown mastic material					
13-04-03537-041	P00298		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous
13-04-03537-042	P00299		Gray Granular; Homogeneous	NAD	1% Cellulose 99% Non-Fibrous
13-04-03537-043	P00300		Beige Vinyl; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-044	P00301		Black Cement. Fibrous; Homogeneous	10% Chrysotile	90% Non-Fibrous
			Total Asbestos:	10%	

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-045A	P00302	Covering/ Jacket	White Fibrous; Gray Brittle; Inhomogeneous	NAD	95% Cellulose 5% Non-Fibrous
13-04-03537-045B	P00302	Mastic	Yellow Adhesive; Silver Foil-Like; Inhomogeneous	NAD	3% Cellulose 5% Fibrous Glass 92% Non-Fibrous
13-04-03537-046A	P00303	Covering/ Jacket	White Fibrous; Gray Brittle; Inhomogeneous	NAD	95% Cellulose 5% Non-Fibrous
13-04-03537-046B	P00303	Mastic	Yellow/White Adhesive; Silver Foil-Like; Inhomogeneous	NAD	15% Cellulose 5% Fibrous Glass 80% Non-Fibrous
13-04-03537-047A	P00304	Tile	Gray Vinyl; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-047B	P00304	Mastic	Black Adhesive; Homogeneous	NAD	1% Cellulose 99% Non-Fibrous
13-04-03537-048	P00305		Gray Pliable; Homogeneous	NAD	100% Non-Fibrous
13-04-03537-049	P00306		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-04-03537

Project/Test Address: Clark Hall; Full Building; Pullman, WA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
13-04-03537-050	P00307		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous
13-04-03537-051	P00308		Gray/White Fibrous; Inhomogeneous	NAD	55% Cellulose 35% Fibrous Glass 10% Non-Fibrous

QC Sample: 39-M1-1999-2, 41-M1-1999-1

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

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

Analyst: Mark Case, Araceli Enzler, Kathy Sizemore

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

51 PLM

Asbestos Chain-of-Custody

13-04-03537

Due Date:
04/26/2013
(Friday)
AE M

Environmental Hazards Services, LLC

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

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: Clark Hall Full Building **City/State (Required):** Pullman, WA

Collected by: Matthew McKibbin Purchase Order Number: 5545-2010

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

X 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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00258	4-18-13	X												
2	P00259	"	X												
3	P00260	"	X												
4	P00261	"	X												
5	P00262	"	X												
6	P00263	"	X												
7	P00264	"	X												
8	P00265	"	X												
9	P00266	"	X												
10	P00267	"	X												

Released by: Matt McKibbin	Signature: Matt McKibbin	Date/Time: 4-24-13 1300
Received by: Travis	Signature:	Date/Time: 4/25/13

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			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM Chatfield (Bulk)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00268	4-18-13	X												
2	P00269		X												
3	P00270		X												
4	P00271		X												
5	P00272		X												
6	P00273		X												
7	P00274		X												
8	P00275		X												
9	P00276		X												
10	P00277		X												

Released by: Matt McKibbin	Signature: Matt McKibbin	Date/Time: 4-24-13 1300
Received by: Travis	Signature:	Date/Time: 4/25/13

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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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00278	4-18-13	X												
2	P00279		X												
3	P00280		X												
4	P00281		X												
5	P00282		X												
6	P00283		X												
7	P00284		X												
8	P00285		X												
9	P00286		X												
10	P00287		X												

Released by: Matt McKibbin Signature: Date/Time: 4-24-13/1300

Received by: Travis Signature: Date/Time: 4/25/13

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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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00288	4-18-13	X												
2	P00289		X												
3	P00290		X												
4	P00291		X												
5	P00292		X												
6	P00293		X												
7	P00294		X												
8	P00295		X												
9	P00296		X												
10	P00297		X												

Released by: Matt McKibbin Signature: Date/Time: 4-24-13 / 1300

Received by: Travis Signature: Date/Time: 4/25/13

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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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00298	3-23-13	X												
2	P00299		X												
3	P00300		X												
4	P00301		X												
5	P00302		X												
6	P00303		X												
7	P00304		X												
8	P00305		X												
9	P00306		X												
10	P00307		X												

Released by: Matt McKibbin	Signature:	Date/Time: 4-24-13 / 1300
Received by:	Signature:	Date/Time: 4/25/13

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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)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00308	4-23-13	X												
2															
3															
4															
5															
6															
7															
8															
9															
10															

Released by: Matt McKibbin Signature: Date/Time: 4-24-13

Received by: Travis Signature: Date/Time: 4/25/13

Environmental Hazards Services, L.L.C.
7469 Whitepine Rd
Richmond, VA 23237
Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 13-06-01027

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

Received Date: 06/08/2013
Analyzed Date: 06/10/2013
Reported Date: 06/11/2013

Project/Test Address: Clark Hall-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
13-06-01027-001	P00417		Off-White/Pale Tan Granular; Homogeneous	NAD	1% Cellulose 99% Non-Fibrous
Insufficient quantity of mastic on flooring sample for analysis of mastic.					
13-06-01027-002	P00418		Off-White/Pale Tan Granular; Homogeneous	NAD	100% Non-Fibrous
Insufficient quantity of mastic on flooring sample for analysis of mastic.					
13-06-01027-003A	P00419	Tile	Off-White/Pale Gray Granular; Homogeneous	NAD	100% Non-Fibrous
13-06-01027-003B	P00419	Mastic	Yellow Adhesive; Homogeneous	NAD	2% Cellulose 1% Fibrous Glass 97% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 49-3308 Report Number: 13-06-01027

Project/Test Address: Clark Hall-Full Building; Pullman, WA

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

QC Sample: 18-M11995-3

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

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

Analyst: Mark Case

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

3 PLM

Asbestos Chain-of-Custody

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Richmond, VA
23237

13-06-01027

Due Date:
06/11/2013
(Tuesday)
AE M

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: Clark Hall - Full Building City/State (Required): Pullman, WA

Collected by: Matthew McKibbin Purchase Order Number: 5545-2010

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			PLM	PLM Point Count 400	PLM Point Count 1000	PLM NY Protocol	PCM	TEM Chatfield (Bulk)	TEM AHERA (Air)	Time On	Time Off	Flow Rate (L/min)	Total Time (minutes)	Volume (Total Liters)	
1	P00417	6-6-13	X												
2	P00418	6-6-13	X												
3	P00419	6-6-13	X												
4															
5															
6															
7															
8															
9															
10															

Released by: Matt McKibbin Signature: Date/Time: 6-7-13 / 1400

Received by: TStone Signature: TStone Date/Time: 6-8-13

APPENDIX B

Asbestos/Lead (Pb) Good Faith Survey Report for Clark Hall dated March 15, 2011 by The Empirical Company

ASBESTOS/LEAD (Pb) GOOD FAITH SURVEY
FOR
CLARK HALL (Facility #0099)
2000 NE WILSON ROAD
PULLMAN, WASHINGTON 99164

PREPARED BY:

THE EMPIRICAL COMPANY
7320 West Hood Place, Suite 101
Kennewick, Washington 99336
Telephone (509) 735-1848

www.empirical-ih.com

Report Date: March 15, 2011

Project #5545-2010

THE EMPIRICAL COMPANY

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EXECUTIVE SUMMARY

The Empirical Company was retained by Washington State University to conduct a hazardous materials survey at Clark Hall located on the Washington State University campus in Pullman, Washington. Materials inspected for included Asbestos-Containing Building Materials (ACBM), Lead, Mercury and Poly-Chlorinated Biphenyls (PCBs).

The object of the inspection was to determine if there was an existence of these hazardous materials present within the assigned area and if so provide the locations of any materials found.

The inspection and sampling of the above mentioned materials was conducted between December 28, 2010 and January 5, 2011. The inspectors associated with this project are accredited U. S. Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA) Building Inspectors, Department of Commerce Lead Inspectors with The Empirical Company. Copies of the training certificates are located in Appendix A of this report.

Samples of suspect materials were analyzed on site or collected and sent to a certified laboratory for analysis. The locations and results are included in this document.

Forty (40) homogenous bulk suspect Asbestos–Containing Building Materials (ACBM) samples were collected of and submitted to Pro Science in Woburn, Massachusetts for analysis. To ensure quality assurance one of out of every ten samples were sent to EMSL Laboratories for analysis. In addition, any friable materials that were analyzed as trace amounts were re-analyzed using the point count method. Of the samples collected sixteen (16) homogenous materials came back positive (greater than 1% asbestos). The results are included on pages 24-33 of this document with the positive results highlighted.

The lead survey was conducted using an XRF which provided on-site results. Of the one-thousand sixty-nine (1069) surfaces tested twelve (12) came back positive (1.0 mg/cm^2). The sample locations and results are shown on pages 84-139 of this document with the positive results highlighted.

The inspection for mercury consisted of location of mercury-containing switches of which none were found.

The inspection proved negative for the presence of PCBs.

Radon samples were collected at suspect locations and submitted to Pro Lab in Weston, Florida for analysis. All four sample results were below levels considered to be a health risk. Results of these samples may be found on page 142 of this document.

The results indicate that asbestos and lead are present within the building at the locations indicated in the tables. The asbestos and lead containing should not be disturbed unless the proper work procedures are followed and the personnel properly trained to handle these materials.

SECTION 1.0
OBJECTIVE

The intent of the inspection was to identify building materials that:

- Contained greater than one (1) percent asbestos mineral fibers;
- Coated with paint containing greater than 1.0 micrograms of lead per square centimeter;
- That may contain mercury (Hg);
- That may contain PCB's (Polychlorinated Biphenyls) and
- Test for elevated radon levels.

The inspection was conducted through visual evaluation; classification and analysis of suspect building materials that had been used in the construction/renovation of the building. The following is a list of tasks included in the inspection:

- Visual survey, collection and subsequent laboratory analysis of building materials known or suspected to have contained asbestos mineral fibers;
- XRF Assay of surface coatings suspected to contain lead-based paints;
- Locate switches that may contain mercury (Hg);
- Visual survey, collection and subsequent laboratory analysis of building materials known or suspected to have contained PCB's and
- laboratory analysis of samples collected for elevated radon levels and
- Preparation of an inspection report summarizing and quantifying the above identified building materials.

SECTION 2.0
SITE DESCRIPTION

Clark Hall is comprised of several departments including Cooperative Extension Services, Department of Animal Sciences, Department of Plant Physiology and Institute of Biological Chemistry.

SECTION 3.0
SURVEY PARAMETERS

The scope of the survey is to provide a non-destructive good faith inspection for Clark Hall as outlined below:

- Provide standard AHERA asbestos survey throughout the interior and exterior as necessary;
- Perform XRF analysis for lead (Pb) in paint, ceramic tile and other potential lead (Pb) sources to aid in meeting hazard communication standard requirements;
- Provide radon measurements in basement and or crawl space under Clark Hall
- Locate mercury switches throughout the building and
- PCB analysis in caulking used in the erecting/renovations of Clark Hall.

Richard J. DeLorme and Paul d'Ombrain, EPA AHERA Accredited Asbestos Building Inspectors with The Empirical Company, conducted the inspection and sampling of suspect asbestos containing building materials. The asbestos inspection was carried out during winter break between December 28, 2010 and January 5, 2011.

Edward S. DeLorme a Licensed Washington State Lead Inspector with The Empirical Company, conducted the lead-based paint testing of Clark Hall to determine the possible presence, condition, location and amount of lead paint. The testing of this site was carried out during the same time frame.

SECTION 4.0
POTENTIAL HEALTH RISKS

Asbestos

Asbestos is the name given to a number of naturally occurring fibrous minerals with high tensile strength, the ability to be woven, and resistance to heat and most chemicals. Because of these properties, asbestos fibers have been used in a wide range of manufactured goods, including roofing shingles, ceiling and floor tiles, paper and cement products, textiles, coatings, and friction products such as automobile clutch, brake and transmission parts. The Toxic Substances Control Act defines asbestos as the asbestiform varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite/grunerite); anthophyllite; tremolite; and actinolite.

Asbestos health effects

Exposure to asbestos increases your risk of developing lung disease. That risk is made worse by smoking. In general, the greater the exposure to asbestos the greater the chance of developing harmful health effects. Disease symptoms may take several years to develop following exposure. If you are concerned about possible exposure, consult a physician who specializes in lung diseases (pulmonologist).

Exposure to airborne friable asbestos may result in a potential health risk because persons breathing the air may breathe in asbestos fibers. Continued exposure can increase the amount of fibers that remain in the lung. Fibers embedded in lung tissue over time may cause serious lung diseases including asbestosis, lung cancer, or Mesothelioma. Smoking increases the risk of developing illness from asbestos exposure.

Three of the major health effects associated with asbestos exposure include:

- **Asbestosis** -- Asbestosis is a serious, progressive, long-term non-cancer disease of the lungs. It is caused by inhaling asbestos fibers that irritate lung tissues and cause the tissues to scar. The scarring makes it hard for oxygen to get into the blood. Symptoms of asbestosis include shortness of breath and a dry, crackling sound in the lungs while inhaling. There is no effective treatment for asbestosis.
- **Lung Cancer** -- Lung cancer causes the largest number of deaths related to asbestos exposure. People who work in the mining, milling, manufacturing of asbestos, and those who use asbestos and its products are more likely to develop lung cancer than the general population. The most common symptoms of lung cancer are coughing and a

change in breathing. Other symptoms include shortness of breath, persistent chest pains, hoarseness, and anemia.

- **Mesothelioma** -- Mesothelioma is a rare form of cancer that is found in the thin lining (membrane) of the lung, chest, abdomen, and heart and almost all cases are linked to exposure to asbestos. This disease may not show up until many years after asbestos exposure. This is why great efforts are being made to prevent school children from being exposed.

Where is asbestos found?

Asbestos fibers are incredibly strong and have properties that make them resistant to heat. Many products are in use today that contain asbestos. Most of these are materials used in heat and acoustic insulation, fire proofing, and roofing and flooring. In 1989, EPA identified the following asbestos product categories. Many of these materials may still be in use.

asbestos-cement corrugated sheet	cement asbestos flat sheet	asbestos-cement pipe	asbestos-cement shingle
roof coatings	flooring felt	pipeline wrap	roofing felt
asbestos clothing	non-roof coatings	vinyl/asbestos floor tile	automatic transmission components
clutch facings	disc brake pads	drum brake linings	brake blocks
commercial/industrial asbestos friction products	rollboard	commercial corrugated specialty paper	millboard

Lead Based Paint

Lead has long been recognized as a harmful environmental pollutant. In late 1991, the Secretary of the Department of Health and Human Services called lead the "number one environmental threat to the health of children in the United States." There are many ways in which humans are exposed to lead: through air, drinking water, food, contaminated soil, deteriorating paint, and dust. Airborne lead enters the body when an individual breathes or swallows lead particles or dust once it has settled. Before it was known how harmful lead could be, it was used in paint, gasoline, water pipes, and many other products.

Old lead-based paint is the most significant source of lead exposure in the U.S. today. Harmful exposures to lead can be created when lead-based paint is improperly removed from surfaces by dry scraping, sanding, or open-flame burning. High concentrations of airborne lead particles in homes can also result from lead dust from outdoor sources, including contaminated soil tracked inside, and use of lead in certain indoor activities such as soldering and stained-glass making.

National Lead Information Center Hotline - 1-800-424-LEAD [1-800-424-5323]

The National Lead Information Center (NLIC) provides the general public and professionals with information about lead hazards and their prevention. NLIC operates under a contract with the EPA, with funding from the EPA, the Centers for Disease Control and Prevention (CDC) and the Department of Housing and Urban Development (HUD).

Definition:

[From "The Condensed Chemical Dictionary, 9th ed., Van Nostrand Reinhold Company, New York, 1977.] Metallic element of atomic number 82, Group IVA of the periodic table. Atomic weight 207.2; valences 2, 4; 4 stable isotopes. The isotopes are the end products of the three series of natural radioactive elements uranium (206), thorium (208), and actinium (207).

Properties: Heavy, ductile, soft gray solid. Sp. gr. 11.35; m.p. 327.4 °C; b.p. 1755 °C; soluble in dilute nitric acid; insoluble in water but dissolves slowly in water containing a weak acid; resists corrosion; relatively impenetrable to radiation. Poor electrical conductor; good sound and vibration absorber. Non-combustible.

Lead Health Effects

Lead affects practically all systems within the body. Lead at high levels (lead levels at or above 80 micrograms per deciliter of blood) can cause convulsions, coma, and even death. Lower levels of lead can cause adverse health effects on the central nervous system, kidney, and blood cells. Blood lead levels as low as 10 micrograms per deciliter can impair mental and physical development. EPA's Integrated Risk Information System profile on Lead and Lead Compounds

The effects of lead exposure on fetuses and young children can be severe. They include delays in physical and mental development, lower IQ levels, shortened attention spans, and increased behavioral problems. Fetuses, infants, and children are more vulnerable to lead exposure than adults since lead is more easily absorbed into growing bodies, and the tissues of small children are more sensitive to the damaging effects of lead. Children may have higher exposures since they are more likely to get lead dust on their hands and then put their fingers or other lead-contaminated objects into their mouths.

Mercury

Mercury is a naturally occurring element that is found in air, water and soil. It exists in several forms: elemental or metallic mercury, inorganic mercury compounds, and organic mercury compounds.

Mercury is used in many items commonly found in schools, such as thermometers, barometers, switches, thermostats, flowmeters, lamps, and laboratory reagents in chemistry and science labs. Two major causes of mercury spills at schools are improper storage and mishandling of these items. EPA encourages schools to prevent spills by removing all mercury compounds and mercury-containing equipment and by discontinuing their use.

Mercury Health Effects.

Elemental (metallic) mercury primarily causes health effects when it is breathed as a vapor, where it can be absorbed through the lungs. These exposures can occur when elemental mercury is spilled or products that contain elemental mercury break and expose mercury to the air, particularly in warm or poorly-ventilated indoor spaces. Symptoms of exposure to mercury include: tremors; emotional changes (e.g., mood swings, irritability, nervousness, excessive shyness); insomnia; neuromuscular changes (such as weakness, muscle atrophy, twitching); headaches; disturbances in sensations; changes in nerve responses; and performance deficits on tests of cognitive function. At higher exposures there may be kidney effects, respiratory failure, and death.

Sources of Mercury Compounds

In the U.S., mercury compounds are manufactured in small amounts for specialty uses, such as chemical and pharmaceutical applications. Larger quantities of these compounds are generated as byproducts from pollution control activities at gold mines or in waste. Elemental mercury is processed in the U.S. from byproduct mercury compounds, and an unknown quantity of mercury compounds is imported into the United States for conversion to elemental mercury.

Sources of Mercury Poisoning

Mercury is an element in the earth's crust. Humans cannot create or destroy mercury. Pure mercury is a liquid metal, sometimes referred to as quicksilver that volatizes readily. It has traditionally been used to make products like thermometers, switches, and some light bulbs.

Mercury is found in many rocks including coal. When coal is burned, mercury is released into the environment. Coal-burning power plants are the largest human-caused source of mercury emissions to the air in the United States, accounting for over 50 percent of all domestic human-caused mercury emissions (Source: 2005 National Emissions Inventory). EPA has estimated that about one quarter of U.S. emissions from coal-burning power plants are deposited within the contiguous U.S. and the remainder enters the global cycle. Burning hazardous wastes, producing chlorine, breaking mercury products, and spilling mercury, as well as the improper treatment and disposal of products or wastes containing mercury, can also release it into the environment. Current estimates are that less than half of all mercury deposition within the U.S. comes from U.S. sources.

Mercury in the air eventually settles into water or onto land where it can be washed into water. Once deposited, certain microorganisms can change it into methylmercury, a highly toxic form that builds up in fish, shellfish and animals that eat fish. Fish and shellfish are the main sources

of methylmercury exposure to humans. Methylmercury builds up more in some types of fish and shellfish than others. The levels of methylmercury in fish and shellfish depend on what they eat, how long they live and how high they are in the food chain.

EPA works with the U.S. Food and Drug Administration (FDA) and with states and tribes to issue advice to women who may become pregnant, pregnant women, nursing mothers and parents of young children about how often they should eat certain types of commercially-caught fish and shellfish. Fish advisories are also issued for men, women, and children of all ages when appropriate. In addition, EPA releases an annual summary of information on locally-issued fish advisories and safe-eating guidelines to the public. Fish is a beneficial part of the diet, so EPA & FDA encourage people to continue to eat fish that are low in methylmercury.

Ecological Effects of Mercury

Birds and mammals that eat fish are more exposed to mercury than other animals in water ecosystems. Similarly, predators that eat fish-eating animals may be highly exposed. At high levels of exposure, methyl mercury's harmful effects on these animals include death, reduced reproduction, slower growth and development, and abnormal behavior.

PCB's

Poly Chlorinated Biphenyl's (PCB) Containing Building Materials

PCBs belong to a broad family of man-made organic chemicals known as chlorinated hydrocarbons. PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979. They have a range of toxicity and vary in consistency from thin, light-colored liquids to yellow or black waxy solids. Due to their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other industrial applications.

Health Effects

PCBs have been demonstrated to cause cancer, as well as a variety of other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system. See the Health Effects page for more information.

Commercial Use of PCBs

Although no longer commercially produced in the United States, PCBs may be present in products and materials produced before the 1979 PCB ban. Products that may contain PCBs include:

- Transformers and capacitors

- Other electrical equipment including voltage regulators, switches, reclosers, bushings, and electromagnets
- Oil used in motors and hydraulic systems
- Old electrical devices or appliances containing PCB capacitors
- Fluorescent light ballasts
- Cable insulation
- Thermal insulation material including fiberglass, felt, foam, and cork
- Adhesives and tapes
- Oil-based paint
- Caulking
- Plastics
- Carbonless copy paper
- Floor finish

The PCBs used in these products were chemical mixtures made up of a variety of individual chlorinated biphenyl components, known as congeners. Most commercial PCB mixtures are known in the United States by their industrial trade names. The most common trade name is Aroclor.

Release and Exposure of PCBs

Prior to the 1979 ban, PCBs entered the environment during their manufacture and use in the United States. Today PCBs can still be released into the environment from poorly maintained hazardous waste sites that contain PCBs; illegal or improper dumping of PCB wastes; leaks or releases from electrical transformers containing PCBs; and disposal of PCB-containing consumer products into municipal or other landfills not designed to handle hazardous waste. PCBs may also be released into the environment by the burning of some wastes in municipal and industrial incinerators.

Once in the environment, PCBs do not readily break down and therefore may remain for long periods of time cycling between air, water, and soil. PCBs can be carried long distances and have been found in snow and sea water in areas far away from where they were released into the environment. As a consequence, PCBs are found all over the world. In general, the lighter the form of PCB, the further it can be transported from the source of contamination.

PCBs can accumulate in the leaves and above-ground parts of plants and food crops. They are also taken up into the bodies of small organisms and fish. As a result, people who ingest fish may be exposed to PCBs that have bio-accumulated in the fish they are ingesting.

Radon

Radon is a radioactive gas released from the normal decay of uranium in rocks and soil. It is an invisible, odorless, tasteless gas that seeps up through the ground and diffuses into the air. In a few areas, depending on local geology, radon dissolves into ground water and can be released

into the air when the water is used. Radon gas usually exists at very low levels outdoors. However, in areas without adequate ventilation, such as underground mines, radon can accumulate to levels that substantially increase the risk of lung cancer.

How does radon cause cancer?

Radon decays quickly, giving off tiny radioactive particles. When inhaled, these radioactive particles can damage the cells that line the lung. Long-term exposure to radon can lead to lung cancer, the only cancer proven to be associated with inhaling radon.

How did scientists discover that radon plays a role in the development of lung cancer?

Radon was identified as a health problem when scientists noted that underground uranium miners who were exposed to it died of lung cancer at high rates. Results of miner studies have been confirmed by experimental animal studies, which show higher rates of lung tumors among rodents exposed to high radon levels.

How is the general population exposed to radon?

Radon is present in nearly all air. Everyone breathes radon in every day, usually at very low levels. However, people who inhale high levels of radon are at an increased risk for developing lung cancer.

Radon can enter homes through cracks in floors, walls, or foundations, and collect indoors. It can also be released from building materials, or from water obtained from wells that contain radon. Radon levels can be higher in homes that are well insulated, tightly sealed, and/or built on uranium-rich soil. Because of their closeness to the ground, basement and first floors typically have the highest radon levels.

How many people develop lung cancer because of exposure to radon?

Cigarette smoking is the most common cause of lung cancer. Radon represents a far smaller risk for this disease, but it is the second leading cause of lung cancer in the United States. Scientists estimate that approximately 15,000 to 22,000 lung cancer deaths per year are related to radon.

Although the association between radon exposure and smoking is not well understood, exposure to the combination of radon gas and cigarette smoke creates a greater risk for lung cancer than either factor alone. The majority of radon-related cancer deaths occur among smokers.

What have scientists learned about the relationship between radon and lung cancer?

Scientists agree that radon causes lung cancer in humans. Recent research has focused on specifying the effect of residential radon on lung cancer risk. In these studies, scientists measure radon levels in the homes of people who have lung cancer and compare them to the levels of radon in the homes of people who have not developed lung cancer.

One of these studies, funded by the National Institute of Environmental Health Sciences, examined residential radon exposure in Iowa among females who had lived in their current home for at least 20 years. This study included 413 females with lung cancer and 614 females without lung cancer. During the study, radon levels were tested in homes, lung cancer tissues were examined, and the scientists collected information about home characteristics and other topics. Results from this study suggested a link between exposure to radon and lung cancer.

Scientists have conducted more studies like this in other regions of the United States and around the world. Many of these studies have demonstrated an association between residential exposure to radon and lung cancer, but this finding has not been observed in all studies. The inconsistencies between studies are due in part to the small size of some studies, the varying levels of radon in many homes, and the difficulty of measuring a person's exposure to radon over time.

Researchers have combined and analyzed data from all radon studies conducted in Canada and the United States. By combining the data from these studies, scientists were able to analyze data from thousands of people. The results of this analysis demonstrated a slightly increased risk of lung cancer associated with exposure to household radon. This increased risk was consistent with the level of risk estimated based on studies of underground miners.

Researchers are also investigating more precise ways to measure a person's exposure to radon over time. In a study published in 2002, scientists examined radon exposure among people in Sweden who had not smoked daily for more than a year. This study included 110 people with lung cancer and 231 people without lung cancer. As with previous studies, the scientists measured radon levels of indoor air. The researchers also used a new technique of analyzing glass to estimate radon exposure over time. Using this technique, the scientists took measurements from glass in an object (e.g., a mirror or picture frame) that was at least 15 years old and had been in the person's home throughout that time, even if the person had moved from one home to another. In this study, both of the techniques for measuring radon demonstrated a relationship between long-term exposure to radon and lung cancer, and supported the results of previous studies.

SECTION 5.0
ASBESTOS SURVEY

Richard J. DeLorme and Paul d'Ombrain, an EPA AHERA Accredited Asbestos Building Inspector with The Empirical Company, conducted the inspection and sampling according to the criteria as outlined in 40 CFR 763.85.

Each homogeneous material was categorized, collected and given a unique number for identification and submitted to Pro Science in Woburn, Massachusetts for analysis following proper chain of custody.

In addition, to ensure the accuracy in quantifying the amount of asbestos, a second set of samples was collected and submitted for analysis. One out of ten sets of asbestos samples collected was submitted to EMSL Analytical, Inc. in Centennial, Colorado.

Table 1 contains a list of suspect asbestos containing building materials (ACBM) identified and sampled.

Table 1
Suspect (ACBM) Collected

Sample Number	Location	Description
CH-AB-122810-1A,B,C	Basement	Type 1 Spray On Insulation
CH-AB-122810-2A,B,C,D,E,F,G	Basement	Type 1 MUD Fitting
CH-AB-122810-3A,B,C	Basement	Type I Lag Cloth/Orange
CH-AB-122810-4A,B	Basement	Type 2 Lag Cloth/Orange

Table 1 Suspect (ACBM) Collected		
Sample Number	**Location**	**Description**
CH-AB-122810-5A,B,C	Basement	Type 3 Lag Cloth/Blue-Green
CH-AB-122810-6A,B,C	Basement	Type 4 Lag Cloth/Blue
CH-AB-122810-7A,B	Basement	Type 5 Lag Cloth/Green
CH-AB-122810-8A,B,C	Basement	Type 1 Cement Board
CH-AB-122810-9A,B,C	Basement	Type 1 Boiler Wrap/Green
*CH-AB-122910-10A,B,C	Basement	Type 1 Pipe Insulation
CH-AB-122910-11A,B CH-AB-123010-11C	Rooms 151, 132, 105	Type 1 12" x 12" Multi Tan Color Floor Tile
CH-AB-122910-12A,B CH-AB-123010-12C	Rooms 151, 132, 105	Type 1 Gypsum Wallboard
CH-AB-122910-13A,B CH-AB-123010-13C	Rooms 151, 132, 105	Type 1 Cove Base/Black Color
CH-AB-122910-14A,B CH-AB-123010-14C	Rooms 151, 132, 105	Type 1 Cove Base Mastic/Brown Color

Table 1
Suspect (ACBM) Collected

Sample Number	Location	Description
CH-AB-122910-15A,B CH-AB-010311-15C	Rooms 151, 157, 109	Type 1 Type I Mud Fitting/White
CH-AB-122910-16A,B CH-AB-010311-16C	Rooms 151, 132, 100S Hall	Type 1 2" x 4' Ceiling Tile/ White Color/Small Holes
CH-AB-122910-17A,B CH-AB-010311-17C	Rooms 151, 132, 100S Hall	Type 2 2" x 4' Ceiling Tile/ White Color/Large Holes
CH-AB-122910-18A,B	Room 149	Type 1 6" x 6" Floor Tile/Red Color/Clay
CH-AB-122910-19A,B	Room 149	Type 1 6" x 6" Floor Tile Mastic/Grey Color
*CH-AB-122910-20A,B	Room 149	Type 1A 6" x 6" Floor Tile Mastic/Tan Color
CH-AB-122910-21A,B CH-AB-123010-21C	Room 151,132,105	Type 1 Gypsum Wallboard Joint Compound/White Color
CH-AB-122910-22A,B CH-AB-123010-22C	Room 151,132,105	Type 1 12" x 12" Floor Tile Mastic/Black
CH-AB-122910-23A CH-AB-123010-23B,C	Room 134,172,172	Type 2 Cement Board (Exhaust Hood)

Table 1
Suspect (ACBM) Collected

Sample Number	Location	Description
		Grey Color
CH-AB-122910-24A CH-AB-010411-24B CH-AB-010511-24C	Room 116A,299A,331A	Type 1 Sink Coating (Insulation) Grey Color
CH-AB-123010-25A,B,C	Room 112	Type 2 12" x 12" Floor Tile /Multi Cream Color
CH-AB-123010-26A,B,C	Room 112	Type 2 12" x 12" Floor Tile Mastic / Black Color
CH-AB-123010-27A	Room 172	Type 1 Partition Curtain/Tan Color
CH-AB-010311-28A,B,C	Room 109	Type 1 Wall Insulation/Black Color
CH-AB-010311-29A,B,C	Room 105,107,111	Type 3 12" x 12" Ceiling Tile (Glue On)/White Color
*CH-AB-010311-30A,B,C	Room 105,107,111	Type 3 12" x 12" Ceiling Tile Mastic/Black Color
CH-AB-010311-31A,B CH-AB-010411-31C	Room 269,251,289	Type 1 12" x 12" Floor Tile/ Multi Tan Color

Table 1
Suspect (ACBM) Collected

Sample Number	Location	Description
CH-AB-010311-32A,B CH-AB-010411-32C	Room 269,251,289	Type 1 12" x 12" Floor Tile Mastic/ Black Color
CH-AB-010311-33A,B CH-AB-010411-33C	Room 269,251,289	Type 1 Cove Base/Black Color
CH-AB-010311-34A,B CH-AB-010411-34C	Room 269,251,289	Type 1 Cove Base Mastic/Brown Color
CH-AB-010311-35A,B CH-AB-010411-35C	Room 269,251,289	Type 1 Gypsum Wallboard /White Color
CH-AB-010311-36A,B CH-AB-010411-36C	Room 269,251,289	Type 1 Gypsum Wallboard Joint Compound/White Color
CH-AB-010311-37A,B CH-AB-010411-37C	Room 263,251,289	Type 1 2" x 4' Ceiling Tile/ White Color/Small Holes
CH-AB-010311-38A,B CH-AB-010411-38C	Room 263,251,289	Type 2 2" x 4' Ceiling Tile/ White Color/Large Holes
CH-AB-010311-39A CH-AB-010411-39B,C	Room 221,204,266	Type 2 Sink Coating (Insulation) Black Color
*CH-AB-010311-40A,B	Room 221	Type 1 Sheet Vinyl Flooring/Multi Brown

Table 1
Suspect (ACBM) Collected

Sample Number	Location	Description
		Color
CH-AB-010311-41A,B	Room 221	Type 1 Sheet Vinyl Flooring Mastic/ Brown Color
CH-AB-010311-42A,B	Room 221	Type 2 Sheet Vinyl Flooring/Multi Cream Color
CH-AB-010311-43A,B	Room 221	Type 2 Sheet Vinyl Flooring Mastic/ Red Color
CH-AB-010311-44A CH-AB-010411-44B,C	Room 209,204,204	Type 2 12" x 12" Floor Tile/Multi Cream Color
CH-AB-010311-45A CH-AB-010411-45B,C	Room 209,204,204	Type 2 12" x 12" Floor Tile Mastic/Black Color
CH-AB-010411-46A,B,C	Room 217,217,213	Type 3 12" x 12" Ceiling Tile (Glue On)/White Color
CH-AB-010411-47A,B,C	Room 217,217,213	Type 3 12" x 12" Ceiling Tile Mastic/Black Color
CH-AB-010411-48A,B,C	Room 215	Type 1

Table 1
Suspect (ACBM) Collected

Sample Number	Location	Description
		Wall Insulation/Black Color
CH-AB-010411-49A,B,C	Room 204,226,262	Type 2 Cement Board (Exhaust Hood) Grey Color
*CH-AB-010411-50A,B,C	Room 218,226,281	Type 1 MUD Fitting/White Color
CH-AB-010411-51A,B,C	Room 258,367,318	Type 4 2" x 4' Ceiling Tile/ White Color/Holes Dashes
CH-AB-010411-52A, CH-AB-010511-52B,C	Room 393,331,372	Type 1 12" x 12" Multi Tan Color Floor Tile
CH-AB-010411-53A, CH-AB-010511-53B,C	Room 393,331,372	Type 1 12" x 12" Floor Tile Mastic/Black Color
CH-AB-010411-54A, CH-AB-010511-54B,C	Room 393,331,372	Type 1 Cove Base/Black Color
CH-AB-010411-55A, CH-AB-010511-55B,C	Room 393,331,372	Type 1 Cove Base Mastic/Brown Color
CH-AB-010411-56A, CH-AB-010511-56B,C	Room 393,331,372	Type 1 Gypsum Wallboard /White Color
CH-AB-010411-57A,	Room 393,331,372	Type 1

Table 1
Suspect (ACBM) Collected

Sample Number	Location	Description
CH-AB-010511-57B,C		Gypsum Wallboard Joint Compound/White Color
CH-AB-010511-57AA,BB,CC	Room 313,313,317	Type 3 12" x 12" Ceiling Tile (Glue On)/White Color
CH-AB-010511-58A,B,C	Room 313,313,317	Type 3 12" x 12" Ceiling Tile Mastic/Black Color
CH-AB-010511-59A,B,C	Room 315	Type 1 Wall Insulation/Black Color
*CH-AB-010511-60A,B,C	Room 336,331,361	Type 1 2" x 4' Ceiling Tile/ White Color/Small Holes
CH-AB-010511-61A,B,C	Room 336,331,361	Type 2 2" x 4' Ceiling Tile/ White Color/Large Holes
CH-AB-010511-62A,B,C	Room 375,306,367	Type 1 MUD Fitting/White Color
CH-AB-010511-63A,B,C	Room 437,435A,417A	Type 1 12" x 12" Multi Tan Color Floor Tile
CH-AB-010511-64A,B,C	Room 437,435A,417A	Type 1 12" x 12" Floor Tile Mastic/Black

Table 1 Suspect (ACBM) Collected		
Sample Number	**Location**	**Description**
CH-AB-010511-65A,B,C	Room 437,435A,417A	Type 1 Cove Base/Black Color
CH-AB-010511-66A,B,C	Room 437,435A,417A	Type 1 Cove Base Mastic/Brown Color
CH-AB-010511-67A,B,C	Room 437,435A,417A	Type 1 Gypsum Wallboard /White Color
CH-AB-010511-68A,B,C	Room 437,435A,417A	Type 1 Gypsum Wallboard Joint Compound/White Color
CH-AB-010511-69A,B,C	Room 437,435B,417	Type 1 2" x 4' Ceiling Tile/ White Color/Small Holes
*CH-AB-010511-70A,B,C	Room 437,435B,417	Type 2 2" x 4' Ceiling Tile/ White Color/Large Holes Color
CH-AB-011211-1A,B,C	Roof	Type 1 Roof-Silver Coat/Silver and Black Color

Note: Samples marked with an asterisk (*) were also submitted to EMSL Analytical, Inc.

ProScience Analytical Services Inc. and EMSL Analytical, Inc. are a United States Department of Commerce, National Institute of Standards and Technology Certified Laboratory under the National Voluntary Laboratory Accreditation Program (NVLAP) Program for Bulk Asbestos Fiber

Analysis. Sample analysis was performed to determine asbestos type and content using Polarized Light Microscopy, supplemented by Dispersion Staining (PLM/DS) in accordance with the following methodologies:

USEPA "Interim Method for the Dispersion of Asbestos in Bulk Insulation Samples", (40 CFR Part 763, Subpart F, Appendix A, May 27, 1982);

ASTM Draft "Standard Method for Asbestos Containing Materials by Polarized Light Microscopy", (Committee D22.05, January 14, 1988).

SECTION 6.0
LABORATORY ANALYSIS OF ACBM BULK SAMPLES

By definition, any material containing greater than 1% asbestos is considered ACM. Materials with less than 1% are designated as "TRACE" in the inventory. The one percent cut off is consistent with EPA's definition under the asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP). However, the OSHA standard has a definition for both "asbestos" and "asbestos-containing materials." These materials may still be regulated in regard to work practice and exposure control techniques. Materials below the 1% threshold should follow requirements set forth in 29 CFR 1926.1101(g)(1)(ii) and (iii). Only materials with no traces of asbestos are considered asbestos-free, and are designated as "NON DETECT" in the inventory.

The 1% threshold is not based upon health data; the value was chosen based upon how good the technology available was at detecting asbestos. It was decided that the various technologies that would be used to detect asbestos for regulatory purposes would not be that consistently accurate below 1%.

The analytical results by PLM have been obtained using the EPA/600/R-93.116 method. The visual estimate quantitative method is generally used for determining the percentage of asbestos and "other components" of the sample. The point counting method was used, if applicable, if the sample was recorded as trace and friable.

Point counting is another means of quantifying the amount of asbestos present in a sample. The results obtained by using PLM with point counting tend to be more accurate.

Laboratory analysis of the suspect building materials confirmed to contain asbestos-mineral fibers is presented in Table 2. Certificates of Analysis are located in Appendix B of this report.

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-122810-1A,B,C	Basement	Type 1 Spray On Insulation	*N/D

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-122810-2A,B,C,D,E,F,G	Basement	Type 1 MUD Fitting	50% Chrysotile 10% Amosite
CH-AB-122810-3A,B,C	Basement	Type I Lag Cloth/Orange	25% Chrysotile 5% Amosite
CH-AB-122810-4A,B	Basement	Type 2 Lag Cloth/Orange	15% Chrysotile 5% Amosite
CH-AB-122810-5A,B,C	Basement	Type 3 Lag Cloth/Blue-Green	2% Chrysotile
CH-AB-122810-6A,B,C	Basement	Type 4 Lag Cloth/Blue	15% Chrysotile 5% Amosite
CH-AB-122810-7A,B,C	Basement	Type 5 Lag Cloth/Green	Trace Non Friable
CH-AB-122810-8A,B,C	Basement	Type 1 Cement Board	25% Chrysotile
CH-AB-122810-9A,B,C	Basement	Type 1 Boiler Wrap/Green	*N/D
CH-AB-122910-10A,B,C	Basement	Type 1 Pipe Insulation	20% Amosite **15% Amosite
CH-AB-122910-11A,B CH-AB-123010-11C	Rooms 151, 132, 105	Type 1 12" x 12" Multi Tan Color Floor Tile	5% Chrysotile

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-122910-12A,B CH-AB-123010-12C	Rooms 151, 132, 105	Type 1 Gypsum Wallboard	*N/D
CH-AB-122910-13A,B CH-AB-123010-13C	Rooms 151, 132, 105	Type 1 Cove Base/Black Color	*N/D
CH-AB-122910-14A,B CH-AB-123010-14C	Rooms 151, 132, 105	Type 1 Cove Base Mastic/Brown Color	*N/D
CH-AB-122910-15A,B CH-AB-010311-15C	Rooms 151, 157, 109	Type 1 Mud Fitting/White	2% Chrysotile
CH-AB-122910-16A,B CH-AB-010311-16C	Rooms 151, 132, 100S Hall	Type 1 2' x 4' Ceiling Tile/ White Color/Small Holes	*N/D
CH-AB-122910-17A,B CH-AB-010311-17C	Rooms 151, 132, 100S Hall	Type 2 2" x 4' Ceiling Tile/ White Color/Large Holes	*N/D
CH-AB-122910-18A,B	Room 149	Type 1 6" x 6" Floor Tile/Red Color/Clay	*N/D
CH-AB-122910-19A,B	Room 149	Type 1 6" x 6" Floor Tile Mastic/Grey Color	*N/D
CH-AB-122910-20A,B	Room 149	Type 1A 6" x 6" Floor Tile Mastic/Tan Color	*N/D **N/D

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-122910-21A,B CH-AB-123010-21C	Room 151,132,105	Type 1 Gypsum Wallboard Joint Compound/White Color	2% Chrysotile
CH-AB-122910-22A,B CH-AB-123010-22C	Room 151,132,105	Type 1 12" x 12" Floor Tile Mastic/Black	15% Chrysotile
CH-AB-122910-23A CH-AB-123010-23B,C	Room 134,172,172	Type 2 Cement Board (Exhaust Hood) Grey Color	30% Chrysotile
CH-AB-122910-24A CH-AB-010411-24B CH-AB-010511-24C	Room 116A,299A,331A	Type 1 Sink Coating (Insulation) Grey Color	20% Chrysotile
CH-AB-123010-25A,B,C	Room 112	Type 2 12" x 12" Floor Tile /Multi Cream Color	*N/D
CH-AB-123010-26A,B,C	Room 112	Type 2 12" x 12" Floor Tile Mastic / Black Color	5% Chrysotile
CH-AB-123010-27A	Room 172	Type 1 Partition Curtain/Tan Color	*N/D
CH-AB-010311-28A,B,C	Room 109	Type 1 Wall Insulation/Black Color	*N/D

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-010311-29A,B,C	Room 105,107,111	Type 3 12" x 12" Ceiling Tile (Glue On)/White Color	*N/D
CH-AB-010311-30A,B,C	Room 105,107,111	Type 3 12" x 12" Ceiling Tile Mastic/Black Color	*N/D **N/D
CH-AB-010311-31A,B CH-AB-010411-31C	Room 269,251,289	Type 1 12" x 12" Floor Tile/ Multi Tan Color	2% Chrysotile
CH-AB-010311-32A,B CH-AB-010411-32C	Room 269,251,289	Type 1 12" x 12" Floor Tile Mastic/ Black Color	10% Chrysotile
CH-AB-010311-33A,B CH-AB-010411-33C	Room 269,251,289	Type 1 Cove Base/Black Color	*N/D
CH-AB-010311-34A,B CH-AB-010411-34C	Room 269,251,289	Type 1 Cove Base Mastic/Brown Color	*N/D
CH-AB-010311-35A,B CH-AB-010411-35C	Room 269,251,289	Type 1 Gypsum Wallboard /White Color	*N/D
CH-AB-010311-36A,B CH-AB-010411-36C	Room 269,251,289	Type 1 Gypsum Wallboard Joint Compound/White Color	2% Chrysotile
CH-AB-010311-37A,B	Room 263,251,289	Type 1	*N/D

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-010411-37C		2" x 4' Ceiling Tile/ White Color/Small Holes	
CH-AB-010311-38A,B CH-AB-010411-38C	Room 263,251,289	Type 2 2" x 4' Ceiling Tile/ White Color/Large Holes	*N/D
CH-AB-010311-39A CH-AB-010411-39B,C	Room 221,204,266	Type 2 Sink Coating (Insulation) Black Color	5% Chrysotile
CH-AB-010311-40A,B	Room 221	Type 1 Sheet Vinyl Flooring/Multi Brown Color	*N/D **N/D
CH-AB-010311-41A,B	Room 221	Type 1 Sheet Vinyl Flooring Mastic/ Brown Color	*N/D
CH-AB-010311-42A,B	Room 221	Type 2 Sheet Vinyl Flooring/Multi Cream Color	20% Chrysotile
CH-AB-010311-43A,B	Room 221	Type 2 Sheet Vinyl Flooring Mastic/ Red Color	*N/D
CH-AB-010311-44A CH-AB-010411-44B,C	Room 209,204,204	Type 2 12" x 12" Floor Tile/Multi Cream Color	*N/D

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-010311-45A CH-AB-010411-45B,C	Room 209,204,204	Type 2 12" x 12" Floor Tile Mastic/Black Color	10% Chrysotile
CH-AB-010411-46A,B,C	Room 217,217,213	Type 3 12" x 12" Ceiling Tile (Glue On)/White Color	*N/D
CH-AB-010411-47A,B,C	Room 217,217,213	Type 3 12" x 12" Ceiling Tile Mastic/Black Color	*N/D
CH-AB-010411-48A,B,C	Room 215	Type 1 Wall Insulation/Black Color	*N/D
CH-AB-010411-49A,B,C	Room 204,226,262	Type 2 Cement Board (Exhaust Hood) Grey Color	20% Chrysotile
CH-AB-010411-50A,B,C	Room 218,226,281	Type 1 MUD Fitting/White Color	2% Chrysotile **3% Chrysotile
CH-AB-010411-51A,B,C	Room 258,367,318	Type 4 2" x 4' Ceiling Tile/ White Color/Holes Dashes	*N/D
CH-AB-010411-52A, CH-AB-010511-52B,C	Room 393,331,372	Type 1 12" x 12" Multi Tan Color Floor Tile	2% Chrysotile
CH-AB-010411-53A,	Room 393,331,372	Type 1	15% Chrysotile

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-010511-53B,C		12" x 12" Floor Tile Mastic/Black Color	
CH-AB-010411-54A, CH-AB-010511-54B,C	Room 393,331,372	Type 1 Cove Base/Black Color	*N/D
CH-AB-010411-55A, CH-AB-010511-55B,C	Room 393,331,372	Type 1 Cove Base Mastic/Brown Color	*N/D
CH-AB-010411-56A, CH-AB-010511-56B,C	Room 393,331,372	Type 1 Gypsum Wallboard /White Color	*N/D
CH-AB-010411-57A, CH-AB-010511-57B,C	Room 393,331,372	Type 1 Gypsum Wallboard Joint Compound/White Color	2% Chrysotile
CH-AB-010511-57AA,BB,CC	Room 313,313,317	Type 3 12" x 12" Ceiling Tile (Glue On)/White Color	*N/D
CH-AB-010511-58A,B,C	Room 313,313,317	Type 3 12" x 12" Ceiling Tile Mastic/Black Color	*N/D
CH-AB-010511-59A,B,C	Room 315	Type 1 Wall Insulation/Black Color	*N/D
CH-AB-010511-60A,B,C	Room 336,331,361	Type 1 2" x 4' Ceiling Tile/ White Color/Small Holes	*N/D **N/D

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
CH-AB-010511-61A,B,C	Room 336,331,361	Type 2 2" x 4' Ceiling Tile/ White Color/Large Holes	*N/D
CH-AB-010511-62A,B,C	Room 375,306,367	Type 1 MUD Fitting/White Color	2% Chrysotile
CH-AB-010511-63A,B,C	Room 437,435A,417A	Type 1 12" x 12" Multi Tan Color Floor Tile	2% Chrysotile
CH-AB-010511-64A,B,C	Room 437,435A,417A	Type 1 12" x 12" Floor Tile Mastic/Black	10% Chrysotile
CH-AB-010511-65A,B,C	Room 437,435A,417A	Type 1 Cove Base/Black Color	*N/D
CH-AB-010511-66A,B,C	Room 437,435A,417A	Type 1 Cove Base Mastic/Brown Color	*N/D
CH-AB-010511-67A,B,C	Room 437,435A,417A	Type 1 Gypsum Wallboard /White Color	*N/D
CH-AB-010511-68A,B,C	Room 437,435A,417A	Type 1 Gypsum Wallboard Joint Compound/White Color	2% Chrysotile
CH-AB-010511-69A,B,C	Room 437,435B,417	Type 1 2' x 4' Ceiling Tile/ White	*N/D

Table 2
Laboratory Analysis of ACBM Bulk Samples

Sample Number	Location	Description	Sample Analysis
		Color/Small Holes	
CH-AB-010511-70A,B,C	Room 437,435B,417	Type 2 2' x 4' Ceiling Tile/ White Color/Large Holes Color	*N/D **N/D
CH-AB-011211-1A,B,C	Roof	Type 1 Roof-Silver Coat/Silver and Black Color	10% Chrysotile

***N/D-None Detected**

****EMSL Analytical Inc. Data**

SECTION 7.0
LEAD SURVEY

Edward S. DeLorme conducted an inspection and testing of building materials suspected to contain or be coated with lead based paint.

The field survey was conducted using a Niton XRF Analyzer, Model XLp 303A, and Serial Number 9296, equipped with a sealed 40 mCi Cadmium (Cd109) source.

Table 3 contains a list of identified surfaces suspected to be coated with lead-based paint and sampled.

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
	FIRST FLOOR	
6	Room #131	Wall / A
7	Room #131	Door jamb / B
8	Room #131	Door jamb / A
9	Room #131	Door / A
10	Room #131	Wall / B
11	Room #131	Wall / C
12	Room #131	Wall / D
13	Room #132	Wall / A
14	Room #132	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
15	Room #132	Wall / D
16	Room #132	Wall / C
17	Room #132	Wall / B
18	Room #132	Radiator / B
19	Room #132	Door jamb / C
20	Room #132	Door jamb / C
21	Room #132	Door / C
22	Room #134	Door / C
23	Room #134	Door jamb / C
24	Room #134	Door jamb / C
25	Room #134	Wall / C
26	Room #134	Wall / A
27	Room #134	Wall / A
28	Room #134	Wall / A
29	Room #134	Wall / A
30	Room #134	Wall / B
31	Room #134	Wall / C
32	Room #133	Wall / A
33	Room #133	Wall / B
34	Room #133	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
35	Room #133	Wall / D
36	Room #133	Door jamb / A
37	Room #133	Door jamb / A
38	Room #133	Door jamb / A
39	Room #135	Door jamb / A
40	Room #135	Door jamb / A
41	Room #135	Door / A
42	Room #135	Door / A
43	Room #135	Wall / A
44	Room #135	Wall / B
45	Room #135	Wall / C
46	Room #135	Wall / D
47	Room #135	Wall / C
48	Room #135	Wall / D
49	Room #135	Wall / A
50	Room #135	Door jamb / C
51	Room #135	Door jamb / C
52	Room #135	Door / C
53	Room #137	Door / A
54	Room #137	Door jamb / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
55	Room #137	Door jamb / A
56	Room #137	Door jamb / A
57	Room #137	Wall / A
58	Room #137	Wall / B
59	Room #137	Wall / C
60	Room #137	Wall / D
68	Room #139	Door / A
69	Room #139	Door jamb / A
70	Room #139	Door jamb / A
71	Room #139	Wall / A
72	Room #139	Wall / B
73	Room #139	Wall / C
74	Room #139	Wall / D
75	Room #141	Wall / A
76	Room #141	Wall / B
77	Room #141	Wall / C
78	Room #141	Wall / D
79	Room #141	Door jamb / A
80	Room #141	Door jamb / A
81	Room #143	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
82	Room #143	Wall / A
83	Room #143	Wall / A
84	Room #143	Wall / A
85	Room #143	Door jamb / A
86	Room #143	Door jamb / A
87	Room #145	Wall / A
88	Room #145	Wall / A
89	Room #145	Wall / A
90	Room #145	Wall / D
91	Room #147	Wall / A
92	Room #147	Wall / A
93	Room #147	Wall / B
94	Room #147	Wall / B
95	Room #147	Wall / B
96	Room #147	Wall / C
97	Room #147	Wall / D
98	Room #147	Wall / D
99	Room #149	Wall / A
100	Room #149	Wall / A
101	Room #149	Wall / B

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
102	Room #149	Wall / B
103	Room #149	Wall / C
104	Room #149	Wall / D
105	Room #149	Wall / D
106	Room #151	Wall / A
107	Room #151	Wall / B
108	Room #151	Wall / B
109	Room #151	Wall / C
110	Room #151	Wall / D
111	Room #151	Wall / D
112	Room #172	Wall / A
113	Room #172	Wall / A
114	Room #172	Wall / B
115	Room #172	Wall / B
116	Room #172	Wall / B
117	Room #172	Wall / B
118	Room #172	Wall / C
119	Room #172	Wall / C
120	Room #172	Wall / D
121	Room #172	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
122	Room #172	Wall / D
123	Room #172	Wall / D
124	Room #112	Wall / A
125	Room #112	Wall / A
126	Room #112	Wall / A
127	Room #112	Wall / A
128	Room #112	Wall / C
129	Room #112	Wall / D
130	Room #112	Wall / D
131	Room #152	Wall / A
132	Room #152	Wall / A
133	Room #152	Wall / A
134	Room #152	Wall / A
135	Room #152	Wall / A
136	Room #152	Wall / A
137	Room #152	Wall / D
138	Room #152	Wall / D
146	Room #100E	Wall / B
147	Room #100E	Wall / A
148	Room #100E	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
149	Room #100E	Wall / A
150	Room #100E	Wall / C
151	Room #100E	Wall / C
152	Room #100E	Wall / C
153	Room #117	Wall / A
154	Room #117	Wall / B
155	Room #117	Wall / C
156	Room #117	Wall / D
157	Room #119	Wall / D
158	Room #119	Wall / A
159	Room #119	Wall / B
160	Room #119	Wall / C
161	Room #119	Door / B
162	Room #119	Door jamb / B
163	Room #119	Door jamb / B
164	Room #121	Wall / A
165	Room #121	Wall / B
166	Room #121	Wall / C
167	Room #121	Wall / D
168	Room #123	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
169	Room #123	Wall / A
170	Room #123	Wall / C
171	Room #123	Wall / D
172	Room #125	Wall / A
173	Room #125	Wall / B
174	Room #125	Wall / C
175	Room #125	Wall / D
176	Room #126A	Wall / A
177	Room #126A	Wall / B
178	Room #126A	Wall / C
179	Room #126A	Wall / D
180	Room #126	Wall / A
181	Room #126	Wall / B
182	Room #126	Wall / C
183	Room #126	Wall / D
184	Room #122	Wall / A
185	Room #122	Wall / B
186	Room #122	Wall / C
187	Room #122	Wall / D
188	Room #126A	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
189	Room #126A	Wall / B
190	Room #126A	Wall / C
191	Room #126A	Wall / D
192	Room #116	Wall / A
193	Room #116	Wall / B
194	Room #116	Wall / C
195	Room #116	Wall / D
196	Room #146	Wall / A
197	Room #146	Wall / B
198	Room #146	Wall / C
199	Room #146	Wall / C
200	Room #146	Wall / A
201	Room #153	Wall / A
202	Room #153	Wall / B
203	Room #153	Wall / C
204	Room #153	Wall / D
205	Room #153	Door / C
206	Room #153	Door / C
207	Room #153	Door jamb / C
208	Room #153	Door jamb / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
209	Room #157	Wall / A
210	Room #157	Wall / A
211	Room #157	Wall / A
212	Room #157	Wall / A
213	Room #161	Wall / A
214	Room #161	Wall / B
215	Room #161	Wall / C
216	Room #161	Wall / D
217	Room #105	Wall / A
218	Room #105	Wall / B
219	Room #105	Wall / C
220	Room #105	Wall / D
221	Room #107	Wall / A
222	Room #107	Wall / B
223	Room #107	Wall / C
224	Room #107	Wall / D
225	Room #107	Wall / D
226	Room #107	Wall / D
227	Room #107	Wall / D
228	Room #107	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
229	Room #111	Wall / B
230	Room #111	Wall / B
231	Room #111	Wall / A
232	Room #111	Wall / A
233	Room #111	Wall / B
234	Room #111	Wall / C
235	Room #111	Wall / D
982	Room # Hall 100N	Wall / C
983	Room # Hall 100N	Wall / A
984	Room # Hall 100N	Wall / A
985	Room # Hall 100N	Wall / C
986	Room # Hall 100N	Wall / C
987	Room # Hall 100N	Wall / A
988	Room # Hall 100E	Wall / D
989	Room # Hall 100E	Wall / B
990	Room # Hall 100S	Wall / A
991	Room # Hall 100S	Wall / C
992	Room # Hall 100W	Wall / B
993	Room # Hall 100W	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
SECOND FLOOR		
243	Room #277	Wall / A
244	Room #277	Wall / B
245	Room #277	Wall / C
246	Room #277	Wall / D
247	Room #277	Door / D
248	Room #277	Door jamb / A
249	Room #277	Door jamb / A
250	Room #275	Wall / A
251	Room #275	Wall / B
252	Room #275	Wall / C
253	Room #275	Wall / D
254	Room #273	Wall / A
255	Room #273	Wall / B
256	Room #273	Wall / B
257	Room #273	Wall / C
258	Room #273	Wall / C
259	Room #273	Wall / D
260	Room #273	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
261	Room #273A	Wall / A
262	Room #273A	Wall / B
263	Room #273A	Wall / C
264	Room #273A	Wall / D
265	Room #273B	Wall / A
266	Room #273B	Wall / A
267	Room #273B	Wall / C
268	Room #273B	Wall / D
269	Room #273B	Wall / A
270	Room #273B	Wall / B
271	Room #273B	Wall / C
272	Room #273B	Wall / D
273	Room #279	Wall / A
274	Room #279	Wall / B
275	Room #279	Wall / C
276	Room #279	Wall / D
277	Room #281	Wall / A
278	Room #281	Wall / B
279	Room #281	Wall / C
280	Room #281	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
281	Room #283	Wall / A
282	Room #283	Wall / A
283	Room #283	Wall / C
283	Room #283	Wall / D
285	Room #285	Wall / A
286	Room #285	Wall / B
287	Room #285	Wall / C
288	Room #285	Wall / D
289	Room #287	Wall / A
290	Room #287	Wall / B
291	Room #287	Wall / C
292	Room #287	Wall / D
293	Room #289	Wall / A
294	Room #289	Wall / B
295	Room #289	Wall / C
296	Room #289	Wall / D
297	Room #291	Wall / A
298	Room #291	Wall / B
299	Room #291	Wall / C
300	Room #291	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
301	Room #293	Wall / A
302	Room #293	Wall / B
303	Room #293	Wall / C
304	Room #293	Wall / D
305	Room #295	Wall / A
306	Room #295	Wall / B
307	Room #295	Wall / C
308	Room #295	Wall / D
309	Room #297	Wall / A
310	Room #297	Wall / B
311	Room #297	Wall / C
312	Room #297	Wall / D
313	Room #299A	Wall / A
314	Room #299A	Wall / B
315	Room #299A	Wall / C
316	Room #299A	Wall / D
317	Room #299	Wall / A
318	Room #299	Wall / B
319	Room #299	Wall / B1
320	Room #299	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
321	Room #201	Wall / A
322	Room #201	Wall / B
323	Room #201	Wall / C
324	Room #201	Wall / D
325	Room #203	Wall / A
326	Room #203	Wall / B
327	Room #203	Wall / C
328	Room #203	Wall / D
329	Room #205	Wall / A
330	Room #205	Wall / B
331	Room #205	Wall / C
332	Room #205	Wall / D
333	Room #207	Wall / A
334	Room #207	Wall / B
335	Room #207	Wall / C
336	Room #207	Wall / D
337	Room #209	Wall / A
338	Room #209	Wall / B
339	Room #209	Wall / C
340	Room #209	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
341	Room #211	Wall / A
342	Room #211	Wall / B
343	Room #211	Wall / C
344	Room #211	Wall / D
345	Room #211A	Wall / A
346	Room #211A	Wall / B
347	Room #211A	Wall / C
348	Room #211A	Wall / D
349	Room #221C	Wall / A
350	Room #221C	Wall / B
351	Room #221C	Wall / C
352	Room #221C	Wall / D
353	Room #221B	Wall / A
354	Room #221B	Wall / B
355	Room #221B	Wall / C
356	Room #221B	Wall / D
357	Room #221A	Wall / A
358	Room #221A	Wall / B
359	Room #221A	Wall / D
360	Room #221	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
361	Room #221	Wall / B
362	Room #221	Wall / D
363	Room #219	Wall / A
364	Room #219	Wall / B
365	Room #219	Wall / C
366	Room #219	Wall / D
367	Room #223	Wall / A
368	Room #223	Wall / B
369	Room #223	Wall / C
370	Room #223	Wall / D
371	Room #231	Wall / A
372	Room #231	Wall / B
373	Room #231	Wall / C
374	Room #374	Wall / D
375	Room #233	Wall / A
376	Room #233	Wall / B
377	Room #233	Wall / C
378	Room #233	Wall / D
379	Room #235	Wall / A
380	Room #235	Wall / B

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
381	Room #235	Wall / C
382	Room #235	Wall / D
383	Room #237	Wall / A
384	Room #237	Wall / B
385	Room #237	Wall / C
386	Room #237	Wall / D
387	Room #239	Wall / A
388	Room #239	Wall / B
389	Room #239	Wall / C
390	Room #239	Wall / D
391	Room #241	Wall / A
392	Room #241	Wall / B
393	Room #241	Wall / B
394	Room #241	Wall / D
395	Room #243	Wall / A
396	Room #243	Wall / B
397	Room #243	Wall / C
398	Room #243	Wall / D
399	Room #245	Wall / A
401	Room #245	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
402	Room #245	Wall / D
403	Room #247	Wall / A
404	Room #247	Wall / B
405	Room #247	Wall / C
406	Room #247	Wall / D
407	Room #249	Wall / A
408	Room #249	Wall / B
409	Room #249	Wall / C
410	Room #249	Wall / D
411	Room #251	Wall / A
412	Room #251	Wall / B
413	Room #251	Wall / C
414	Room #251	Wall / D
415	Room #253	Wall / A
416	Room #253	Wall / B
417	Room #253	Wall / C
418	Room #253	Wall / D
419	Room #255	Wall / A
420	Room #255	Wall / B
421	Room #255	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
422	Room #255	Wall / D
423	Room #257	Wall / A
424	Room #257	Wall / B
425	Room #257	Wall / C
426	Room #257	Wall / D
427	Room #259	Wall / A
428	Room #259	Wall / B
429	Room #259	Wall / C
430	Room #259	Wall / D
431	Room #261	Wall / A
432	Room #261	Wall / B
433	Room #261	Wall / C
434	Room #261	Wall / D
435	Room #263	Wall / A
436	Room #263	Wall / B
437	Room #263	Wall / C
438	Room #263	Wall / D
446	Room #204	Wall / A
447	Room #204	Wall / A
448	Room #204	Wall / B

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
449	Room #204	Wall / C
450	Room #204	Wall / C
451	Room #204	Wall / D
452	Room #212	Wall / A
453	Room #212	Wall / B
454	Room #212	Wall / C
455	Room #212	Wall / D
456	Room #278	Wall / A
457	Room #278	Wall / B
458	Room #278	Wall / C
459	Room #278	Wall / D
460	Room #214	Wall / A
461	Room #214	Wall / B
462	Room #214	Wall / C
463	Room #214	Wall / D
464	Room #272	Wall / A
465	Room #272	Wall / B
466	Room #272	Wall / C
467	Room #272	Wall / D
468	Room #216	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
469	Room #216	Wall / B
470	Room #216	Wall / C
471	Room #216	Wall / D
472	Room #224	Wall / A
473	Room #224	Wall / A
474	Room #224	Wall / A
475	Room #224	Wall / A
476	Room #226	Wall / A
477	Room #226	Wall / B
478	Room #226	Wall / C
479	Room #226	Wall / D
480	Room #264	Wall / A
481	Room #264	Wall / B
482	Room #264	Wall / C
483	Room #264	Wall / D
484	Room #228	Wall / A
485	Room #228	Wall / B
486	Room #228	Wall / C
487	Room #228	Wall / D
488	Room #234	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
489	Room #234	Wall / B
490	Room #234	Wall / C
491	Room #234	Wall / D
492	Room #258	Wall / A
493	Room #258	Wall / B
494	Room #258	Wall / C
495	Room #258	Wall / D
496	Room #262	Wall / A
497	Room #262	Wall / B
498	Room #262	Wall / C
499	Room #262	Wall / D
500	Room #267	Wall / A
501	Room #267	Wall / B
502	Room #267	Wall / C
503	Room #267	Wall / D
504	Room #266	Wall / A
505	Room #266	Wall / B
506	Room #266	Wall / C
507	Room #266	Wall / D
508	Room #269	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
509	Room #269	Wall / A
510	Room #269	Wall / A
511	Room #269	Wall / A
512	Room #222	Wall / A
513	Room #222	Wall / B
514	Room #222	Wall / C
515	Room #222	Wall / D
994	Room # Hall 200N	Wall / C
995	Room # Hall 200N	Wall / A
996	Room # Hall 200N	Wall / A
997	Room # Hall 200N	Wall / C
998	Room # Hall 200N	Wall / C
999	Room # Hall 200N	Wall / A
1000	Room # Hall 200E	Wall / D
1001	Room # Hall 200E	Wall / B
1002	Room # Hall 200E	Wall / B
1003	Room # Hall 200E	Wall / D
1004	Room # Hall 200S	Wall / A
1005	Room # Hall 200S	Wall / C
1006	Room # Hall 200S	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
1007	Room # Hall 200S	Wall / A
1008	Room # Hall 200S	Wall / A
1009	Room # Hall 200S	Wall / C
1010	Room # Hall 200W	Wall / B
1011	Room # Hall 200W	Wall / D
1012	Room # Hall 200W	Wall / D
1013	Room # Hall 200W	Wall / B
THIRD FLOOR		
516	Room #369	Wall / A
517	Room #369	Wall / B
518	Room #369	Wall / C
519	Room #369	Wall / D
520	Room #373	Wall / A
521	Room #373	Wall / B
522	Room #373	Wall / C
523	Room #373	Wall / D
524	Room #375	Wall / A
525	Room #375	Wall / B
526	Room #375	Wall / C
527	Room #375	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
528	Room #375	Wall / D
529	Room #377	Wall / A
530	Room #377	Wall / B
531	Room #377	Wall / C
532	Room #377	Wall / D
533	Room #379	Wall / A
534	Room #379	Wall / B
535	Room #379	Wall / C
536	Room #379	Wall / D
537	Room #381	Wall / A
538	Room #381	Wall / B
539	Room #381	Wall / C
540	Room #381	Wall / D
541	Room #383	Wall / A
542	Room #383	Wall / B
543	Room #383	Wall / C
544	Room #383	Wall / D
545	Room #385	Wall / A
546	Room #385	Wall / B
547	Room #385	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
548	Room #385	Wall / D
549	Room #387	Wall / A
550	Room #387	Wall / B
551	Room #387	Wall / C
552	Room #387	Wall / D
553	Room #389	Wall / A
554	Room #389	Wall / B
555	Room #389	Wall / C
556	Room #389	Wall / D
557	Room #393	Wall / A
558	Room #393	Wall / B
559	Room #393	Wall / C
560	Room #393	Wall / D
561	Room #393A	Wall / A
562	Room #393A	Wall / B
563	Room #393A	Wall / C
564	Room #393A	Wall / D
565	Room #303	Wall / A
566	Room #303	Wall / B
567	Room #303	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
568	Room #303	Wall / D
576	Room #367	Wall / A
577	Room #367	Wall / B
578	Room #367	Wall / C
579	Room #367	Wall / D
580	Room #361	Wall / A
581	Room #361	Wall / B
582	Room #361	Wall / C
583	Room #361	Wall / D
584	Room #359	Wall / A
585	Room #359	Wall / B
586	Room #359	Wall / C
587	Room #359	Wall / D
588	Room #353	Wall / A
589	Room #353	Wall / B
590	Room #353	Wall / C
591	Room #353	Wall / D
592	Room #351	Wall / A
593	Room #351	Wall / B
594	Room #351	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
595	Room #351	Wall / D
596	Room #349	Wall / A
597	Room #349	Wall / B
598	Room #349	Wall / C
599	Room #349	Wall / D
600	Room #347	Wall / A
601	Room #347	Wall / B
602	Room #347	Wall / C
603	Room #347	Wall / D
604	Room #345	Wall / A
605	Room #345	Wall / B
606	Room #345	Wall / C
607	Room #345	Wall / D
608	Room #343	Wall / A
609	Room #343	Wall / B
610	Room #343	Wall / C
611	Room #343	Wall / D
612	Room #341	Wall / A
613	Room #341	Wall / B
614	Room #341	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
615	Room #341	Wall / D
616	Room #344	Wall / A
617	Room #344	Wall / B
618	Room #344	Wall / C
619	Room #344	Wall / D
620	Room #342	Wall / A
621	Room #342	Wall / B
622	Room #342	Wall / C
623	Room #342	Wall / D
624	Room #338A	Wall / A
625	Room #338A	Wall / B
626	Room #338A	Wall / C
627	Room #338A	Wall / D
628	Room #338	Wall / A
629	Room #338	Wall / B
630	Room #338	Wall / C
631	Room #338	Wall / D
632	Room #339	Wall / A
633	Room #339	Wall / B
634	Room #339	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
635	Room #339	Wall / D
636	Room #337	Wall / A
637	Room #337	Wall / B
638	Room #337	Wall / C
639	Room #337	Wall / D
640	Room #335	Wall / A
641	Room #335	Wall / B
642	Room #335	Wall / C
643	Room #335	Wall / D
644	Room #333	Wall / A
645	Room #333	Wall / B
646	Room #333	Wall / C
647	Room #333	Wall / D
648	Room #331A	Wall / A
649	Room #331A	Wall / B
650	Room #331A	Wall / C
651	Room #331A	Wall / D
652	Room #331	Wall / A
653	Room #331	Wall / B
654	Room #331	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
655	Room #331	Wall / D
656	Room #325	Wall / A
657	Room #325	Wall / B
658	Room #325	Wall / C
659	Room #325	Wall / D
660	Room #323	Wall / A
661	Room #323	Wall / B
662	Room #323	Wall / C
663	Room #323	Wall / D
664	Room #321	Wall / A
665	Room #321	Wall / B
666	Room #321	Wall / C
667	Room #321	Wall / D
668	Room #311	Wall / A
669	Room #311	Wall / B
670	Room #311	Wall / C
671	Room #311	Wall / D
672	Room #309	Wall / A
673	Room #309	Wall / B
674	Room #309	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
675	Room #309	Wall / D
676	Room #307	Wall / A
677	Room #307	Wall / B
678	Room #307	Wall / C
679	Room #307	Wall / D
680	Room #317	Wall / A
681	Room #317	Wall / A
682	Room #317	Wall / C
683	Room #317	Wall / D
684	Room # 317	Wall / D
685	Room #317	Wall / A
686	Room #313	Wall / A
687	Room #313	Wall / B
688	Room #313	Wall / C
689	Room #313	Wall / D
690	Room #313	Wall / B
691	Room #313	Wall / D
692	Room #300SV	Wall / A
693	Room #300SV	Wall / B
694	Room #300SV	Wall / C

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
695	Room #300SV	Wall / D
696	Room #312	Wall / A
697	Room #312	Wall / B
698	Room #312	Wall / C
699	Room #312	Wall / D
700	Room #306	Wall / A
701	Room #306	Wall / B
702	Room #306	Wall / C
703	Room #306	Wall / D
704	Room #304	Wall / A
705	Room #304	Wall / C
706	Room #304	Wall / D
707	Room #372	Wall / A
708	Room #372	Wall / B
709	Room #372	Wall / C
710	Room #372	Wall / D
711	Room #364	Wall / A
712	Room #364	Wall / B
713	Room #364	Wall / C
714	Room #364	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
715	Room #364A	Wall / A
716	Room #364A	Wall / B
717	Room #364A	Wall / C
718	Room #364A	Wall / D
719	Room #352	Wall / A
720	Room #352	Wall / B
721	Room #352	Wall / C
722	Room #352	Wall / D
723	Room #346	Wall / A
724	Room #346	Wall / B
725	Room #346	Wall / C
726	Room #346	Wall / D
727	Room #336	Wall / A
728	Room #336	Wall / B
729	Room #336	Wall / C
730	Room #336	Wall / D
731	Room #334	Wall / A
732	Room #334	Wall / B
733	Room #334	Wall / C
734	Room #334	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
735	Room #332	Wall / A
736	Room #332	Wall / B
737	Room #332	Wall / C
738	Room #332	Wall / D
739	Room #326	Wall / A
740	Room #326	Wall / B
741	Room #326	Wall / C
742	Room #326	Wall / D
743	Room #326A	Wall / A
744	Room #326A	Wall / B
745	Room #326A	Wall / C
746	Room #326A	Wall / D
747	Room #318	Wall / A
748	Room #318	Wall / B
749	Room #318	Wall / C
750	Room #318	Wall / D
1014	Room # Hall 300N	Wall / A
1015	Room # Hall 300N	Wall / C
1016	Room # Hall 300N	Wall / C
1017	Room # Hall 300N	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
1018	Room # Hall 300N	Wall / A
1019	Room # Hall 300N	Wall / C
1020	Room # Hall 300E	Wall / D
1021	Room # Hall 300E	Wall / B
1022	Room # Hall 300E	Wall / B
1023	Room # Hall 300E	Wall / D
1024	Room # Hall 300S	Wall / A
1025	Room # Hall 300S	Wall / A
1026	Room # Hall 300S	Wall / A
1027	Room # Hall 300S	Wall / C
1028	Room # Hall 300S	Wall / C
1029	Room # Hall 300S	Wall / A
1030	Room # Hall 300W	Wall / B
1031	Room # Hall 300W	Wall / D
1032	Room # Hall 300W	Wall / D
1033	Room # Hall 300W	Wall / B
FOURTH FLOOR		
766	Room #451	Wall / D
767	Room #454	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
768	Room #454	Wall / A
769	Room #454	Wall / C
770	Room #454	Wall / D
771	Room #454A	Wall / A
772	Room #454A	Wall / B
773	Room #454A	Wall / C
774	Room #454A	Wall / D
775	Room #443A	Wall / A
776	Room #443A	Wall / B
777	Room #443A	Wall / C
778	Room #443A	Wall / D
779	Room #443	Wall / A
780	Room #443	Wall / B
781	Room #443	Wall / C
782	Room #443	Wall / D
783	Room #441	Wall / A
784	Room #441	Wall / B
785	Room #441	Wall / C
786	Room #441	Wall / D
787	Room #439	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
788	Room #439	Wall / B
789	Room #439	Wall / C
790	Room #439	Wall / D
791	Room #437	Wall / A
792	Room #437	Wall / B
793	Room #437	Wall / C
794	Room #437	Wall / D
795	Room #435A	Wall / A
796	Room #435A	Wall / B
797	Room #435A	Wall / C
798	Room #435A	Wall / C
799	Room #435A	Wall / D
800	Room #435	Wall / A
801	Room #435	Wall / B
802	Room #435	Wall / C
803	Room #435	Wall / D
804	Room #433	Wall / A
805	Room #433	Wall / B
806	Room #433	Wall / C
807	Room #433	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
808	Room #433A	Wall / A
809	Room #433A	Wall / B
810	Room #433A	Wall / C
811	Room #433A	Wall / D
812	Room #429	Wall / A
813	Room #429	Wall / B
814	Room #429	Wall / C
815	Room #429	Wall / D
816	Room #429A	Wall / A
817	Room #429A	Wall / B
818	Room #429A	Wall / C
819	Room #429A	Wall / D
820	Room #427	Wall / A
821	Room #427	Wall / B
822	Room #427	Wall / C
823	Room #427	Wall / D
824	Room #427A	Wall / A
825	Room #427A	Wall / B
826	Room #427A	Wall / C
827	Room #427A	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
828	Room #425	Wall / A
829	Room #425	Wall / B
830	Room #425	Wall / C
831	Room #425	Wall / D
832	Room #423	Wall / A
833	Room #423	Wall / B
834	Room #423	Wall / C
835	Room #423	Wall / D
836	Room #419	Wall / A
837	Room #419	Wall / B
838	Room #419	Wall / C
839	Room #419	Wall / D
840	Room #417	Wall / A
841	Room #417	Wall / B
842	Room #417	Wall / C
843	Room #417	Wall / D
844	Room #407	Wall / A
845	Room #407	Wall / B
846	Room #407	Wall / C
847	Room #407	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
848	Room #417A	Wall / A
849	Room #417A	Wall / B
850	Room #417A	Wall / C
851	Room #417A	Wall / D
852	Room #405A	Wall / A
853	Room #405A	Wall / B
854	Room #405A	Wall / C
855	Room #405A	Wall / D
856	Room #405	Wall / A
857	Room #405	Wall / B
858	Room #405	Wall / C
859	Room #405	Wall / D
860	Room #409	Wall / A
861	Room #409	Wall / B
862	Room #409	Wall / C
863	Room #409	Wall / D
864	Room #409	Wall / D
865	Room #409	Wall / B
866	Room #413	Wall / A
867	Room #413	Wall / B

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
868	Room #413	Wall / C
869	Room #413	Wall / D
870	Room #413	Wall / D
871	Room #413	Wall / B
872	Room #407	Wall / A
873	Room #407	Wall / B
874	Room #407	Wall / C
875	Room #407	Wall / D
876	Room #415	Wall / A
877	Room #415	Wall / B
878	Room #415	Wall / C
879	Room #415	Wall / D
880	Room #408	Wall / A
881	Room #408	Wall / B
882	Room #408	Wall / C
883	Room #408	Wall / D
884	Room #414	Wall / A
885	Room #414	Wall / B
886	Room #414	Wall / C
887	Room #414	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
888	Room #416	Wall / A
889	Room #416	Wall / B
890	Room #416	Wall / C
891	Room #416	Wall / D
892	Room #418	Wall / A
893	Room #418	Wall / B
894	Room #418	Wall / C
895	Room #418	Wall / D
896	Room #424	Wall / A
897	Room #424	Wall / B
898	Room #424	Wall / C
899	Room #424	Wall / D
900	Room #426	Wall / A
901	Room #426	Wall / B
902	Room #426	Wall / C
903	Room #426	Wall / D
904	Room #432	Wall / A
905	Room #432	Wall / B
906	Room #432	Wall / C
907	Room #432	Wall / D

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
908	Room #438	Wall / A
909	Room #438	Wall / B
910	Room #438	Wall / D
911	Room #444	Wall / A
912	Room #444	Wall / B
913	Room #444	Wall / C
914	Room #444	Wall / D
915	Room #446	Wall / A
916	Room #446	Wall / B
917	Room #446	Wall / C
918	Room #446	Wall / D
919	Room #448	Wall / A
920	Room #448	Wall / B
921	Room #448	Wall / C
922	Room #448	Wall / D
923	Room #456	Wall / A
924	Room #456	Wall / B
925	Room #456	Door jamb / C
926	Room #456	Wall / D
927	Room #445	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
928	Room #445	Wall / B
929	Room #445	Wall / C
930	Room #445	Wall / D
931	Room #447	Wall / A
932	Room #447	Wall / B
933	Room #447	Wall / C
934	Room #447	Wall / D
935	Room #449	Wall / A
936	Room #449	Wall / B
937	Room #449	Wall / C
938	Room #449	Wall / D
939	Room #457	Wall / A
940	Room #457	Wall / B
941	Room #457	Wall / C
942	Room #457	Wall / D
943	Room #461A	Wall / A
944	Room #461A	Wall / B
945	Room #461A	Wall / C
946	Room #461A	Wall / D
947	Room #461	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
948	Room #461	Wall / B
949	Room #461	Wall / C
950	Room #461	Wall / D
951	Room #463	Wall / A
952	Room #463	Wall / B
953	Room #463	Wall / C
954	Room #463	Wall / D
955	Room #467A	Wall / A
956	Room #467A	Wall / B
957	Room #467A	Wall / C
958	Room #467A	Wall / D
959	Room #467B	Wall / A
960	Room #467B	Wall / B
961	Room #467B	Wall / C
962	Room #467B	Wall / D
963	Room #467C	Wall / A
964	Room #467C	Wall / B
965	Room #467C	Wall / C
966	Room #467C	Wall / D
967	Room #467	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
968	Room #467	Wall / B
969	Room #467	Wall / C
970	Room #467	Wall / D
971	Room #469	Wall / A
972	Room #469	Wall / B
973	Room #469	Wall / C
974	Room #469	Wall / D
1034	Room # Hall 400N	Wall / A
1035	Room # Hall 400N	Wall / C
1036	Room # Hall 400N	Wall / C
1037	Room # Hall 400N	Wall / A
1038	Room # Hall 400E	Wall / B
1039	Room # Hall 400E	Wall / D
1040	Room # Hall 400E	Wall / D
1041	Room # Hall 400E	Wall / B
1042	Room # Hall 400S	Wall / A
1043	Room # Hall 400S	Wall / C
1044	Room # Hall 400S	Wall / C
1045	Room # Hall 400S	Wall / A
1046	Room # Hall 400S	Wall / A

Table 3
Coated Materials Identified For Sampling

SAMPLE POINT	AREA	COMPONENT/SIDE
1047	Room # Hall 400S	Wall / C
1048	Room # Hall 400W	Wall / B
1049	Room # Hall 400W	Wall / D
1050	Room # Hall 400W	Wall / D
1051	Room # Hall 400W	Wall / B

SECTION 8.0
XRF ANALYSIS

X-ray fluorescence is a simple concept to understand if you think about tuning a radio. When tuning a radio we adjust the frequency to a specific numerical value to receive the signal generated by a dedicated radio station transmission. The principal is the same for x-ray fluorescence; we adjust the instrument to receive the specific x-ray frequency signal generated by a lead atom. Gamma rays emitted by Cadmium source strike the electrons of individual atom contained within the material being assayed. The force of the gamma ray strike causes an electron to be ejected from it normal molecular orbit, creating an excited atom. These excited atoms are unstable and as an electron falls from an outer ring to replace the electron that was ejected energy is given of in the form of x-rays. The frequency of the x-ray is unique to each chemical element. So by tuning the XRF Analyzer to the frequency for lead we can determined the amount of energy released by x-ray fluorescence. Therefore, we can determine the number of lead atoms contained within any given building material or from painted surfaces.

Table 4 contains the XRF results for the identified materials suspected to be coated with lead-based paint.

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
FIRST FLOOR			
6	Room #131	Wall / A	0.14 mg/cm^2
7	Room #131	Door jamb / B	0.05 mg/cm^2
8	Room #131	Door jamb / A	0.02 mg/cm^2
9	Room #131	Door / A	0.0 mg/cm^2
10	Room #131	Wall / B	0.4 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
11	Room #131	Wall / C	0.19 mg/cm^2
12	Room #131	Wall / D	0.23 mg/cm^2
13	Room #132	Wall / A	0.27 mg/cm^2
14	Room #132	Wall / A	0.14 mg/cm^2
15	Room #132	Wall / D	0.5 mg/cm^2
16	Room #132	Wall / C	0.24 mg/cm^2
17	Room #132	Wall / B	0.13 mg/cm^2
18	Room #132	Radiator / B	0.04 mg/cm^2
19	Room #132	Door jamb / C	0.05 mg/cm^2
20	Room #132	Door jamb / C	0.03 mg/cm^2
21	Room #132	Door / C	0.01 mg/cm^2
22	Room #134	Door / C	0.01 mg/cm^2
23	Room #134	Door jamb / C	0.12 mg/cm^2
24	Room #134	Door jamb / C	0.07 mg/cm^2
25	Room #134	Wall / C	0.19 mg/cm^2
26	Room #134	Wall / A	0.14 mg/cm^2
27	Room #134	Wall / A	0.14 mg/cm^2
28	Room #134	Wall / A	0.6 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
29	Room #134	Wall / A	0.11 mg/cm^2
30	Room #134	Wall / B	0.13 mg/cm^2
31	Room #134	Wall / C	0.19 mg/cm^2
32	Room #133	Wall / A	0.15 mg/cm^2
33	Room #133	Wall / B	0.4 mg/cm^2
34	Room #133	Wall / C	0.13 mg/cm^2
35	Room #133	Wall / D	0.22 mg/cm2
36	Room #133	Door jamb / A	0.09 mg/cm^2
37	Room #133	Door jamb / A	0.03 mg/cm^2
38	Room #133	Door jamb / A	0.01 mg/cm^2
39	Room #135	Door jamb / A	0.07 mg/cm^2
40	Room #135	Door jamb / A	0.13 mg/cm^2
41	Room #135	Door / A	0.01 mg/cm^2
42	Room #135	Door / A	0.0 mg/cm^2
43	Room #135	Wall / A	0.17 mg/cm^2
44	Room #135	Wall / B	0.5 mg/cm^2
45	Room #135	Wall / C	0.1 mg/cm^2
46	Room #135	Wall / D	0.18 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
47	Room #135	Wall / C	0.13 mg/cm^2
48	Room #135	Wall / D	0.8 mg/cm^2
49	Room #135	Wall / A	0.17 mg/cm^2
50	Room #135	Door jamb / C	0.05 mg/cm^2
51	Room #135	Door jamb / C	0.06 mg/cm^2
52	Room #135	Door / C	0.03 mg/cm^2
53	Room #137	Door / A	0.01 mg/cm^2
54	Room #137	Door jamb / A	0.05 mg/cm^2
55	Room #137	Door jamb / A	0.1 mg/cm^2
56	Room #137	Door jamb / A	0.08 mg/cm^2
57	Room #137	Wall / A	0.2 mg/cm^2
58	Room #137	Wall / B	0.4 mg/cm^2
59	Room #137	Wall / C	0.16 mg/cm^2
60	Room #137	Wall / D	0.2 mg/cm^2
68	Room #139	Door / A	0.0 mg/cm^2
69	Room #139	Door jamb / A	0.06 mg/cm^2
70	Room #139	Door jamb / A	0.05 mg/cm^2
71	Room #139	Wall / A	0.3 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
72	Room #139	Wall / B	0.4 mg/cm^2
73	Room #139	Wall / C	0.23 mg/cm^2
74	Room #139	Wall / D	0.13 mg/cm^2
75	Room #141	Wall / A	0.14 mg/cm^2
76	Room #141	Wall / B	0.4 mg/cm^2
77	Room #141	Wall / C	0.2 mg/cm^2
78	Room #141	Wall / D	0.18 mg/cm^2
79	Room #141	Door jamb / A	0.09 mg/cm^2
80	Room #141	Door jamb / A	0.02 mg/cm^2
81	Room #143	Wall / A	0.12 mg/cm^2
82	Room #143	Wall / A	0.6 mg/cm^2
83	Room #143	Wall / A	0.15 mg/cm^2
84	Room #143	Wall / A	0.07 mg/cm^2
85	Room #143	Door jamb / A	0.06 mg/cm^2
86	Room #143	Door jamb / A	0.07 mg/cm^2
87	Room #145	Wall / A	0.25 mg/cm^2
88	Room #145	Wall / A	0.05 mg/cm^2
89	Room #145	Wall / A	0.06 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
90	Room #145	Wall / D	0.5 mg/cm^2
91	Room #147	Wall / A	0.6 mg/cm^2
92	Room #147	Wall / A	0.13 mg/cm^2
93	Room #147	Wall / B	0.23 mg/cm^2
94	Room #147	Wall / B	0.3 mg/cm^2
95	Room #147	Wall / B	0.07 mg/cm^2
96	Room #147	Wall / C	0.07 mg/cm^2
97	Room #147	Wall / D	0.12 mg/cm^2
98	Room #147	Wall / D	0.16 mg/cm^2
99	Room #149	Wall / A	0.11 mg/cm^2
100	Room #149	Wall / A	0.03 mg/cm^2
101	Room #149	Wall / B	0.04 mg/cm^2
102	Room #149	Wall / B	0.4 mg/cm^2
103	Room #149	Wall / C	0.07 mg/cm^2
104	Room #149	Wall / D	0.07 mg/cm^2
105	Room #149	Wall / D	0.09 mg/cm^2
106	Room #151	Wall / A	0.16 mg/cm^2
107	Room #151	Wall / B	0.4 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
108	Room #151	Wall / B	0.4 mg/cm^2
109	Room #151	Wall / C	0.14 mg/cm^2
110	Room #151	Wall / D	0.14 mg/cm^2
111	Room #151	Wall / D	0.06 mg/cm^2
112	Room #172	Wall / A	0.16 mg/cm^2
113	Room #172	Wall / A	0.2 mg/cm^2
114	Room #172	Wall / B	0.7 mg/cm^2
115	Room #172	Wall / B	0.7 mg/cm^2
116	Room #172	Wall / B	0.6 mg/cm^2
117	Room #172	Wall / B	0.7 mg/cm^2
118	Room #172	Wall / C	0.16 mg/cm^2
119	Room #172	Wall / C	0.15 mg/cm^2
120	Room #172	Wall / D	0.15 mg/cm^2
121	Room #172	Wall / D	0.12 mg/cm^2
122	Room #172	Wall / D	0.16 mg/cm^2
123	Room #172	Wall / D	0.15 mg/cm^2
124	Room #112	Wall / A	0.13 mg/cm^2
125	Room #112	Wall / A	0.5 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
126	Room #112	Wall / A	0.08 mg/cm^2
127	Room #112	Wall / A	0.0 mg/cm^2
128	Room #112	Wall / C	0.16 mg/cm^2
129	Room #112	Wall / D	0.18 mg/cm^2
130	Room #112	Wall / D	0.01 mg/cm^2
131	Room #152	Wall / A	0.13 mg/cm^2
132	Room #152	Wall / A	0.7 mg/cm^2
133	Room #152	Wall / A	0.19 mg/cm^2
134	Room #152	Wall / A	0.19 mg/cm^2
135	Room #152	Wall / A	0.15 mg/cm^2
136	Room #152	Wall / A	0.13 mg/cm^2
137	Room #152	Wall / D	0.7 mg/cm^2
138	Room #152	Wall / D	0.5 mg/cm^2
146	Room #100E	Wall / B	0.4 mg/cm^2
147	Room #100E	Wall / A	0.15 mg/cm^2
148	Room #100E	Wall / A	0.12 mg/cm^2
149	Room #100E	Wall / A	0.06 mg/cm^2
150	Room #100E	Wall / C	0.4 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
151	Room #100E	Wall / C	0.04 mg/cm^2
152	Room #100E	Wall / C	0.08 mg/cm^2
153	Room #117	Wall / A	0.19 mg/cm^2
154	Room #117	Wall / B	0.04 mg/cm^2
155	Room #117	Wall / C	0.5 mg/cm^2
156	Room #117	Wall / D	0.15 mg/cm^2
157	Room #119	Wall / D	0.1 mg/cm^2
158	Room #119	Wall / A	0.08 mg/cm^2
159	Room #119	Wall / B	0.4 mg/cm^2
160	Room #119	Wall / C	0.16 mg/cm^2
161	Room #119	Door / B	0.03 mg/cm^2
162	Room #119	Door jamb / B	0.04 mg/cm^2
163	Room #119	Door jamb / B	0.04 mg/cm^2
164	Room #121	Wall / A	0.23 mg/cm^2
165	Room #121	Wall / B	0.4 mg/cm^2
166	Room #121	Wall / C	0.14 mg/cm^2
167	Room #121	Wall / D	0.2 mg/cm^2
168	Room #123	Wall / A	0.23 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
169	Room #123	Wall / A	0.3 mg/cm^2
170	Room #123	Wall / C	0.2 mg/cm^2
171	Room #123	Wall / D	0.15 mg/cm^2
172	Room #125	Wall / A	0.15 mg/cm^2
173	Room #125	Wall / B	0.4 mg/cm^2
174	Room #125	Wall / C	0.15 mg/cm^2
175	Room #125	Wall / D	0.26 mg/cm^2
176	Room #126A	Wall / A	0.18 mg/cm^2
177	Room #126A	Wall / B	0.16 mg/cm^2
178	Room #126A	Wall / C	0.14 mg/cm^2
179	Room #126A	Wall / D	0.11 mg/cm^2
180	Room #126	Wall / A	0.12 mg/cm^2
181	Room #126	Wall / B	0.14 mg/cm^2
182	Room #126	Wall / C	0.6 mg/cm^2
183	Room #126	Wall / D	0.13 mg/cm^2
184	Room #122	Wall / A	0.6 mg/cm^2
185	Room #122	Wall / B	0.25 mg/cm^2
186	Room #122	Wall / C	0.19 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
187	Room #122	Wall / D	0.11 mg/cm^2
188	Room #126A	Wall / A	0.12 mg/cm^2
189	Room #126A	Wall / B	0.08 mg/cm^2
190	Room #126A	Wall / C	0.6 mg/cm^2
191	Room #126A	Wall / D	0.11 mg/cm^2
192	Room #116	Wall / A	0.1 mg/cm^2
193	Room #116	Wall / B	0.5 mg/cm^2
194	Room #116	Wall / C	0.09 mg/cm^2
195	Room #116	Wall / D	0.18 mg/cm^2
196	Room #146	Wall / A	0.17 mg/cm^2
197	Room #146	Wall / B	0.6 mg/cm^2
198	Room #146	Wall / C	0.1 mg/cm^2
199	Room #146	Wall / C	0.12 mg/cm^2
200	Room #146	Wall / A	0.08 mg/cm^2
201	Room #153	Wall / A	0.02 mg/cm^2
202	Room #153	Wall / B	0.03 mg/cm^2
203	Room #153	Wall / C	0.02 mg/cm^2
204	Room #153	Wall / D	0.03 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
205	Room #153	Door / C	0.0 mg/cm^2
206	Room #153	Door / C	0.0 mg/cm^2
207	Room #153	Door jamb / C	0.18 mg/cm^2
208	Room #153	Door jamb / C	0.07 mg/cm^2
209	Room #157	Wall / A	0.06 mg/cm^2
210	Room #157	Wall / A	0.07 mg/cm^2
211	Room #157	Wall / A	0.04 mg/cm^2
212	Room #157	Wall / A	0.07 mg/cm^2
213	Room #161	Wall / A	0.05 mg/cm^2
214	Room #161	Wall / B	0.11 mg/cm^2
215	Room #161	Wall / C	0.07 mg/cm^2
216	Room #161	Wall / D	0.1 mg/cm^2
217	Room #105	Wall / A	0.13 mg/cm^2
218	Room #105	Wall / B	0.12 mg/cm^2
219	Room #105	Wall / C	0.11 mg/cm^2
220	Room #105	Wall / D	0.11 mg/cm^2
221	Room #107	Wall / A	0.14 mg/cm^2
222	Room #107	Wall / B	0.7 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
223	Room #107	Wall / C	0.1 mg/cm^2
224	Room #107	Wall / D	0.07 mg/cm^2
225	Room #107	Wall / D	2.6 mg/cm^2
226	Room #107	Wall / D	3.5 mg/cm^2
227	Room #107	Wall / D	0.11 mg/cm^2
228	Room #107	Wall / D	0.01 mg/cm^2
229	Room #111	Wall / B	3.3 mg/cm^2
230	Room #111	Wall / B	2.9 mg/cm^2
231	Room #111	Wall / A	0.11 mg/cm^2
232	Room #111	Wall / A	0.11 mg/cm^2
233	Room #111	Wall / B	0.13 mg/cm^2
234	Room #111	Wall / C	0.7 mg/cm^2
235	Room #111	Wall / D	0.6 mg/cm^2
982	Room # Hall 100N	Wall / C	0.7 mg/cm^2
983	Room # Hall 100N	Wall / A	0.15 mg/cm^2
984	Room # Hall 100N	Wall / A	0.6 mg/cm^2
985	Room # Hall 100N	Wall / C	0.03 mg/cm^2
986	Room # Hall 100N	Wall / C	0.05 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
987	Room # Hall 100N	Wall / A	0.03 mg/cm^2
988	Room # Hall 100E	Wall / D	0.14 mg/cm^2
989	Room # Hall 100E	Wall / B	0.1 mg/cm^2
990	Room # Hall 100S	Wall / A	0.04 mg/cm^2
991	Room # Hall 100S	Wall / C	0.07 mg/cm^2
992	Room # Hall 100W	Wall / B	0.03 mg/cm^2
993	Room # Hall 100W	Wall / D	0.07 mg/cm^2
SECOND FLOOR			
243	Room #277	Wall / A	0.07 mg/cm^2
244	Room #277	Wall / B	0.09 mg/cm^2
245	Room #277	Wall / C	0.09 mg/cm^2
246	Room #277	Wall / D	0.4 mg/cm^2
247	Room #277	Door / D	0.0 mg/cm^2
248	Room #277	Door jamb / A	0.09 mg/cm^2
249	Room #277	Door jamb / A	0.04 mg/cm^2
250	Room #275	Wall / A	0.1 mg/cm^2
251	Room #275	Wall / B	0.21 mg/cm^2
252	Room #275	Wall / C	0.11 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
253	Room #275	Wall / D	0.4 mg/cm^2
254	Room #273	Wall / A	0.4 mg/cm^2
255	Room #273	Wall / B	0.06 mg/cm^2
256	Room #273	Wall / B	0.23 mg/cm^2
257	Room #273	Wall / C	0.07 mg/cm^2
258	Room #273	Wall / C	0.18 mg/cm^2
259	Room #273	Wall / D	0.05 mg/cm^2
260	Room #273	Wall / D	0.13 mg/cm^2
261	Room #273A	Wall / A	0.09 mg/cm^2
262	Room #273A	Wall / B	0.4 mg/cm^2
263	Room #273A	Wall / C	0.06 mg/cm^2
264	Room #273A	Wall / D	0.06 mg/cm^2
265	Room #273B	Wall / A	0 mg/cm^2
266	Room #273B	Wall / A	0.24 mg/cm^2
267	Room #273B	Wall / C	0.13 mg/cm^2
268	Room #273B	Wall / D	0.05 mg/cm^2
269	Room #273B	Wall / A	0.05 mg/cm^2
270	Room #273B	Wall / B	0.06 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
271	Room #273B	Wall / C	0.06 mg/cm^2
272	Room #273B	Wall / D	0.06 mg/cm^2
273	Room #279	Wall / A	0.13 mg/cm^2
274	Room #279	Wall / B	0.08 mg/cm^2
275	Room #279	Wall / C	0.1 mg/cm^2
276	Room #279	Wall / D	0.15 mg/cm^2
277	Room #281	Wall / A	0.13 mg/cm^2
278	Room #281	Wall / B	0.23 mg/cm^2
279	Room #281	Wall / C	0.14 mg/cm^2
280	Room #281	Wall / D	0.18 mg/cm^2
281	Room #283	Wall / A	0.2 mg/cm^2
282	Room #283	Wall / A	0.18 mg/cm^2
283	Room #283	Wall / C	0.2 mg/cm^2
283	Room #283	Wall / D	0.8 mg/cm^2
285	Room #285	Wall / A	0.1 mg/cm^2
286	Room #285	Wall / B	0.14 mg/cm^2
287	Room #285	Wall / C	0.29 mg/cm^2
288	Room #285	Wall / D	0.5 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
289	Room #287	Wall / A	0.12 mg/cm^2
290	Room #287	Wall / B	0.09 mg/cm^2
291	Room #287	Wall / C	0.15 mg/cm^2
292	Room #287	Wall / D	0.7 mg/cm^2
293	Room #289	Wall / A	0.5 mg/cm^2
294	Room #289	Wall / B	0.11 mg/cm^2
295	Room #289	Wall / C	0.14 mg/cm^2
296	Room #289	Wall / D	0.06 mg/cm^2
297	Room #291	Wall / A	0.5 mg/cm^2
298	Room #291	Wall / B	0.14 mg/cm^2
299	Room #291	Wall / C	0.15 mg/cm^2
300	Room #291	Wall / D	0.17 mg/cm^2
301	Room #293	Wall / A	0.6 mg/cm^2
302	Room #293	Wall / B	0.16 mg/cm^2
303	Room #293	Wall / C	0.11 mg/cm^2
304	Room #293	Wall / D	0.07 mg/cm^2
305	Room #295	Wall / A	0.22 mg/cm^2
306	Room #295	Wall / B	0.06 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
307	Room #295	Wall / C	0.18 mg/cm^2
308	Room #295	Wall / D	0.7 mg/cm^2
309	Room #297	Wall / A	0.12 mg/cm^2
310	Room #297	Wall / B	0.09 mg/cm^2
311	Room #297	Wall / C	0.5 mg/cm^2
312	Room #297	Wall / D	0.21 mg/cm^2
313	Room #299A	Wall / A	0.23 mg/cm^2
314	Room #299A	Wall / B	0.4 mg/cm^2
315	Room #299A	Wall / C	0.11 mg/cm^2
316	Room #299A	Wall / D	0.23 mg/cm^2
317	Room #299	Wall / A	0.12 mg/cm^2
318	Room #299	Wall / B	0.14 mg/cm^2
319	Room #299	Wall / B1	0.12 mg/cm^2
320	Room #299	Wall / D	0.15 mg/cm^2
321	Room #201	Wall / A	0.15 mg/cm^2
322	Room #201	Wall / B	0.4 mg/cm^2
323	Room #201	Wall / C	0.11 mg/cm^2
324	Room #201	Wall / D	0.16 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
325	Room #203	Wall / A	0.14 mg/cm^2
326	Room #203	Wall / B	0.4 mg/cm^2
327	Room #203	Wall / C	0.11 mg/cm^2
328	Room #203	Wall / D	0.26 mg/cm^2
329	Room #205	Wall / A	0.1 mg/cm^2
330	Room #205	Wall / B	0.3 mg/cm^2
331	Room #205	Wall / C	0.5 mg/cm^2
332	Room #205	Wall / D	0.06 mg/cm^2
333	Room #207	Wall / A	0.07 mg/cm^2
334	Room #207	Wall / B	0.5 mg/cm^2
335	Room #207	Wall / C	0.11 mg/cm^2
336	Room #207	Wall / D	0.16 mg/cm^2
337	Room #209	Wall / A	0.5 mg/cm^2
338	Room #209	Wall / B	0.12 mg/cm^2
339	Room #209	Wall / C	0.4 mg/cm^2
340	Room #209	Wall / D	0.15 mg/cm^2
341	Room #211	Wall / A	0.0 mg/cm^2
342	Room #211	Wall / B	0.0 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
343	Room #211	Wall / C	0.02 mg/cm^2
344	Room #211	Wall / D	0.0 mg/cm^2
345	Room #211A	Wall / A	0.1 mg/cm^2
346	Room #211A	Wall / B	0.04 mg/cm^2
347	Room #211A	Wall / C	0.5 mg/cm^2
348	Room #211A	Wall / D	0.14 mg/cm^2
349	Room #221C	Wall / A	0.09 mg/cm^2
350	Room #221C	Wall / B	0.25 mg/cm^2
351	Room #221C	Wall / C	0.17 mg/cm^2
352	Room #221C	Wall / D	0.5 mg/cm^2
353	Room #221B	Wall / A	0.19 mg/cm^2
354	Room #221B	Wall / B	0.14 mg/cm^2
355	Room #221B	Wall / C	0.19 mg/cm^2
356	Room #221B	Wall / D	0.18 mg/cm^2
357	Room #221A	Wall / A	0.15 mg/cm^2
358	Room #221A	Wall / B	0.08 mg/cm^2
359	Room #221A	Wall / D	0.26 mg/cm^2
360	Room #221	Wall / A	0.16 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
361	Room #221	Wall / B	0.18 mg/cm^2
362	Room #221	Wall / D	0.11 mg/cm^2
363	Room #219	Wall / A	0.25 mg/cm^2
364	Room #219	Wall / B	0.1 mg/cm^2
365	Room #219	Wall / C	0.24 mg/cm^2
366	Room #219	Wall / D	0.27 mg/cm^2
367	Room #223	Wall / A	0.5 mg/cm^2
368	Room #223	Wall / B	0.18 mg/cm^2
369	Room #223	Wall / C	0.14 mg/cm^2
370	Room #223	Wall / D	0.17 mg/cm^2
371	Room #231	Wall / A	0.13 mg/cm^2
372	Room #231	Wall / B	0.14 mg/cm^2
373	Room #231	Wall / C	0.12 mg/cm^2
374	Room #374	Wall / D	0.4 mg/cm^2
375	Room #233	Wall / A	0.12 mg/cm^2
376	Room #233	Wall / B	0.12 mg/cm^2
377	Room #233	Wall / C	0.16 mg/cm^2
378	Room #233	Wall / D	0.4 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
379	Room #235	Wall / A	0.13 mg/cm^2
380	Room #235	Wall / B	0.23 mg/cm^2
381	Room #235	Wall / C	0.06 mg/cm^2
382	Room #235	Wall / D	0.4 mg/cm^2
383	Room #237	Wall / A	0.08 mg/cm^2
384	Room #237	Wall / B	0.18 mg/cm^2
385	Room #237	Wall / C	0.08 mg/cm^2
386	Room #237	Wall / D	0.5 mg/cm^2
387	Room #239	Wall / A	0.11 mg/cm^2
388	Room #239	Wall / B	0.09 mg/cm^2
389	Room #239	Wall / C	0.07 mg/cm^2
390	Room #239	Wall / D	0.4 mg/cm^2
391	Room #241	Wall / A	0.06 mg/cm^2
392	Room #241	Wall / B	0.15 mg/cm^2
393	Room #241	Wall / B	0.0 mg/cm^2
394	Room #241	Wall / D	0.08 mg/cm^2
395	Room #243	Wall / A	0.1 mg/cm^2
396	Room #243	Wall / B	0.09 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
397	Room #243	Wall / C	0.5 mg/cm^2
398	Room #243	Wall / D	0.08 mg/cm^2
399	Room #245	Wall / A	0.06 mg/cm^2
400	Room #245	Wall / A	0.1 mg/cm^2
401	Room #245	Wall / C	0.6 mg/cm^2
402	Room #245	Wall / D	0.08 mg/cm^2
403	Room #247	Wall / A	0.06 mg/cm^2
404	Room #247	Wall / B	0.14 mg/cm^2
405	Room #247	Wall / C	0.4 mg/cm^2
406	Room #247	Wall / D	0.09 mg/cm^2
407	Room #249	Wall / A	0.16 mg/cm^2
408	Room #249	Wall / B	0.09 mg/cm^2
409	Room #249	Wall / C	0.5 mg/cm^2
410	Room #249	Wall / D	0.08 mg/cm^2
411	Room #251	Wall / A	0.5 mg/cm^2
412	Room #251	Wall / B	0.12 mg/cm^2
413	Room #251	Wall / C	0.17 mg/cm^2
414	Room #251	Wall / D	0.12 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
415	Room #253	Wall / A	0.07 mg/cm^2
416	Room #253	Wall / B	0.6 mg/cm^2
417	Room #253	Wall / C	0.1 mg/cm^2
418	Room #253	Wall / D	0.11 mg/cm^2
419	Room #255	Wall / A	0.13 mg/cm^2
420	Room #255	Wall / B	0.6 mg/cm^2
421	Room #255	Wall / C	0.1 mg/cm^2
422	Room #255	Wall / D	0.4 mg/cm^2
423	Room #257	Wall / A	0.13 mg/cm^2
424	Room #257	Wall / B	0.5 mg/cm^2
425	Room #257	Wall / C	0.09 mg/cm^2
426	Room #257	Wall / D	0.14 mg/cm^2
427	Room #259	Wall / A	0.14 mg/cm^2
428	Room #259	Wall / B	0.5 mg/cm^2
429	Room #259	Wall / C	0.09 mg/cm^2
430	Room #259	Wall / D	0.24 mg/cm^2
431	Room #261	Wall / A	0.11 mg/cm^2
432	Room #261	Wall / B	0.4 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
433	Room #261	Wall / C	0.14 mg/cm^2
434	Room #261	Wall / D	0.13 mg/cm^2
435	Room #263	Wall / A	0.28 mg/cm^2
436	Room #263	Wall / B	0.6 mg/cm^2
437	Room #263	Wall / C	0.22 mg/cm^2
438	Room #263	Wall / D	0.18 mg/cm^2
446	Room #204	Wall / A	0.09 mg/cm^2
447	Room #204	Wall / A	0.15 mg/cm^2
448	Room #204	Wall / B	0.0 mg/cm^2
449	Room #204	Wall / C	0.0 mg/cm^2
450	Room #204	Wall / C	0.12 mg/cm^2
451	Room #204	Wall / D	0.12 mg/cm^2
452	Room #212	Wall / A	0.0 mg/cm^2
453	Room #212	Wall / B	0.0 mg/cm^2
454	Room #212	Wall / C	0.01 mg/cm^2
455	Room #212	Wall / D	0.0 mg/cm^2
456	Room #278	Wall / A	0.0 mg/cm^2
457	Room #278	Wall / B	0.18 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
458	Room #278	Wall / C	0.19 mg/cm^2
459	Room #278	Wall / D	0.16 mg/cm^2
460	Room #214	Wall / A	0.1 mg/cm^2
461	Room #214	Wall / B	0.09 mg/cm^2
462	Room #214	Wall / C	0.12 mg/cm^2
463	Room #214	Wall / D	0.06 mg/cm^2
464	Room #272	Wall / A	0.5 mg/cm^2
465	Room #272	Wall / B	0.13 mg/cm^2
466	Room #272	Wall / C	0.15 mg/cm^2
467	Room #272	Wall / D	0.1 mg/cm^2
468	Room #216	Wall / A	0.05 mg/cm^2
469	Room #216	Wall / B	0.12 mg/cm^2
470	Room #216	Wall / C	0.4 mg/cm^2
471	Room #216	Wall / D	0.11 mg/cm^2
472	Room #224	Wall / A	0.0 mg/cm^2
473	Room #224	Wall / A	0.0 mg/cm^2
474	Room #224	Wall / A	0.01 mg/cm^2
475	Room #224	Wall / A	0.0 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
476	Room #226	Wall / A	0.12 mg/cm^2
477	Room #226	Wall / B	0.11 mg/cm^2
478	Room #226	Wall / C	0.5 mg/cm^2
479	Room #226	Wall / D	0.1 mg/cm^2
480	Room #264	Wall / A	0.5 mg/cm^2
481	Room #264	Wall / B	0.11 mg/cm^2
482	Room #264	Wall / C	0.11 mg/cm^2
483	Room #264	Wall / D	0.08 mg/cm^2
484	Room #228	Wall / A	0.11 mg/cm^2
485	Room #228	Wall / B	0.09 mg/cm^2
486	Room #228	Wall / C	0.6 mg/cm^2
487	Room #228	Wall / D	0.28 mg/cm^2
488	Room #234	Wall / A	0.4 mg/cm^2
489	Room #234	Wall / B	0.16 mg/cm^2
490	Room #234	Wall / C	0.21 mg/cm^2
491	Room #234	Wall / D	0.08 mg/cm^2
492	Room #258	Wall / A	0.0 mg/cm^2
493	Room #258	Wall / B	0.0 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
494	Room #258	Wall / C	0.0 mg/cm^2
495	Room #258	Wall / D	0.0 mg/cm^2
496	Room #262	Wall / A	0.5 mg/cm^2
497	Room #262	Wall / B	0.09 mg/cm^2
498	Room #262	Wall / C	0.2 mg/cm^2
499	Room #262	Wall / D	0.1 mg/cm^2
500	Room #267	Wall / A	0.0 mg/cm^2
501	Room #267	Wall / B	0.0 mg/cm^2
502	Room #267	Wall / C	0.0 mg/cm^2
503	Room #267	Wall / D	0.0 mg/cm^2
504	Room #266	Wall / A	0.09 mg/cm^2
505	Room #266	Wall / B	0.09 mg/cm^2
506	Room #266	Wall / C	0.15 mg/cm^2
507	Room #266	Wall / D	0.09 mg/cm^2
508	Room #269	Wall / A	0.09 mg/cm^2
509	Room #269	Wall / A	0.4 mg/cm^2
510	Room #269	Wall / A	0.06 mg/cm^2
511	Room #269	Wall / A	0.1 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
512	Room #222	Wall / A	0.18 mg/cm^2
513	Room #222	Wall / B	0.2 mg/cm^2
514	Room #222	Wall / C	0.7 mg/cm^2
515	Room #222	Wall / D	0.24 mg/cm^2
994	Room # Hall 200N	Wall / C	0.08 mg/cm^2
995	Room # Hall 200N	Wall / A	0.06 mg/cm^2
996	Room # Hall 200N	Wall / A	0.5 mg/cm^2
997	Room # Hall 200N	Wall / C	0.04 mg/cm^2
998	Room # Hall 200N	Wall / C	0.02 mg/cm^2
999	Room # Hall 200N	Wall / A	0.05 mg/cm^2
1000	Room # Hall 200E	Wall / D	0.02 mg/cm^2
1001	Room # Hall 200E	Wall / B	0.1 mg/cm^2
1002	Room # Hall 200E	Wall / B	0.07 mg/cm^2
1003	Room # Hall 200E	Wall / D	0.5 mg/cm^2
1004	Room # Hall 200S	Wall / A	0.03 mg/cm^2
1005	Room # Hall 200S	Wall / C	0.11 mg/cm^2
1006	Room # Hall 200S	Wall / C	0.04 mg/cm^2
1007	Room # Hall 200S	Wall / A	0.09 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
1008	Room # Hall 200S	Wall / A	0.13 mg/cm^2
1009	Room # Hall 200S	Wall / C	0.1 mg/cm^2
1010	Room # Hall 200W	Wall / B	0.17 mg/cm^2
1011	Room # Hall 200W	Wall / D	0.07 mg/cm^2
1012	Room # Hall 200W	Wall / D	0.07 mg/cm^2
1013	Room # Hall 200W	Wall / B	0.3 mg/cm^2
THIRD FLOOR			
516	Room #369	Wall / A	0.1 mg/cm^2
517	Room #369	Wall / B	0.06 mg/cm^2
518	Room #369	Wall / C	0.08 mg/cm^2
519	Room #369	Wall / D	0.13 mg/cm^2
520	Room #373	Wall / A	0.19 mg/cm^2
521	Room #373	Wall / B	0.25 mg/cm^2
522	Room #373	Wall / C	0.17 mg/cm^2
523	Room #373	Wall / D	0.27 mg/cm^2
524	Room #375	Wall / A	0.26 mg/cm^2
525	Room #375	Wall / B	0.09 mg/cm^2
526	Room #375	Wall / C	0.12 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
527	Room #375	Wall / C	0.15 mg/cm^2
528	Room #375	Wall / D	0.7 mg/cm^2
529	Room #377	Wall / A	0.16 mg/cm^2
530	Room #377	Wall / B	0.12 mg/cm^2
531	Room #377	Wall / C	0.22 mg/cm^2
532	Room #377	Wall / D	0.5 mg/cm^2
533	Room #379	Wall / A	0.09 mg/cm^2
534	Room #379	Wall / B	0.13 mg/cm^2
535	Room #379	Wall / C	0.11 mg/cm^2
536	Room #379	Wall / D	0.5 mg/cm^2
537	Room #381	Wall / A	0.6 mg/cm^2
538	Room #381	Wall / B	0.13 mg/cm^2
539	Room #381	Wall / C	0.1 mg/cm^2
540	Room #381	Wall / D	0.24 mg/cm^2
541	Room #383	Wall / A	0.5 mg/cm^2
542	Room #383	Wall / B	0.15 mg/cm^2
543	Room #383	Wall / C	0.14 mg/cm^2
544	Room #383	Wall / D	0.22 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
545	Room #385	Wall / A	0.5 mg/cm^2
546	Room #385	Wall / B	0.1 mg/cm^2
547	Room #385	Wall / C	0.11 mg/cm^2
548	Room #385	Wall / D	0.07 mg/cm^2
549	Room #387	Wall / A	0.26 mg/cm^2
550	Room #387	Wall / B	0.06 mg/cm^2
551	Room #387	Wall / C	0.24 mg/cm^2
552	Room #387	Wall / D	0.5 mg/cm^2
553	Room #389	Wall / A	0.17 mg/cm^2
554	Room #389	Wall / B	0.13 mg/cm^2
555	Room #389	Wall / C	0.21 mg/cm^2
556	Room #389	Wall / D	0.5 mg/cm^2
557	Room #393	Wall / A	0.18 mg/cm^2
558	Room #393	Wall / B	0.28 mg/cm^2
559	Room #393	Wall / C	0.7 mg/cm^2
560	Room #393	Wall / D	0.18 mg/cm^2
561	Room #393A	Wall / A	0.2 mg/cm^2
562	Room #393A	Wall / B	0.6 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
563	Room #393A	Wall / C	0.24 mg/cm^2
564	Room #393A	Wall / D	0.17 mg/cm^2
565	Room #303	Wall / A	0.3 mg/cm^2
566	Room #303	Wall / B	0.7 mg/cm^2
567	Room #303	Wall / C	0.13 mg/cm^2
568	Room #303	Wall / D	0.13 mg/cm^2
576	Room #367	Wall / A	0.0 mg/cm^2
577	Room #367	Wall / B	0.0 mg/cm^2
578	Room #367	Wall / C	0.03 mg/cm^2
579	Room #367	Wall / D	0.0 mg/cm^2
580	Room #361	Wall / A	0.6 mg/cm^2
581	Room #361	Wall / B	0.22 mg/cm^2
582	Room #361	Wall / C	0.07 mg/cm^2
583	Room #361	Wall / D	0.09 mg/cm^2
584	Room #359	Wall / A	0.6 mg/cm^2
585	Room #359	Wall / B	0.06 mg/cm^2
586	Room #359	Wall / C	0.12 mg/cm^2
587	Room #359	Wall / D	0.09 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
588	Room #353	Wall / A	0.24 mg/cm^2
589	Room #353	Wall / B	0.5 mg/cm^2
590	Room #353	Wall / C	0.11 mg/cm^2
591	Room #353	Wall / D	0.25 mg/cm^2
592	Room #351	Wall / A	0.21 mg/cm^2
593	Room #351	Wall / B	0.5 mg/cm^2
594	Room #351	Wall / C	0.13 mg/cm^2
595	Room #351	Wall / D	0.24 mg/cm^2
596	Room #349	Wall / A	0.17 mg/cm^2
597	Room #349	Wall / B	0.6 mg/cm^2
598	Room #349	Wall / C	0.06 mg/cm^2
599	Room #349	Wall / D	0.17 mg/cm^2
600	Room #347	Wall / A	0.18 mg/cm^2
601	Room #347	Wall / B	0.4 mg/cm^2
602	Room #347	Wall / C	0.18 mg/cm^2
603	Room #347	Wall / D	0.15 mg/cm^2
604	Room #345	Wall / A	0.17 mg/cm^2
605	Room #345	Wall / B	0.4 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
606	Room #345	Wall / C	0.07 mg/cm^2
607	Room #345	Wall / D	0.13 mg/cm^2
608	Room #343	Wall / A	0.23 mg/cm^2
609	Room #343	Wall / B	0.4 mg/cm^2
610	Room #343	Wall / C	0.12 mg/cm^2
611	Room #343	Wall / D	0.17 mg/cm^2
612	Room #341	Wall / A	0.2 mg/cm^2
613	Room #341	Wall / B	0.5 mg/cm^2
614	Room #341	Wall / C	0.26 mg/cm^2
615	Room #341	Wall / D	0.13 mg/cm^2
616	Room #344	Wall / A	0.14 mg/cm^2
617	Room #344	Wall / B	0.4 mg/cm^2
618	Room #344	Wall / C	0.1 mg/cm^2
619	Room #344	Wall / D	0.11 mg/cm^2
620	Room #342	Wall / A	0.1 mg/cm^2
621	Room #342	Wall / B	0.4 mg/cm^2
622	Room #342	Wall / C	0.13 mg/cm^2
623	Room #342	Wall / D	0.14 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
624	Room #338A	Wall / A	0.0 mg/cm^2
625	Room #338A	Wall / B	0.0 mg/cm^2
626	Room #338A	Wall / C	0.0 mg/cm^2
627	Room #338A	Wall / D	0.0 mg/cm^2
628	Room #338	Wall / A	0.0 mg/cm^2
629	Room #338	Wall / B	0.01 mg/cm^2
630	Room #338	Wall / C	0.0 mg/cm^2
631	Room #338	Wall / D	0.0 mg/cm^2
632	Room #339	Wall / A	0.11 mg/cm^2
633	Room #339	Wall / B	0.6 mg/cm^2
634	Room #339	Wall / C	0.17 mg/cm^2
635	Room #339	Wall / D	0.1 mg/cm^2
636	Room #337	Wall / A	0.15 mg/cm^2
637	Room #337	Wall / B	0.5 mg/cm^2
638	Room #337	Wall / C	0.14 mg/cm^2
639	Room #337	Wall / D	0.27 mg/cm^2
640	Room #335	Wall / A	0.06 mg/cm^2
641	Room #335	Wall / B	0.5 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
642	Room #335	Wall / C	0.17 mg/cm^2
643	Room #335	Wall / D	0.18 mg/cm^2
644	Room #333	Wall / A	0.07 mg/cm^2
645	Room #333	Wall / B	0.5 mg/cm^2
646	Room #333	Wall / C	0.14 mg/cm^2
647	Room #333	Wall / D	0.17 mg/cm^2
648	Room #331A	Wall / A	0.09 mg/cm^2
649	Room #331A	Wall / B	0.1 mg/cm^2
650	Room #331A	Wall / C	0.5 mg/cm^2
651	Room #331A	Wall / D	0.15 mg/cm^2
652	Room #331	Wall / A	0.17 mg/cm^2
653	Room #331	Wall / B	0.14 mg/cm^2
654	Room #331	Wall / C	0.13 mg/cm^2
655	Room #331	Wall / D	0.5 mg/cm^2
656	Room #325	Wall / A	0.13 mg/cm^2
657	Room #325	Wall / B	0.06 mg/cm^2
658	Room #325	Wall / C	0.6 mg/cm^2
659	Room #325	Wall / D	0.13 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
660	Room #323	Wall / A	0.6 mg/cm^2
661	Room #323	Wall / B	0.12 mg/cm^2
662	Room #323	Wall / C	0.12 mg/cm^2
663	Room #323	Wall / D	0.11 mg/cm^2
664	Room #321	Wall / A	0.17 mg/cm^2
665	Room #321	Wall / B	0.09 mg/cm^2
666	Room #321	Wall / C	0.04 mg/cm^2
667	Room #321	Wall / D	0.06 mg/cm^2
668	Room #311	Wall / A	0 mg/cm^2
669	Room #311	Wall / B	0.03 mg/cm^2
670	Room #311	Wall / C	0.0 mg/cm^2
671	Room #311	Wall / D	0.0 mg/cm^2
672	Room #309	Wall / A	0.13 mg/cm^2
673	Room #309	Wall / B	0.05 mg/cm^2
674	Room #309	Wall / C	0.4 mg/cm^2
675	Room #309	Wall / D	0.08 mg/cm^2
676	Room #307	Wall / A	0.11 mg/cm^2
677	Room #307	Wall / B	0.09 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
678	Room #307	Wall / C	0.19 mg/cm^2
679	Room #307	Wall / D	0.06 mg/cm^2
680	Room #317	Wall / A	0.16 mg/cm^2
681	Room #317	Wall / A	0.19 mg/cm^2
682	Room #317	Wall / C	0.14 mg/cm^2
683	Room #317	Wall / D	0.6 mg/cm^2
684	Room # 317	Wall / D	3.9 mg/cm^2
685	Room #317	Wall / A	4.1 mg/cm^2
686	Room #313	Wall / A	0.08 mg/cm^2
687	Room #313	Wall / B	0.6 mg/cm^2
688	Room #313	Wall / C	0.07 mg/cm^2
689	Room #313	Wall / D	0.11 mg/cm^2
690	Room #313	Wall / B	3.2 mg/cm^2
691	Room #313	Wall / D	2.9 mg/cm^2
692	Room #300SV	Wall / A	0.03 mg/cm^2
693	Room #300SV	Wall / B	0.08 mg/cm^2
694	Room #300SV	Wall / C	0.0 mg/cm^2
695	Room #300SV	Wall / D	0.5 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
696	Room #312	Wall / A	0.08 mg/cm^2
697	Room #312	Wall / B	0.5 mg/cm^2
698	Room #312	Wall / C	0.11 mg/cm^2
699	Room #312	Wall / D	0.17 mg/cm^2
700	Room #306	Wall / A	0.0 mg/cm^2
701	Room #306	Wall / B	0.04 mg/cm^2
702	Room #306	Wall / C	0.5 mg/cm^2
703	Room #306	Wall / D	0.12 mg/cm^2
704	Room #304	Wall / A	0.5 mg/cm^2
705	Room #304	Wall / C	0.0 mg/cm^2
706	Room #304	Wall / D	0.0 mg/cm^2
707	Room #372	Wall / A	0.21 mg/cm^2
708	Room #372	Wall / B	0.8 mg/cm^2
709	Room #372	Wall / C	0.16 mg/cm^2
710	Room #372	Wall / D	0.13 mg/cm^2
711	Room #364	Wall / A	0.12 mg/cm^2
712	Room #364	Wall / B	0.14 mg/cm^2
713	Room #364	Wall / C	0.08 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
714	Room #364	Wall / D	0.1 mg/cm^2
715	Room #364A	Wall / A	0.6 mg/cm^2
716	Room #364A	Wall / B	0.09 mg/cm^2
717	Room #364A	Wall / C	0.1 mg/cm^2
718	Room #364A	Wall / D	0.08 mg/cm^2
719	Room #352	Wall / A	0.5 mg/cm^2
720	Room #352	Wall / B	0.01 mg/cm^2
721	Room #352	Wall / C	0.15 mg/cm^2
722	Room #352	Wall / D	0.12 mg/cm^2
723	Room #346	Wall / A	0.08 mg/cm^2
724	Room #346	Wall / B	0.7 mg/cm^2
725	Room #346	Wall / C	0.17 mg/cm^2
726	Room #346	Wall / D	0.11 mg/cm^2
727	Room #336	Wall / A	0.5 mg/cm^2
728	Room #336	Wall / B	0.15 mg/cm^2
729	Room #336	Wall / C	0.08 mg/cm^2
730	Room #336	Wall / D	0.16 mg/cm^2
731	Room #334	Wall / A	0.11 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
732	Room #334	Wall / B	0.05 mg/cm^2
733	Room #334	Wall / C	0.16 mg/cm^2
734	Room #334	Wall / D	0.04 mg/cm^2
735	Room #332	Wall / A	0.19 mg/cm^2
736	Room #332	Wall / B	0.7 mg/cm^2
737	Room #332	Wall / C	0.1 mg/cm^2
738	Room #332	Wall / D	0.15 mg/cm^2
739	Room #326	Wall / A	0.0 mg/cm^2
740	Room #326	Wall / B	0.0 mg/cm^2
741	Room #326	Wall / C	0.0 mg/cm^2
742	Room #326	Wall / D	0.0 mg/cm^2
743	Room #326A	Wall / A	0.0 mg/cm^2
744	Room #326A	Wall / B	0.0 mg/cm^2
745	Room #326A	Wall / C	0.0 mg/cm^2
746	Room #326A	Wall / D	0.0 mg/cm^2
747	Room #318	Wall / A	0.0 mg/cm^2
748	Room #318	Wall / B	0.0 mg/cm^2
749	Room #318	Wall / C	0.0 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
750	Room #318	Wall / D	0.0 mg/cm^2
1014	Room # Hall 300N	Wall / A	0.06 mg/cm^2
1015	Room # Hall 300N	Wall / C	0.5 mg/cm^2
1016	Room # Hall 300N	Wall / C	0.02 mg/cm^2
1017	Room # Hall 300N	Wall / A	0.4 mg/cm^2
1018	Room # Hall 300N	Wall / A	0.04 mg/cm^2
1019	Room # Hall 300N	Wall / C	0.14 mg/cm^2
1020	Room # Hall 300E	Wall / D	0.03 mg/cm^2
1021	Room # Hall 300E	Wall / B	0.03 mg/cm^2
1022	Room # Hall 300E	Wall / B	0.03 mg/cm^2
1023	Room # Hall 300E	Wall / D	0.05 mg/cm^2
1024	Room # Hall 300S	Wall / A	0.05 mg/cm^2
1025	Room # Hall 300S	Wall / A	0.08 mg/cm^2
1026	Room # Hall 300S	Wall / A	0.04 mg/cm^2
1027	Room # Hall 300S	Wall / C	0.6 mg/cm^2
1028	Room # Hall 300S	Wall / C	0.05 mg/cm^2
1029	Room # Hall 300S	Wall / A	0.11 mg/cm^2
1030	Room # Hall 300W	Wall / B	0.1 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
1031	Room # Hall 300W	Wall / D	0.03 mg/cm^2
1032	Room # Hall 300W	Wall / D	0.03 mg/cm^2
1033	Room # Hall 300W	Wall / B	0.6 mg/cm^2
FOURTH FLOOR			
766	Room #451	Wall / D	0.6 mg/cm^2
767	Room #454	Wall / A	0.11 mg/cm^2
768	Room #454	Wall / A	0.7 mg/cm^2
769	Room #454	Wall / C	0.08 mg/cm^2
770	Room #454	Wall / D	0.11 mg/cm^2
771	Room #454A	Wall / A	0.6 mg/cm^2
772	Room #454A	Wall / B	0.26 mg/cm^2
773	Room #454A	Wall / C	0.26 mg/cm^2
774	Room #454A	Wall / D	0.15 mg/cm^2
775	Room #443A	Wall / A	0.18 mg/cm^2
776	Room #443A	Wall / B	0.6 mg/cm^2
777	Room #443A	Wall / C	0.17 mg/cm^2
778	Room #443A	Wall / D	0.16 mg/cm^2
779	Room #443	Wall / A	0.06 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
780	Room #443	Wall / B	0.15 mg/cm^2
781	Room #443	Wall / C	0.6 mg/cm^2
782	Room #443	Wall / D	0.11 mg/cm^2
783	Room #441	Wall / A	0.17 mg/cm^2
784	Room #441	Wall / B	0.5 mg/cm^2
785	Room #441	Wall / C	0.17 mg/cm^2
786	Room #441	Wall / D	0.07 mg/cm^2
787	Room #439	Wall / A	0.23 mg/cm^2
788	Room #439	Wall / B	0.13 mg/cm^2
789	Room #439	Wall / C	0.24 mg/cm^2
790	Room #439	Wall / D	0.13 mg/cm^2
791	Room #437	Wall / A	0.15 mg/cm^2
792	Room #437	Wall / B	0.18 mg/cm^2
793	Room #437	Wall / C	0.7 mg/cm^2
794	Room #437	Wall / D	0.28 mg/cm^2
795	Room #435A	Wall / A	0.7 mg/cm^2
796	Room #435A	Wall / B	0.14 mg/cm^2
797	Room #435A	Wall / C	0.26 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
798	Room #435A	Wall / C	0.11 mg/cm^2
799	Room #435A	Wall / D	0.13 mg/cm^2
800	Room #435	Wall / A	0.15 mg/cm^2
801	Room #435	Wall / B	0.14 mg/cm^2
802	Room #435	Wall / C	0.11 mg/cm^2
803	Room #435	Wall / D	0.14 mg/cm^2
804	Room #433	Wall / A	0.5 mg/cm^2
805	Room #433	Wall / B	0.13 mg/cm^2
806	Room #433	Wall / C	0.3 mg/cm^2
807	Room #433	Wall / D	0.18 mg/cm^2
808	Room #433A	Wall / A	0.16 mg/cm^2
809	Room #433A	Wall / B	0.7 mg/cm^2
810	Room #433A	Wall / C	0.11 mg/cm^2
811	Room #433A	Wall / D	0.11 mg/cm^2
812	Room #429	Wall / A	0.14 mg/cm^2
813	Room #429	Wall / B	0.13 mg/cm^2
814	Room #429	Wall / C	0.8 mg/cm^2
815	Room #429	Wall / D	0.21 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
816	Room #429A	Wall / A	0.13 mg/cm^2
817	Room #429A	Wall / B	0.8 mg/cm^2
818	Room #429A	Wall / C	0.11 mg/cm^2
819	Room #429A	Wall / D	0.1 mg/cm^2
820	Room #427	Wall / A	0.1 mg/cm^2
821	Room #427	Wall / B	0.24 mg/cm^2
822	Room #427	Wall / C	0.17 mg/cm^2
823	Room #427	Wall / D	0.13 mg/cm^2
824	Room #427A	Wall / A	0.1 mg/cm^2
825	Room #427A	Wall / B	0.09 mg/cm^2
826	Room #427A	Wall / C	0.15 mg/cm^2
827	Room #427A	Wall / D	0.15 mg/cm^2
828	Room #425	Wall / A	0.13 mg/cm^2
829	Room #425	Wall / B	0.14 mg/cm^2
830	Room #425	Wall / C	0.12 mg/cm^2
831	Room #425	Wall / D	0.7 mg/cm^2
832	Room #423	Wall / A	0.07 mg/cm^2
833	Room #423	Wall / B	0.18 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
834	Room #423	Wall / C	0.0 mg/cm^2
835	Room #423	Wall / D	0.0 mg/cm^2
836	Room #419	Wall / A	0.25 mg/cm^2
837	Room #419	Wall / B	0.13 mg/cm^2
838	Room #419	Wall / C	0.6 mg/cm^2
839	Room #419	Wall / D	0.11 mg/cm^2
840	Room #417	Wall / A	0.08 mg/cm^2
841	Room #417	Wall / B	0.06 mg/cm^2
842	Room #417	Wall / C	0.5 mg/cm^2
843	Room #417	Wall / D	0.11 mg/cm^2
844	Room #407	Wall / A	0.02 mg/cm^2
845	Room #407	Wall / B	0.0 mg/cm^2
846	Room #407	Wall / C	0.0 mg/cm^2
847	Room #407	Wall / D	0.0 mg/cm^2
848	Room #417A	Wall / A	0.14 mg/cm^2
849	Room #417A	Wall / B	0.1 mg/cm^2
850	Room #417A	Wall / C	0.6 mg/cm^2
851	Room #417A	Wall / D	0.06 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
852	Room #405A	Wall / A	0.12 mg/cm^2
853	Room #405A	Wall / B	0.07 mg/cm^2
854	Room #405A	Wall / C	0.6 mg/cm^2
855	Room #405A	Wall / D	0.08 mg/cm^2
856	Room #405	Wall / A	0.04 mg/cm^2
857	Room #405	Wall / B	0.11 mg/cm^2
858	Room #405	Wall / C	0.04 mg/cm^2
859	Room #405	Wall / D	0.04 mg/cm^2
860	Room #409	Wall / A	0.05 mg/cm^2
861	Room #409	Wall / B	0.5 mg/cm^2
862	Room #409	Wall / C	0.06 mg/cm^2
863	Room #409	Wall / D	0.03 mg/cm^2
864	Room #409	Wall / D	3.4 mg/cm^2
865	Room #409	Wall / B	2.5 mg/cm^2
866	Room #413	Wall / A	0.08 mg/cm^2
867	Room #413	Wall / B	0.04 mg/cm^2
868	Room #413	Wall / C	0.04 mg/cm^2
869	Room #413	Wall / D	0.5 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
870	Room #413	Wall / D	3.2 mg/cm^2
871	Room #413	Wall / B	3 mg/cm^2
872	Room #407	Wall / A	0.04 mg/cm^2
873	Room #407	Wall / B	0.04 mg/cm^2
874	Room #407	Wall / C	0.04 mg/cm^2
875	Room #407	Wall / D	0.13 mg/cm^2
876	Room #415	Wall / A	0.15 mg/cm^2
877	Room #415	Wall / B	0.04 mg/cm^2
878	Room #415	Wall / C	0.11 mg/cm^2
879	Room #415	Wall / D	0.09 mg/cm^2
880	Room #408	Wall / A	0.19 mg/cm^2
881	Room #408	Wall / B	0.09 mg/cm^2
882	Room #408	Wall / C	0.6 mg/cm^2
883	Room #408	Wall / D	0.21 mg/cm^2
884	Room #414	Wall / A	0.09 mg/cm^2
885	Room #414	Wall / B	0.0 mg/cm^2
886	Room #414	Wall / C	0.4 mg/cm^2
887	Room #414	Wall / D	0.0 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
888	Room #416	Wall / A	0.25 mg/cm^2
889	Room #416	Wall / B	0.0 mg/cm^2
890	Room #416	Wall / C	0.04 mg/cm^2
891	Room #416	Wall / D	0.0 mg/cm^2
892	Room #418	Wall / A	0.07 mg/cm^2
893	Room #418	Wall / B	0.0 mg/cm^2
894	Room #418	Wall / C	0.04 mg/cm^2
895	Room #418	Wall / D	0.11 mg/cm^2
896	Room #424	Wall / A	0.09 mg/cm^2
897	Room #424	Wall / B	0.08 mg/cm^2
898	Room #424	Wall / C	0.05 mg/cm^2
899	Room #424	Wall / D	0.1 mg/cm^2
900	Room #426	Wall / A	0.01 mg/cm^2
901	Room #426	Wall / B	0.0 mg/cm^2
902	Room #426	Wall / C	0.0 mg/cm^2
903	Room #426	Wall / D	0.0 mg/cm^2
904	Room #432	Wall / A	0.07 mg/cm^2
905	Room #432	Wall / B	0.14 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
906	Room #432	Wall / C	0.04 mg/cm^2
907	Room #432	Wall / D	0.05 mg/cm^2
908	Room #438	Wall / A	0.0 mg/cm^2
909	Room #438	Wall / B	0.12 mg/cm^2
910	Room #438	Wall / D	0.25 mg/cm^2
911	Room #444	Wall / A	0.11 mg/cm^2
912	Room #444	Wall / B	0.5 mg/cm^2
913	Room #444	Wall / C	0.08 mg/cm^2
914	Room #444	Wall / D	0.16 mg/cm^2
915	Room #446	Wall / A	0.0 mg/cm^2
916	Room #446	Wall / B	0.0 mg/cm^2
917	Room #446	Wall / C	0.0 mg/cm^2
918	Room #446	Wall / D	0.0 mg/cm^2
919	Room #448	Wall / A	0.25 mg/cm^2
920	Room #448	Wall / B	0.16 mg/cm^2
921	Room #448	Wall / C	0.14 mg/cm^2
922	Room #448	Wall / D	0.23 mg/cm^2
923	Room #456	Wall / A	0.01 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
924	Room #456	Wall / B	0.06 mg/cm^2
925	Room #456	Door jamb / C	0.22 mg/cm^2
926	Room #456	Wall / D	0.04 mg/cm^2
927	Room #445	Wall / A	0.08 mg/cm^2
928	Room #445	Wall / B	0.0 mg/cm^2
929	Room #445	Wall / C	0.0 mg/cm^2
930	Room #445	Wall / D	0.06 mg/cm^2
931	Room #447	Wall / A	0.09 mg/cm^2
932	Room #447	Wall / B	0.4 mg/cm^2
933	Room #447	Wall / C	0.1 mg/cm^2
934	Room #447	Wall / D	0.0 mg/cm^2
935	Room #449	Wall / A	0.0 mg/cm^2
936	Room #449	Wall / B	0.7 mg/cm^2
937	Room #449	Wall / C	0.19 mg/cm^2
938	Room #449	Wall / D	0.12 mg/cm^2
939	Room #457	Wall / A	0.1 mg/cm^2
940	Room #457	Wall / B	0.14 mg/cm^2
941	Room #457	Wall / C	0.07 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
942	Room #457	Wall / D	0.11 mg/cm^2
943	Room #461A	Wall / A	0.8 mg/cm^2
944	Room #461A	Wall / B	0.18 mg/cm^2
945	Room #461A	Wall / C	0.24 mg/cm^2
946	Room #461A	Wall / D	0.27 mg/cm^2
947	Room #461	Wall / A	0.15 mg/cm^2
948	Room #461	Wall / B	0.5 mg/cm^2
949	Room #461	Wall / C	0.18 mg/cm^2
950	Room #461	Wall / D	0.13 mg/cm^2
951	Room #463	Wall / A	0.6 mg/cm^2
952	Room #463	Wall / B	0.07 mg/cm^2
953	Room #463	Wall / C	0.19 mg/cm^2
954	Room #463	Wall / D	0.05 mg/cm^2
955	Room #467A	Wall / A	0.15 mg/cm^2
956	Room #467A	Wall / B	0.16 mg/cm^2
957	Room #467A	Wall / C	0.09 mg/cm^2
958	Room #467A	Wall / D	0.7 mg/cm^2
959	Room #467B	Wall / A	0.6 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
960	Room #467B	Wall / B	0.15 mg/cm^2
961	Room #467B	Wall / C	0.29 mg/cm^2
962	Room #467B	Wall / D	0.14 mg/cm^2
963	Room #467C	Wall / A	0.6 mg/cm^2
964	Room #467C	Wall / B	0.13 mg/cm^2
965	Room #467C	Wall / C	0.2 mg/cm^2
966	Room #467C	Wall / D	0.18 mg/cm^2
967	Room #467	Wall / A	0.5 mg/cm^2
968	Room #467	Wall / B	0.0 mg/cm^2
969	Room #467	Wall / C	0.05 mg/cm^2
970	Room #467	Wall / D	0.04 mg/cm^2
971	Room #469	Wall / A	0.1 mg/cm^2
972	Room #469	Wall / B	0.16 mg/cm^2
973	Room #469	Wall / C	0.09 mg/cm^2
974	Room #469	Wall / D	0.5 mg/cm^2
1034	Room # Hall 400N	Wall / A	0.05 mg/cm^2
1035	Room # Hall 400N	Wall / C	0.5 mg/cm^2
1036	Room # Hall 400N	Wall / C	0.11 mg/cm^2

Table 4
XRF Results

SAMPLE POINT	AREA	COMPONENT / SIDE	XRF Results mg/cm^2
1037	Room # Hall 400N	Wall / A	0.03 mg/cm^2
1038	Room # Hall 400E	Wall / B	0.09 mg/cm^2
1039	Room # Hall 400E	Wall / D	0.07 mg/cm^2
1040	Room # Hall 400E	Wall / D	0.07 mg/cm^2
1041	Room # Hall 400E	Wall / B	0.03 mg/cm^2
1042	Room # Hall 400S	Wall / A	0.05 mg/cm^2
1043	Room # Hall 400S	Wall / C	0.06 mg/cm^2
1044	Room # Hall 400S	Wall / C	0.0 mg/cm^2
1045	Room # Hall 400S	Wall / A	0.4 mg/cm^2
1046	Room # Hall 400S	Wall / A	0.04 mg/cm^2
1047	Room # Hall 400S	Wall / C	0.02 mg/cm^2
1048	Room # Hall 400W	Wall / B	0.02 mg/cm^2
1049	Room # Hall 400W	Wall / D	0.01 mg/cm^2
1050	Room # Hall 400W	Wall / D	0.01 mg/cm^2
1051	Room # Hall 400W	Wall / B	0.12 mg/cm^2

SECTION 9.0
MERCURY/PCB's/RADON

Mercury

The survey included the location and physical count of mercury-containing thermostat switches. Typically mercury-containing thermostats use mercury tilt switches. Typically about 3 grams of mercury is in each mercury tilt switch. Most thermostats have one switch; some have two, and up to six switches are possible. If replacement is desired, safe removal includes the removal of the entire thermostat. For safe disposal, store the entire thermostat in a marked container until it can be sent for proper disposal. In many states, the Thermostat Recycling Corporation operates a recycling program utilizing heating, ventilation and air conditioning (HVAC) wholesalers. The wholesalers consolidate thermostats from contractors and send them to recyclers; only whole thermostats are accepted. Contact your HVAC wholesaler to find out whether you can drop off thermostats. If the Thermostat Recycling Corporation program is not yet operating in your state, inquire with your state or local hazardous waste program for information about where you can send mercury thermostats for proper disposal.

No mercury-containing switches were located.

PCB's

The main use of PCBs in building materials is as a plasticizer. They are found predominantly in paints, specialty coatings, caulking, sealants, and other materials, as well. PCBs were added to these materials for durability, resistance to degradation, low flammability, and as a softener/plasticizer for application.

According to U.S. EPA reports, as much as 115 million pounds of PCBs were used by industry in plasticizer applications from the 1930s to the 1970s. By the early 1970s, the use of PCBs in plasticizer applications was drastically reduced, and by the late 1970s, the manufacture of PCBs in the United States was banned by the EPA.

This survey focused specifically on PCB's used in caulking and sealants. If the material is at a regulated concentration, proper management and disposal are required by Federal regulations. Of particular importance is the fact that some of these materials have been shown to leach and impact adjacent building materials, such as concrete or bricks, which are then also subject to proper clean-up and disposal.

The main statute regulating PCBs is the Toxic Substance Control Act (TSCA), but state and local regulations also need to be followed. Federal disposal regulations, codified under 40 CFR

761, establish the prohibitions of and requirements for the use, disposal, storage, and marking of PCBs.

No materials were identified for sampling.

Radon

Test for radon was carried out during this survey. One set of two short term radon detector vials was set out in the basement and first floor janitor's closet within Clark Hall. The uncapped vials were exposed to the environment for approximately 96 hours to allow time for the detectors to absorb enough radon to be analyzed according to EPA standards. The vials were submitted to Pro Lab in Weston, Florida following manufacturer's chain of custody. Radon was measured using the liquid scintillation method (EPA 402-R-92-004).

Table 5
Radon Results

Sample Vial Number	Area	Sample Results	Average
2251844	Basement	0.2 pCi/L	**0.4 pCi/L**
2250068	Basement	0.5 pCi/L	
2412382	1st Floor	0.2 pCi/L	**0.2 pCi/L**
2412251	1st Floor	0.2 pCi/L	

Long-term tests remain in the building for more than 90 days. "Alpha track" and "electret" detectors are commonly used for this type of testing. A long-term test will give you a reading that is more likely to tell you your building's year-round average radon level than a short-term test.

EPA Recommends the Following Testing Steps:

- Take a short-term test. If the result is 4 pCi/L or higher take a follow-up test to be sure.
- Follow up with either a long-term test or a second short-term test.

If the first short-term test result is more than twice EPA's 4 pCi/L action level, a second short-term test should be completed immediately.

According to the EPA, the average indoor radon level is estimated to be about 1.3 pCi/L and about 0.4 pCi/L of radon is normally found in the outside air. The U.S. Congress has set a long-term goal that indoor radon levels be no more than outdoor levels. While this goal is not yet technologically achievable in all cases, most homes today can be reduced to 2 pCi/L or below.

SECTION 10.0
CONCLUSIONS

Our inspection identified Forty (40) homogenous materials that are listed as potential suspect asbestos containing building materials. Of the Forty (40) homogenous materials collected, lab data indicate Sixteen (16) materials were identified that contained greater than one (1) percent asbestos mineral fibers.

A total of One Thousand sixty-nine (1069) assays were collected from materials suspected to contain or be coated with lead based paints. Copies of the data tables generated by the XFR data logger are located In Appendix C. Of the 988 assays twelve (12) are considered to be lead containing or coated with lead-based paints and coatings.

The short term radon tests indicate the levels of radon are well below the EPA's 4.0 pCi/L action level.

No mercury containing switches or suspect PCB containing materials were identified within Clark Hall.

SECTION 11.0
RECOMMENDATIONS

Laboratory analyses of suspect asbestos containing building materials located within Clark Hall identified sixteen (16) homogenous materials as asbestos containing. Washington Administrative Code requires that properly trained and certified workers handle building materials containing or suspected to contain greater than one percent asbestos mineral fibers as outlined under applicable sections of 296-62.

By definition, any material containing greater than 1% asbestos is considered ACM. Materials with less than 1% are designated as "TRACE" in the inventory. The one percent cut off is consistent with EPA's definition under the asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP). However, the OSHA standard has a definition for both "asbestos" and "asbestos-containing materials." These materials may still be regulated in regards to work practices and exposure control techniques. Materials below the 1% threshold should follow requirements set forth in 29 CFR 1926.1101(g)(1)(ii) and (iii). Only materials with no traces of asbestos are considered asbestos-free, and are designated as "NON DETECT" in the inventory.

The materials identified for testing (Lead Based Paint) contained no lead to amounts of lead (Pb) above the current HUD regulations of 1.0 mg/cm^2 when analyzed with an XRF. It also needs to be noted, OSHA's definition of Lead-Based Paint is ANY detectable concentration of lead by use of AAS or XRF.

With regards to materials identified with minimal amounts of lead, below HUD standards at a minimum, the contractor performing maintenance/removal of these materials will need to develop a Negative Exposure Assessment (NEA) per the regulations codified at 20CFR1926.62(d)(1). This requirement could be eliminated should the contractor performing this work has developed a negative exposure assessment on a prior "similar" project within the last 12 months.

The components identified as coated with lead-based paint are in fair to good condition meaning showing wear with apparent good adhesion. At a minimum, the components identified as coated with lead-based paint should be encapsulated using a product such as FIBERLOCK 5801 LBC. All work performed within Clark Hall with respects to lead (Pb) would, at a minimum, need to meet the Federal Lead (Pb) regulations codified at 29CFR1926.62 Lead (Pb) in construction regulations.

The EPA recommends for a better understanding of the year-round average radon level, take a long-term test or take a second short-term test.

SECTION 12.0
LIMITING CONDITIONS

During this building inspection, The Empirical Company endeavored to observe and sample all potential ACM's associated within this inspection process. During demolition/renovation activities of the identified building, materials not observed due to inaccessibility may be uncovered that may warrant additional sampling and analysis for ACM content.

The X-Ray Fluorescence (XRF) survey and analysis applies only to the readily accessible areas within Clark Hall. The presence or absence of lead-based paint or lead-based paint hazards applies only to the tested or assessed surfaces on the date of the field visit and it should be understood that conditions may change due to deterioration or maintenance. The results and material conditions noted within this report were accurate at the time of the inspection and in no way reflect the conditions at the property after the date of the inspection. Ongoing monitoring by the owner is usually necessary.

In connection with all tasks performed relative to this project, we have exercised reasonable efforts to accomplish these tasks employing professional standards applicable in the industry today.

SECTION 13.0
CLOSURE

The results, conclusions and recommendations present in this report were prepared following our inspections and hazard assessments of asbestos containing building materials and surfaces coated with lead-based paints at the subject property. Methods employed by The Empirical Company to conduct this study are consistent with the standard of care and professionalism normally exercised by consultants in the fields of environmental science and engineering.

The Client acknowledges that The Empirical Company has been retained for the sole purpose of assisting the Client in identifying asbestos containing building materials, surfaces coated with lead-based paints, mercury-tilt switches and radon associated with the subject site structure. It is agreed that The Empirical Company has assumed responsibility only for performing this inspection and presenting this report and conclusions to the Client. The Client acknowledges that The Empirical Company is not acting as an agent for the Client, or any other user or entity, for work associated with any asbestos containing building materials or surfaces coated with lead-based paints. The Empirical Company does not act or have authority to act for or in place of the Client or their successors or assigns. The Empirical Company does not represent the Client nor does it authorize or allow any construction, renovation, remodeling, maintenance, repair, or demolition work by performing this inspection.

SECTION 14.0
STATEMENT OF INSPECTION

The Empirical Company hereby certifies that the Asbestos Hazard Inspection, Sampling and XRF Lead Survey at Clark Hall located on the WSU campus in Pullman, Washington was conducted under modified protocols of 40 CFR 763.85 and 40 CFR part 745 and Title X.

All work and statements contained herein are certified true and correct to the best of The Empirical Company, a Division of the Elicit Corporation ability, and using "State of the Art" practices.

Inspector: Richard J. DeLorme Date: 7-1-11

Richard J. DeLorme
AHERA Inspector (Certificate Number 1067550 Argus Pacific)

Inspector: Paul d'Ombrain Date: 7-11-11

Paul d'Ombrain
AHERA Inspector (Certificate Number 1067551 Argus Pacific)

Inspector: Edward S DeLorme Date: 7-11-11

Edward S. DeLorme
Licensed Washington State Lead Inspector (Certificate No.0520, Expiration Date June 13th, 2012)

APPENDIX A

TRAINING CERTIFICATES

STATE OF WASHINGTON

Department of Community, Trade and Economic Development
Lead-Based Paint Program

Edward S. DeLorme

Has fulfilled the certification requirements of Washington Administrative code (WAC) 365-230 and has been certified to conduct lead-based paint activities pursuant to WAC 365-230-200 as a:

Risk Assessor

Certification #	Issuance Date	Expiration Date
0520	6/9/2009	6/13/2012

Certificate of Completion

This is to certify that

Richard J. DeLorme

has satisfactorily completed
4 hours of refresher training as an

Asbestos Building Inspector

to comply with the training requirements of
TSCA Title II / 40 CFR 763 (AHERA)

1067550
Certificate Number

Instructor
EPA Provider Cert. Number: 1085

ARGUS PACIFIC
TRAINING • CONSULTING

Jun 30, 2010
Date(s) of Training
Exam Score: NA
Expiration Date: Jun 30, 2011

Argus Pacific, Inc. • 1900 W. Nickerson, Suite 315 • Seattle, Washington • 98119 • 206.285.3373 • fax 206.285.3927

Certificate of Completion

This is to certify that

Paul J. d'Ombrain

has satisfactorily completed
4 hours of refresher training as an

Asbestos Building Inspector

to comply with the training requirements of
TSCA Title II / 40 CFR 763 (AHERA)

1067551
Certificate Number

Instructor
EPA Provider Cert. Number: 1085

ARGUS PACIFIC
TRAINING•CONSULTING

Jun 30, 2010
Date(s) of Training
Exam Score: NA
Expiration Date: Jun 30, 2011

Argus Pacific, Inc. • 1900 W. Nickerson, Suite 315 • Seattle, Washington • 98119 • 206.285.3373 • fax 206.285.3927

APPENDIX B

CERTIFICATES OF ANALYSIS

ProScience Analytical Services, Inc.

EMSL Analytical, Inc.

Pro Lab

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-1A	White	0	0	0	0	0	0	0	85	5	0	0	0	10

Description: Type 1 Spray-On Insulation
Location: Basement
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-1B	White	0	0	0	0	0	0	0	85	5	0	0	0	10

Description: Type 1 Spray-On Insulation
Location: Basement
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-1C	White	0	0	0	0	0	0	0	85	5	0	0	0	10

Description: Type 1 Spray-On Insulation
Location: Basement
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-2A	White	50	10	0	0	0	0	0	0	0	0	0	0	40

Description: Type 1 Mud Fitting "T"
Location: Basement
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-2B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting "T"
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-2C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting "Elbow"
Location: Basement
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-2D		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting "Elbow"
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-2E		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting "Elbow"
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-2F		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting "Elbow"
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-2G		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting "Elbow"
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-3A	Multi	25	5	0	0	0	0	0	0	40	0	0	0	30

Description: Type 1 Lag Cloth, Orange
Location: Valve Body
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-3B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Lag Cloth, Orange
Location: Valve Body
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-3C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Lag Cloth, Orange, 23" Pipe
Location: Basement
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-4A	Multi	15	5	0	0	0	0	0	0	50	0	0	0	30

Description: Type 2 Lag Cloth, Yellow
Location: Heat Exchanger, Basement
Comments: Chrysotile found on back of webbed layers. Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-4B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Lag Cloth, Yellow
Location: Valve Body, Basement
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-4C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Lag Cloth, Yellow, 10" Pipe
Location: Basement
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-5A	Multi	TR	0	0	0	0	0	0	0	40	0	0	0	60

Description: Type 3 Lag Cloth, Blue/Green, 10" Pipe
Location: Basement
Comments: Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-5B	Multi	0	0	0	0	0	0	0	0	40	0	0	0	60

Description: Type 3 Lag Cloth, Blue/Green, 4" Elbow
Location: Basement
Comments: Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-5C	Multi	2	0	0	0	0	0	0	0	70	0	0	0	28

Description: Type 3 Lag Cloth, Blue/Green, 12" Pipe
Location: Basement
Comments: Chrysotile on back of webbed layers.
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-6A	Multi	15	2	0	0	0	0	0	0	60	0	0	0	23

Description: Type 4 Lag Cloth, Blue
Location: Heat Exchanger, Basement
Comments: Chrysotile on back of webbed layers.
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-6B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 4 Lag Cloth, Blue, 3" Pipe
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-6C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 4 Lag Cloth, Blue, 4" Elbow
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-7A	Multi	TR	0	0	0	0	0	0	0	70	0	0	0	30

Description: Type 5 Lag Cloth, Green, 24" Elbow
Location: Basement
Comments: Chrysotile on back of webbed layers.
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-7B	Multi	0	0	0	0	0	0	0	0	70	0	0	0	30

Description: Type 5 Lag Cloth, Green, 24" Elbow
Location: Basement
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-8A	Gray	25	0	0	0	0	0	0	0	0	0	0	0	75

Description: Type 1 Cement Board, Gray, Rough Texture
Location: N/A
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-8B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Cement Board, Gray, Rough Texture
Location: N/A
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-8C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Cement Board, Gray, Rough Texture
Location: N/A
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-9A	Multi	0	0	0	0	0	0	0	0	70	0	0	0	30

Description: Type 1 Boiler Wrap, Green
Location: Basement
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-9B	Multi	0	0	0	0	0	0	0	0	70	0	0	0	30

Description: Type 1 Boiler Wrap, Green
Location: Basement
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122810-9C	White	0	0	0	0	0	0	0	0	70	0	0	0	30

Description: Type 1 Boiler Wrap, Green
Location: Basement
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-10A	White	0	20	0	0	0	0	0	0	0	0	0	0	80

Description: Type 1 Pipe Insulation, 21" Yellow
Location: Basement
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-10B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Pipe Insulation, 21" Orange
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-10C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Pipe Insulation, 21" Yellow
Location: Basement
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-11A	Tan	5	0	0	0	0	0	0	0	0	0	0	0	95

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 151
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-11B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 132
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-11C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 105
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-12A	Multi	0	0	0	0	0	0	2	0	35	0	0	0	63

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 151
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-12B	Multi	0	0	0	0	0	0	2	0	5	0	0	0	93

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 132
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-12C	Multi	0	0	0	0	0	0	TR	0	25	0	0	0	75

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 105
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-13A	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 151
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-13B	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 132
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-13C	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 105
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-14A	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 151
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-14B	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 132
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-14C	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 105
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-15A	White	2	0	0	0	0	0	0	50	0	0	0	0	48

Description: Type 1 Mud Fitting, White Color
Location: Room 151
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-15B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting, White Color
Location: Room 157
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-15C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting, White Color
Location: Room 109
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-16A	Multi	0	0	0	0	0	0	0	30	50	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile, White Color, Small Holes
Location: Room 151
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-16B	Multi	0	0	0	0	0	0	0	30	50	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile, White Color, Small Holes
Location: Room 132
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-16C	Multi	0	0	0	0	0	0	0	30	50	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile, White Color, Small Holes
Location: 100S Hall
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-17A	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4' Ceiling Tile, White Color, Large Holes
Location: Room 151
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-17B	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4' Ceiling Tile, White Color, Large Holes
Location: Room 132
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-17C	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4' Ceiling Tile, White Color, Lage Holes
Location: 100S Hall
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-18A	Red	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 6"x6" Floor Tile, Red Color, Clay
Location: Room 149
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-18B	Red	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 6"x6" Floor Tile, Red Color, Clay
Location: Room 149
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-19A	Gray	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 6"x6" Floor Tile Mastic, Gray Color, Clay
Location: Room 149
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-19B	Gray	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 6"x6" Floor Tile Mastic, Gray Color
Location: Room 149
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-20A	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 6"x6" Floor Tile Mastic, Tan Color
Location: Room 149
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-20B	Yellow	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 6"x6" Floor Tile Mastic, Tan Color
Location: Room 149
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-21A	White	2	0	0	0	0	0	0	0	0	0	0	0	98

Description: Type 1 GWB Joint Compound, White Color
Location: Room 151
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-21B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 GWB Joint Compound, White Color
Location: Room 132
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-21C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 GWB Joint Compound, White Color
Location: Room 105
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-22A	Black	15	0	0	0	0	0	0	0	0	0	0	0	85

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 151
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-22B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 132
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-22C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 105
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-23A	Gray	30	0	0	0	0	0	0	0	0	0	0	0	70

Description: Type 2 Cement Board (Exhaust Hood), Gray Color, Smooth Texture
Location: Room 134
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-23B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Cement Board (Exhaust Hood), Gray Color, Smooth Texture
Location: Room 172
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-23C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Cement Board (Exhaust Hood), Gray Color, Smooth Texture
Location: Room 172
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-122910-24A	Gray	20	0	0	0	0	0	0	0	0	0	0	0	80

Description: Type 1 Sink Coating Insulation, Gray Color
Location: Room 116A
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-24B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Sink Coating Insulation, Gray Color
Location: Room 299A
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-24C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Sink Coating Insulation, Gray Color
Location: Room 331A
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-25A	Cream	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 2 12"x12" Floor Tile, Multi-Cream Color
Location: Room 112
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-25B	Cream	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 2 12"x12" Floor Tile, Multi-Cream Color
Location: Room 112
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-25C	Cream	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 2 12"x12" Floor Tile, Multi-Cream Color
Location: Room 112
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-26A	Black	5	0	0	0	0	0	0	0	0	0	0	0	95

Description: Type 2 12"x12" Floor Tile Mastic, Black Color
Location: Room 112
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-26B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 12"x12" Floor Tile Mastic, Black Color
Location: Room 112
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-26C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 12"x12" Floor Tile Mastic, Black Color
Location: Room 112
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-123010-27A	Tan	0	0	0	0	0	0	0	0	40	0	0	0	60

Description: Type 1 Partition Curtain, Tan Color
Location: Room 172
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-28A	Black	0	0	0	0	0	0	0	85	5	0	0	0	10

Description: Type 1 Wall Insulation, Black Color
Location: Room 109
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-28B	Black	0	0	0	0	0	0	0	85	5	0	0	0	10

Description: Type 1 Wall Insulation, Black Color
Location: Room 109
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-28C	Black	0	0	0	0	0	0	0	85	5	0	0	0	10

Description: Type 1 Wall Insulation, Black Color
Location: Room 109
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-29A	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceiling Tiles (Glue On), White Color
Location: Room 105
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-29B	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceiling Tiles (Glue On), White Color
Location: Room 107
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-29C	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceiling Tiles (Glue On), White Color
Location: Room 111
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-30A	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 3 12"x12" Ceiling Tiles (Glue on) Mastic, Black Color
Location: Room 105
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-30B	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 3 12"x12" Ceiling Tiles (Glue on) Mastic, Black Color
Location: Room 107
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-30C	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 3 12"x12" Ceiling Tiles (Glue on) Mastic, Black Color
Location: Room 111
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-31A	Tan	2	0	0	0	0	0	0	0	0	0	0	0	98

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 269
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-31B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 251
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-31C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 289
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-32A	Black	10	0	0	0	0	0	0	0	0	0	0	0	90

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 269
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-32B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 251
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-32C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 289
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-33A	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 269
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-33B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 251
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-33C	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 289
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-34A	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 269
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-34B	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 251
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-34C	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 289
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-35A	Multi	0	0	0	0	0	0	5	0	20	0	0	0	75

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 269
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-35B	White	0	0	0	0	0	0	5	0	5	0	0	0	90

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 251
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-35C	Multi	0	0	0	0	0	0	0	0	10	0	0	0	90

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 289
Comments: Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-36A	White	2	0	0	0	0	0	0	0	0	0	0	0	98

Description: Type 1 GWB Joint Compound, White Color
Location: Room 269
Comments: Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-36B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 GWB Joint Compound, White Color
Location: Room 251
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-36C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 GWB Joint Compound, White Color
Location: Room 289
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-37A	White	0	0	0	0	0	0	0	30	50	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile, Small Holes, White Color
Location: Room 263
Comments: Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-37B	Tan	0	0	0	0	0	0	0	30	50	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile, Small Holes, White Color
Location: Room 251
Comments: Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-37C	White	0	0	0	0	0	0	0	30	50	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile, Small Holes, White Color
Location: Room 289
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-38A	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4' Ceiling Tile, Large Holes, White Color
Location: Room 263
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-38B	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4' Ceiling Tile, Large Holes, White Color
Location: Room 251
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-38C	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4' Ceiling Tile, Large Holes, White Color
Location: Room 289
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-39A	Black	5	0	0	0	0	0	0	0	0	0	0	0	95

Description: Type 2 Sink Coating Insulation, Black Color
Location: Room 221
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-39B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Sink Coating Insulation, Black Color
Location: Room 204
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-39C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Sink Coating Insulation, Black Color
Location: Room 266
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-40A	Multi	0	0	0	0	0	0	TR	0	15	0	5	0	80

Description: Type 1 Sheet Vinyl Flooring, Multi-Brown Color
Location: Room 221
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-40B	Multi	0	0	0	0	0	0	TR	0	15	0	5	0	80

Description: Type 1 Sheet Vinyl Flooring, Multi-Brown Color
Location: Room 221
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-41A	Multi	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Sheet Vinyl Floor Mastic, Brown Color
Location: Room 221
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-41B	Multi	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Sheet Vinyl Floor Mastic, Brown Color
Location: Room 221
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-42A	Cream	20	0	0	0	0	0	0	0	5	0	0	0	75

Description: Type 2 Sheet Vinyl Flooring, Multi-Cream Color
Location: Room 221
Comments:
Is asbestos present? Yes. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-42B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Sheet Vinyl Flooring, Multi-Cream Color
Location: Room 221
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-43A	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 2 Sheet Vinyl Floor Mastic, Red Color
Location: Room 221
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-43B	Brown	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 2 Sheet Vinyl Floor Mastic, Red Color
Location: Room 221
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-44A	Cream	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 2 12"x12" Floor Tile, Multi-Cream Color
Location: Room 209
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-44B	Cream	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 2 12"x12" Floor Tile, Multi-Cream Color
Location: Room 204
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-44C	Cream	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 2 12"x12" Floor Tile, Multi-Cream Color
Location: Room 204
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010311-45A	Black	10	0	0	0	0	0	0	0	0	0	0	0	90

Description: Type 2 12"x12" Floor Tile Mastic, Black Color
Location: Room 209
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-45B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 12"x12" Floor Tile Mastic, Black Color
Location: Room 204
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-45C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 12"x12" Floor Tile Mastic, Black Color
Location: Room 204
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-46A	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceiling Tile (Glue On), White
Location: Room 217
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-46B	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceiling Tile (Glue On), White
Location: Room 217
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-46C	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceiling Tile (Glue On), White
Location: Room 213
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-47A	Brown	0	0	0	0	0	TR	0	0	0	0	0	TR	100

Description: Type 3 12"x12" Ceiling Tile Mastic, Black
Location: Room 217
Comments: Recommend TEM.
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-47B	Brown	0	0	0	0	0	TR	0	0	0	0	0	TR	100

Description: Type 3 12"x12" Ceiling Tile Mastic, Black
Location: Room 217
Comments: Recommend TEM.
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-47C	Brown	0	0	0	0	0	TR	0	0	0	0	0	TR	100

Description: Type 3 12"x12" Ceiling Tile Mastic, Black
Location: Room 213
Comments: Recommend TEM.
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-48A	Black	0	0	0	0	0	0	0	90	0	0	0	0	10

Description: Type 1 Wall Insulation, Black
Location: Room 215
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-48B	Black	0	0	0	0	0	0	0	90	0	0	0	0	10

Description: Type 1 Wall Insulation, Black
Location: Room 215
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-48C	Black	0	0	0	0	0	0	0	90	0	0	0	0	10

Description: Type 1 Wall Insulation, Black
Location: Room 215
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-49A	Gray	20	0	0	0	0	0	0	0	0	0	0	0	80

Description: Type 2 Cement Board (Smooth Texture), Gray
Location: Room 204
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-49B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Cement Board (Smooth Texture), Gray
Location: Room 226
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-49C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 2 Cement Board (Smooth Texture), Gray
Location: Room 262
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-50A	White	2	0	0	0	0	0	0	35	25	0	0	0	38

Description: Type 1 Mud Fitting, White
Location: Room 218
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-50B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting, White
Location: Room 226
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-50C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting, White
Location: Room 281
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-51A	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 4 2'x4' Ceiling Tile (Holes/Dashes), White
Location: Room 258
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-51B	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 4 2'x4' Ceiling Tile (Holes/Dashes), White
Location: Room 367
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-51C	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 4 2'x4' Ceiling Tile (Holes/Dashes), White
Location: Room 318
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-52A	Tan	2	0	0	0	0	0	0	0	0	0	0	0	98

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 393
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-52B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 331
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-52C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 372
Comments:
Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-53A	Black	15	0	0	0	0	0	0	0	0	0	0	0	85

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 393
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-53B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 331
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-53C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 372
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-54A	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 393
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-54B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 331
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-54C	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 372
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-55A	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Black Color
Location: Room 393
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-55B	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Black Color
Location: Room 331
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-55C	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Black Color
Location: Room 372
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-56A	Multi	0	0	0	0	0	0	2	0	5	0	0	0	93

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 393
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-56B	Multi	0	0	0	0	0	0	2	0	5	0	0	0	93

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 331
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-56C	Multi	0	0	0	0	0	0	2	0	5	0	0	0	93

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 372
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-57A	White	2	0	0	0	0	0	0	0	0	0	0	0	98

Description: Type 1 GWB Joint Compound, White Color
Location: Room 393
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-57B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 GWB Joint Compound, White Color
Location: Room 331
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-57C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 GWB Joint Compound, White Color
Location: Room 372
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-57AA	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceiling Tile (Glue On), White Color
Location: Room 313
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-57BB	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceilng Tile (Glue On), White Color
Location: Room 313
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-57CC	Multi	0	0	0	0	0	0	0	95	0	0	0	0	5

Description: Type 3 12"x12" Ceiling Tile (Glue On), White Color
Location: Room 317
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010411-58A	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 3 12"x12" Ceiling Tile Mastic, Black Color
Location: Room 313
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-58B	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 3 12"x12" Ceiling Tile Mastic, Black Color
Location: Room 331
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-58C	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 3 12"x12" Ceiling Tile Mastic, Black Color
Location: Room 317
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-59A	Black	0	0	0	0	0	0	0	90	TR	0	0	0	10

Description: Type 1 Wall Insulation, Black Color
Location: Room 315
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-59B	Black	0	0	0	0	0	0	0	90	TR	0	0	0	10

Description: Type 1 Wall Insulation, Black Color
Location: Room 315
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-59C	Black	0	0	0	0	0	0	0	90	TR	0	0	0	10

Description: Type 1 Wall Insulation, Black Color
Location: Room 315
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-60A	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 1 2'x2' Ceiling Tile (Small Holes), White Color
Location: Room 336
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-60B	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 1 2'x2' Ceiling Tile (Small Holes), White Color
Location: Room 331
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-60C	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 1 2'x2' Ceiling Tile (Small Holes), White Color
Location: Room 361
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-61A	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4 Ceiling Tile (Large Holes), White Color
Location: Room 336
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-61B	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4 Ceiling Tile (Large Holes), White Color
Location: Room 331
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-61C	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4 Ceiling Tile (Large Holes), White Color
Location: Room 361
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-62A	Gray	2	0	0	0	0	0	0	40	5	0	0	0	53

Description: Type 1 Mud Fitting, White Color
Location: Room 375
Comments: Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-62B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting, White Color
Location: Room 306
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-62C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Mud Fitting, White Color
Location: Room 367
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-63A	Tan	2	0	0	0	0	0	0	0	0	0	0	0	98

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 437
Comments: Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-63B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 435A
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-63C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile, Multi-Tan Color
Location: Room 417A
Comments: Analyzed: No

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-64A	Black	10	0	0	0	0	0	0	0	0	0	0	0	90

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 437
Comments:
Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-64B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 435A
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-64C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 12"x12" Floor Tile Mastic, Black Color
Location: Room 417A
Comments:
Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-65A	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 437
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-65B	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 435A
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-65C	Black	0	0	0	0	0	0	0	0	0	0	0	0	100

Description: Type 1 Cove Base, Black Color
Location: Room 417A
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-66A	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 437
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-66B	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 435A
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-66C	Brown	0	0	0	0	0	0	0	0	0	0	0	TR	100

Description: Type 1 Cove Base Mastic, Brown Color
Location: Room 417A
Comments: Recommend TEM.
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-67A	White	0	0	0	0	0	0	2	0	2	0	0	0	96

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 437
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-67B	Multi	0	0	0	0	0	0	2	0	10	0	0	0	88

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 435A
Comments:
Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-67C	Multi	0	0	0	0	0	0	2	0	5	0	0	0	93

Description: Type 1 Gypsum Wallboard, White Color
Location: Room 417A
Comments:
Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-68A	White	2	0	0	0	0	0	0	0	0	0	0	0	98

Description: Type 1 GWB Joint Compound, White Color
Location: Room 437
Comments: Is asbestos present? Yes. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-68B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 GWB Joint Compound, White Color
Location: Room 435A
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-68C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 GWB Joint Compound, White Color
Location: Room 417A
Comments: Analyzed: No

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-69A	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile (Small Holes), White Color
Location: Room 437
Comments: Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-69B	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile (Small Holes), White Color
Location: Room 435B
Comments: Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-69C	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 1 2'x4' Ceiling Tile (Small Holes), White Color
Location: Room 417
Comments: Is asbestos present? No. Analyzed: Yes

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852
Client Reference: Clark Hall
Method: EPA/600/R-93/116

Batch: B73001
Date Sampled: Various
Date Received: 1/7/2011
Date Analyzed: 1/10/2011
Date of Report: 1/13/2011

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-70A	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4' CeilingTile (Large Holes), White Color
Location: Room 437
Comments: Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-70B	Multi	0	0	0	0	0	0	0	40	40	0	0	0	20

Description: Type 2 2'x4' CeilingTile (Large Holes), White Color
Location: Room 435B
Comments: Is asbestos present? No. Analyzed: Yes

Sample ID	Color	Asbestos %						Non-Asbestos %						
		CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
CH-AB-010511-70C	Multi	0	0	0	0	0	0	0	35	35	0	0	0	30

Description: Type 2 2'x4' CeilingTile (Large Holes), White Color
Location: Room 417
Comments: Is asbestos present? No. Analyzed: Yes

Asbestos Codes: CHR = Chrysotile AMO = Amosite CRO = Crocidolite ACT = Actinolite TRE = Tremolite ANT = Anthophyllite
Non-Asbestos Codes: FBG = Fiberglass MNW = Mineral Wool CEL = Cellulose HAR = Hair SYN = Synthetic OTH = Other NON = Non-Fibrous Minerals

Note: To create a unique lab sample ID, use the Batch # and the Sample ID (exemple: [Batch #] - [Sample ID]).

* All results are in percentage.

Analyst: Dan Pine

ProScience Analytical Services, Inc

January 19, 2011

Richard DeLorme
The Empirical Company
7320 West Hood Place
Suite 101
Kennewick, WA 99336

Dear Richard DeLorme,

The enclosed analytical results have been obtained by using the EPA/600/R-93/116 method. The "Visual Estimate" quantitative method is generally used for determining the percentage of asbestos and other components of the sample. "The Point Counting" method may also be used upon client request or at the analyst discretion. The Point Count method is usually recommended when the sample contains less than 10% asbestos by Visual estimate. Asbestos content less than 1% is recorded on the report as TR (trace).

The Quality Control data related to the samples analyzed is available upon client's written request. ProScience Analytical Services Inc., assumes no responsibility for potential sample contamination that may have occurred during the sample collection process or erroneous data provided by the client.

The enclosed results may not be used under any circumstances as product endorsement by any US government agency including NIST/NVLAP.

All Laboratory records are retained for at least three years unless otherwise directed in writing by the client. The actual samples are retained for a period of two months and written request is necessary in order to be retained for a longer period of time. All analytical results and records are considered strictly confidential and will not be released under any circumstances to anyone except the actual client. The analytical results included in this report apply only to the items tested.

If you have any questions please contact the Laboratory Manager or the Laboratory Director.

Sincerely,

Valerica Stanca, Optical Asbestos Manager

Adrian Stanca, Laboratory Director

Enclosure: Version 2
LAB BATCH ID: B 73063 CLIENT PROJECT ID: 2852-1
Client Ref: WSU Clark Hall
NVLAP Lab Code 200090-0; CT ID# PH-0209; MA ID# AA000156; ME ID# LB-055; ME ID# LA-056; AIHA ID# 102754; VT ID# AL016876; PH ID# 218(TEM,PLM); RI ID# 186.

ProScience Analytical Services, Inc.

Client Name: The Empirical Company
PO #: N/A
Client Project #: 2852-1
Client Reference: WSU Clark Hall
Method: EPA/600/R-93/116

Batch: B73063
Date Sampled: 1/12/2011
Date Received: 1/17/2011
Date Analyzed: 1/19/2011
Date of Report: 1/19/2011

Lab ID	Field ID	Color	Asbestos						Non-Asbestos						
			CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
B823974	CH-AB-011211-1A	Multi	10	0	0	0	0	0	20	0	10	0	0	0	60

Description: Type 1 Roof-Silver Coat, Silver & Black Color
Location: N/A
Comments:
Is asbestos present? Yes. Analyzed: Yes

Lab ID	Field ID	Color	Asbestos						Non-Asbestos						
			CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
B823975	CH-AB-011211-1B		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Roof-Silver Coat, Silver & Black Color
Location: N/A
Comments:
Is asbestos present? No. Analyzed: No

Lab ID	Field ID	Color	Asbestos						Non-Asbestos						
			CHR	AMO	CRO	ACT	TRE	ANT	FBG	MNW	CEL	HAR	SYN	OTH	NON
B823976	CH-AB-011211-1C		0	0	0	0	0	0	0	0	0	0	0	0	0

Description: Type 1 Roof-Silver Coat, Silver & Black Color
Location: N/A
Comments:
Is asbestos present? No. Analyzed: No

Asbestos Codes: CHR = Chrysotile, AMO = Amosite, CRO = Crocidolite, ACT = Actinolite, TRE = Tremolite, ANT = Anthophyllite
Non-Asbestos Codes: FBG = Fiberglass, MNW = Mineral Wool, CEL = Cellulose, HAR = Hair, SYN = Synthetic, OTH = Other, NON = Non-Fibrous Minerals

* All results are in percentage.

Analyst: Stefanie Bishop

EMSL Analytical, Inc.
7330 S. Alton Way Building 12 Suite A, Centennial, CO 80112
Phone: (303) 740-5700 Fax: (303) 741-1400 Email: denverlab@emsl.com

Attn: **Richard DeLorme**
The Empirical Company
7320 West Hood Place
Suite 101
Kennewick, WA 99336

Fax: (509) 735-1859 Phone: (509) 735-1848
Project: **Clark Hall/MCC Asbestos Survey 2852-1**

Customer ID: EMPI78
Customer PO:
Received: 01/14/11 11:45 AM
EMSL Order: 221100124

EMSL Proj:
Analysis Date: 1/27/2011

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
CH-AB-122910-1A *221100124-0001*	Type 1 Pipe Insulation - Basement	White Fibrous Homogeneous		85% Non-fibrous (other)	**15% Amosite**
CH-AB-122910-1B *221100124-0002*	Type 1 Pipe Insulation - Basement				**Stop Positive (Not Analyzed)**
CH-AB-122910-1C *221100124-0003*	Type 1 Pipe Insulation - Basement				**Stop Positive (Not Analyzed)**
CH-AB-122910-2A *221100124-0004*	Type 2A Floor Tile Mastic	Tan Non-Fibrous Homogeneous	2% Fibrous (other)	98% Non-fibrous (other)	**None Detected**
CH-AB-122910-2B *221100124-0005*	Type 2A Floor Tile Mastic	Tan Non-Fibrous Homogeneous	2% Fibrous (other)	98% Non-fibrous (other)	**None Detected**
CH-AB-010311-3A *221100124-0006*	Type 3 Ceiling Tile Mastic - 105	Brown Non-Fibrous Homogeneous	5% Fibrous (other)	95% Non-fibrous (other)	**None Detected**
CH-AB-010311-3B *221100124-0007*	Type 3 Ceiling Tile Mastic - 107	Brown Non-Fibrous Homogeneous	5% Fibrous (other)	95% Non-fibrous (other)	**None Detected**

Initial report from 01/27/2011 15:56:24

Analyst(s)

Erin Orthun (25)

Erin Orthun, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. 7330 S. Alton Way Building 12 Suite A, Centennial CO NVLAP Lab Code 200828-0

EMSL Analytical, Inc.
7330 S. Alton Way Building 12 Suite A, Centennial, CO 80112
Phone: (303) 740-5700 Fax: (303) 741-1400 Email: denverlab@emsl.com

Attn: **Richard DeLorme**
The Empirical Company
7320 West Hood Place
Suite 101
Kennewick, WA 99336

Fax: (509) 735-1859 Phone: (509) 735-1848
Project: **Clark Hall/MCC Asbestos Survey 2852-1**

Customer ID: EMPI78
Customer PO:
Received: 01/14/11 11:45 AM
EMSL Order: 221100124

EMSL Proj:
Analysis Date: 1/27/2011

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**% Non-Fibrous**	**% Type**
CH-AB-010311-3C *221100124-0008*	Type 3 Ceiling Tile Mastic - 111	Brown Non-Fibrous Homogeneous	5%	Fibrous (other)	95% Non-fibrous (other)	**None Detected**
CH-AB-010311-4A-Linoleum *221100124-0009*	Type 1 Sheet Vinyl Flooring - 221	Brown Fibrous Heterogeneous	20% 10% 5%	Cellulose Synthetic Glass	65% Non-fibrous (other)	**None Detected**
CH-AB-010311-4A-Mastic *221100124-0009A*	Type 1 Sheet Vinyl Flooring - 221	Tan Non-Fibrous Homogeneous			100% Non-fibrous (other)	**None Detected**
CH-AB-010311-4B *221100124-0010*	Type 1 Sheet Vinyl Flooring - 221	Brown Fibrous Heterogeneous	20% 10% 5%	Cellulose Synthetic Glass	65% Non-fibrous (other)	**None Detected**
CH-AB-010411-5A *221100124-0011*	Type 1 Mud Fitting - 218	Gray/White Fibrous Heterogeneous	10% 25%	Cellulose Min. Wool	62% Non-fibrous (other)	**3% Chrysotile**
CH-AB-010411-5B *221100124-0012*	Type 1 Mud Fitting - 226					**Stop Positive (Not Analyzed)**

Initial report from 01/27/2011 15:56:24

Analyst(s)

Erin Orthun (25)

Erin Orthun, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. 7330 S. Alton Way Building 12 Suite A, Centennial CO NVLAP Lab Code 200828-0

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Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**		**% Non-Fibrous**	**% Type**
CH-AB-010411-5C *221100124-0013*	Type 1 Mud Fitting - 281					**Stop Positive (Not Analyzed)**
CH-AB-010511-6A *221100124-0014*	Type 1 2'x4' Ceiling Tile - 336	Gray/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool		10% Non-fibrous (other) 10% Perlite	**None Detected**
CH-AB-010511-6B *221100124-0015*	Type 1 2'x4' Ceiling Tile - 331	Gray/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool		10% Non-fibrous (other) 10% Perlite	**None Detected**
CH-AB-010511-6C *221100124-0016*	Type 1 2'x4' Ceiling Tile - 361	Gray/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool		10% Non-fibrous (other) 10% Perlite	**None Detected**
CH-AB-010511-7A *221100124-0017*	Type 2 2'x4' Ceiling Tile - 437	Tan/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool		10% Non-fibrous (other) 10% Perlite	**None Detected**
CH-AB-010511-7B *221100124-0018*	Type 2 2'x4' Ceiling Tile - 435A	Tan/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool		10% Non-fibrous (other) 10% Perlite	**None Detected**
CH-AB-010511-7C *221100124-0019*	Type 2 2'x4' Ceiling Tile - 417A	Tan/White Fibrous Heterogeneous	40% Cellulose 40% Min. Wool		10% Non-fibrous (other) 10% Perlite	**None Detected**

Initial report from 01/27/2011 15:56:24

Analyst(s)

Erin Orthun (25)

Erin Orthun, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. 7330 S. Alton Way Building 12 Suite A, Centennial CO NVLAP Lab Code 200828-0

RADON ANALYSIS REPORT

PRO-LAB™

1675 North Commerce Parkway, Weston, FL 33326 (954) 384-4446

TEST ID NUMBER: 610847
DATE RECEIVED: 01/14/2011
REPORT DATE: 01/18/2011

THE EMPIRICAL COMPANY(R.DELORME)
7320 W HOOD PL, SUITE 101
KENNEWICK, WA 99336

TEST LOCATION
PULLMAN, WA/WSU CAMPUS
BENTON COUNTY
KENNEWICK, WA 99336

This is a confidential report of the radon samples that were submitted to our laboratory for measurements of radon-222 levels. The results represent the amount of radon that was present in the air during the time of sampling. The radon is measured in our laboratory using the liquid scintillation method (EPA 402-R-92-004). This report will not be released to anyone without your permission except as required by individual state laws and guidelines.

HERE ARE YOUR TEST RESULTS

VIAL #	ROOM TESTED	DATE OPENED	DATE CAPPED	DATE ANALYZED	RADON LEVEL
2412382	1ST FLOOR CLARK HALL	Jan 08, 2011 8:30 AM	Jan 12, 2011 10:55 AM	Jan 15, 2011 6:36 AM	0.2 pCi/L
2412251	1ST FLOOR CLARK HALL	Jan 08, 2011 8:30 AM	Jan 12, 2011 10:55 AM	Jan 15, 2011 6:47 AM	0.2 pCi/L

AVERAGE RADON LEVEL (average result of two tests) : **0.2 pCi/L**

THE EPA RECOMMENDS THAT YOU FIX YOUR HOME IF THE RADON LEVEL IS 4 PICOCURIES (PCI/L) OR HIGHER.
Please read the EPA Citizen's Guide to Radon at www.epa.gov/radon/pubs/citguide.html. Residents of New Jersey should read "Radon Testing and Mitigation: The Basics" at http://njradon.org/download/mitbas.pdf. Radon levels less than 4 pCi/L still pose a risk. You may want to take additional measurements because radon levels can vary with the seasons. You may also want to consider doing a long term test to determine the average radon concentrations over a longer period of time. If the radon level is 4.0 pCi/L or higher you should perform either a long-term test or a second short-term test. If the radon level is higher than 10 pCi/L you should perform a second short-term test immediately. If you would like to know more about radon mitigation, or have other questions, please call us at **(954) 384-4446.**

LIMITATIONS OF DATA AND PRODUCT LIABILITY
PRO-LAB expressly disclaims any and all liability for any special, incidental, or consequential damages resulting directly or indirectly from the improper use of or improper interpretation of the radon product or its results. Any delays in receipt of the test sample by PRO-LAB shall be the sole responsibility of the purchaser and their legal remedy shall be limited to recourse with their chosen carrier. Additionally, PRO-LAB shall not be responsible for the improper placement of the test canister nor shall PRO-LAB be liable for results derived directly or indirectly from the improper placement of said test canister. PRO-LAB, its agents, its retailers, its distributors, and the manufacturers' sole liability are limited to the cost for the replacement of the test canister itself only.

Malissa Sears, RMS
NEHA-NRPP CERT# 104126RT
AARST ID#779

Trevor Luks, RMS
PRO-LAB NEHA ID# 101461AL

James E. McDonnell IV
NEHA-NRPP ID# 103456RT
AARST ID#558

program revision #: 102710

APPENDIX C

XRF DATA LOGS

Reading No	Time	Type	Duration	Units	Sequence	Component	Substrate	Side	Condition	Color	Site	Inspector	Floor	Room	Results	Action Level	PbL
																	0.91
1	12/28/2010 11:45	SHUTTER_CAL	62.17	cps	Final						Clark Hall	ESD	FIRST		Null	1	1.2
2	12/28/2010 11:53	PAINT	1.69	mg / cm ^2	Final						Clark Hall	ESD	FIRST		Negative	1	0.9
3	12/28/2010 11:55	PAINT	10.2	mg / cm ^2	Final						Clark Hall	ESD	FIRST		Negative	1	0.9
4	12/28/2010 11:55	PAINT	6.81	mg / cm ^2	Final						Clark Hall	ESD	FIRST		Negative	1	0.9
5	12/28/2010 11:56	PAINT	7.36	mg / cm ^2	Final						Clark Hall	ESD	FIRST		Negative	1	0.9
6	12/28/2010 12:26	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	Clark Hall	ESD	FIRST	131	Negative	1	0.14
7	12/28/2010 12:42	PAINT	1.13	mg / cm ^2	Final	DOORJAMB	METAL	A	INTACT	WHITE	Clark Hall	ESD	FIRST	131	Negative	1	0.05
8	12/28/2010 12:42	PAINT	1.13	mg / cm ^2	Final	DOORJAMB	METAL	A	INTACT	WHITE	Clark Hall	ESD	FIRST	131	Negative	1	0.02
9	12/28/2010 12:47	PAINT	1.13	mg / cm ^2	Final	DOOR	WOOD	A	INTACT	VARNISH	Clark Hall	ESD	FIRST	131	Negative	1	0
10	12/28/2010 12:48	PAINT	3.4	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	VARNISH	Clark Hall	ESD	FIRST	131	Negative	1	0.4
11	12/28/2010 12:48	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	VARNISH	Clark Hall	ESD	FIRST	131	Negative	1	0.19
12	12/28/2010 12:49	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	VARNISH	Clark Hall	ESD	FIRST	131	Negative	1	0.23
13	12/28/2010 12:54	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.27
14	12/28/2010 13:37	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.14
15	12/28/2010 13:38	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.5
16	12/28/2010 13:39	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.24
17	12/28/2010 13:40	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.13
18	12/28/2010 13:41	PAINT	1.13	mg / cm ^2	Final	RADIATOR	METAL	B	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.04
19	12/28/2010 13:42	PAINT	1.14	mg / cm ^2	Final	DOORJAMB	METAL	C	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.05
20	12/28/2010 13:43	PAINT	1.14	mg / cm ^2	Final	DOORJAMB	METAL	C	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.03
21	12/28/2010 13:43	PAINT	1.13	mg / cm ^2	Final	DOOR	WOOD	C	INTACT	VARNISH	Clark Hall	ESD	FIRST	132	Negative	1	0.01
22	12/28/2010 14:08	PAINT	1.13	mg / cm ^2	Final	DOOR	WOOD	C	INTACT	VARNISH	Clark Hall	ESD	FIRST	134	Negative	1	0.01
23	12/28/2010 14:09	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	C	INTACT	BROWN	Clark Hall	ESD	FIRST	134	Negative	1	0.12
24	12/28/2010 14:10	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	C	INTACT	BROWN	Clark Hall	ESD	FIRST	134	Negative	1	0.07
25	12/28/2010 14:11	PAINT	3.4	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BROWN	Clark Hall	ESD	FIRST	134	Negative	1	0.19
26	12/28/2010 14:11	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BROWN	Clark Hall	ESD	FIRST	134	Negative	1	0.14
27	12/28/2010 14:11	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BROWN	Clark Hall	ESD	FIRST	134	Negative	1	0.14
28	12/28/2010 14:14	PAINT	2.83	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	RED	Clark Hall	ESD	FIRST	134	Negative	1	0.6
29	12/28/2010 14:15	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	Clark Hall	ESD	FIRST	134	Negative	1	0.11
30	12/28/2010 14:17	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	Clark Hall	ESD	FIRST	134	Negative	1	0.13
31	12/28/2010 14:17	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	Clark Hall	ESD	FIRST	134	Negative	1	0.19
32	12/28/2010 14:23	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	Clark Hall	ESD	FIRST	133	Negative	1	0.15
33	12/28/2010 14:24	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	Clark Hall	ESD	FIRST	133	Negative	1	0.4
34	12/28/2010 14:24	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	Clark Hall	ESD	FIRST	133	Negative	1	0.13
35	12/28/2010 14:25	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	Clark Hall	ESD	FIRST	133	Negative	1	0.22
36	12/28/2010 14:26	PAINT	1.12	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	BEIGE	Clark Hall	ESD	FIRST	133	Negative	1	0.09
37	12/28/2010 14:26	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	BEIGE	Clark Hall	ESD	FIRST	133	Negative	1	0.03
38	12/28/2010 14:27	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	WOOD	A	INTACT		Clark Hall	ESD	FIRST	133	Negative	1	0.01
39	12/28/2010 14:31	PAINT	1.14	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	BEIGE	Clark Hall	ESD	FIRST	135	Negative	1	0.07
40	12/28/2010 14:31	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	BEIGE	Clark Hall	ESD	FIRST	135	Negative	1	0.13
41	12/28/2010 14:32	PAINT	1.14	mg / cm ^2	Final	DOOR	WOOD	A	INTACT		Clark Hall	ESD	FIRST	135	Negative	1	0.01
42	12/28/2010 14:32	PAINT	1.14	mg / cm ^2	Final	DOOR	WOOD	A	INTACT		Clark Hall	ESD	FIRST	135	Negative	1	0
43	12/28/2010 14:33	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	Clark Hall	ESD	FIRST	135	Negative	1	0.17
44	12/28/2010 14:33	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	Clark Hall	ESD	FIRST	135	Negative	1	0.5
45	12/28/2010 14:34	PAINT	2.28	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	Clark Hall	ESD	FIRST	135	Negative	1	0.1
46	12/28/2010 14:34	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	Clark Hall	ESD	FIRST	135	Negative	1	0.18

47	12/28/2010 14:44	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	Clark Hall	ESD	FIRST	135	Negative	1	0.13
48	12/28/2010 14:44	PAINT	4.55	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	Clark Hall	ESD	FIRST	135	Negative	1	0.8
49	12/28/2010 14:45	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	Clark Hall	ESD	FIRST	135	Negative	1	0.17
50	12/28/2010 14:47	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	C	INTACT	BEIGE	Clark Hall	ESD	FIRST	135	Negative	1	0.05
51	12/28/2010 14:47	PAINT	1.14	mg / cm ^2	Final	DOOR JAMB	METAL	C	INTACT	BEIGE	Clark Hall	ESD	FIRST	135	Negative	1	0.06
52	12/28/2010 14:48	PAINT	1.12	mg / cm ^2	Final	DOOR	WOOD	C	INTACT		Clark Hall	ESD	FIRST	135	Negative	1	0.03
53	12/28/2010 14:52	PAINT	1.13	mg / cm ^2	Final	DOOR	WOOD	A	INTACT		Clark Hall	ESD	FIRST	137	Negative	1	0.01
54	12/28/2010 14:53	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT		Clark Hall	ESD	FIRST	137	Negative	1	0.05
55	12/28/2010 14:53	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT		Clark Hall	ESD	FIRST	137	Negative	1	0.1
56	12/28/2010 14:54	PAINT	1.12	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT		Clark Hall	ESD	FIRST	137	Negative	1	0.08
57	12/28/2010 14:55	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	Clark Hall	ESD	FIRST	137	Negative	1	0.2
58	12/28/2010 14:55	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	Clark Hall	ESD	FIRST	137	Negative	1	0.4
59	12/28/2010 14:55	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	Clark Hall	ESD	FIRST	137	Negative	1	0.16
60	12/28/2010 14:55	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	Clark Hall	ESD	FIRST	137	Negative	1	0.2
61	12/28/2010 15:00	PAINT	6.8	mg / cm ^2	Final						Clark Hall	ESD	FIRST		Negative	1	0.9
62	12/28/2010 15:01	PAINT	6.24	mg / cm ^2	Final						Clark Hall	ESD	FIRST		Negative	1	0.9
63	12/28/2010 15:01	PAINT	9.06	mg / cm ^2	Final						Clark Hall	ESD	FIRST		Negative	1	0.9
64	12/28/2010 17:21	SHUTTER_CAL	62.05	cps	Final												1.06
65	12/28/2010 17:21	PAINT	6.2	mg / cm ^2	Final										Negative	1	0.9
66	12/28/2010 17:21	PAINT	2.82	mg / cm ^2	Final										Positive	1	1.3
67	12/28/2010 17:21	PAINT	6.2	mg / cm ^2	Final										Negative	1	0.9
68	12/28/2010 17:30	PAINT	1.13	mg / cm ^2	Final	DOOR	WOOD	A	INTACT		CLARK HALL	ESD	FIRST	139	Negative	1	0
69	12/28/2010 17:31	PAINT	1.12	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	139	Negative	1	0.06
70	12/28/2010 17:31	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	139	Negative	1	0.05
71	12/28/2010 17:33	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	139	Negative	1	0.3
72	12/28/2010 17:33	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	139	Negative	1	0.4
73	12/28/2010 17:33	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FIRST	139	Negative	1	0.23
74	12/28/2010 17:34	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	139	Negative	1	0.13
75	12/28/2010 17:38	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	141	Negative	1	0.14
76	12/28/2010 17:38	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	141	Negative	1	0.4
77	12/28/2010 17:38	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FIRST	141	Negative	1	0.2
78	12/28/2010 17:39	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	141	Negative	1	0.18
79	12/28/2010 17:40	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	141	Negative	1	0.09
80	12/28/2010 17:40	PAINT	1.12	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	141	Negative	1	0.02
81	12/28/2010 17:43	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	143	Negative	1	0.12
82	12/28/2010 17:43	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	143	Negative	1	0.6
83	12/28/2010 17:44	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	143	Negative	1	0.15
84	12/28/2010 17:44	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	143	Negative	1	0.07
85	12/28/2010 17:45	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	143	Negative	1	0.06
86	12/28/2010 17:45	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	143	Negative	1	0.07
87	12/28/2010 18:22	PAINT	1.13	mg / cm ^2	Final	WALL	CONCRETE	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	145	Negative	1	0.25
88	12/28/2010 18:22	PAINT	1.13	mg / cm ^2	Final	WALL	CONCRETE	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	145	Negative	1	0.05
89	12/28/2010 18:23	PAINT	1.69	mg / cm ^2	Final	WALL	CONCRETE	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	145	Negative	1	0.06
90	12/28/2010 18:23	PAINT	1.69	mg / cm ^2	Final	WALL	CONCRETE	D	INTACT	RED	CLARK HALL	ESD	FIRST	145	Negative	1	0.5
91	12/28/2010 18:38	PAINT	3.42	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	147	Negative	1	0.6
92	12/28/2010 18:38	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	147	Negative	1	0.13
93	12/28/2010 18:38	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	147	Negative	1	0.23

94	12/28/2010 18:39	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	147	Negative	1	0.3
95	12/28/2010 18:39	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	147	Negative	1	0.07
96	12/28/2010 18:39	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FIRST	147	Negative	1	0.07
97	12/28/2010 18:39	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	147	Negative	1	0.12
98	12/28/2010 18:40	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	147	Negative	1	0.16
99	12/28/2010 18:54	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	149	Negative	1	0.11
100	12/28/2010 18:54	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	149	Negative	1	0.03
101	12/28/2010 18:54	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	149	Negative	1	0.04
102	12/28/2010 18:54	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	149	Negative	1	0.4
103	12/28/2010 18:55	PAINT	2.25 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FIRST	149	Negative	1	0.07
104	12/28/2010 18:55	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	149	Negative	1	0.07
105	12/28/2010 18:55	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	149	Negative	1	0.09
106	12/28/2010 19:05	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	151	Negative	1	0.16
107	12/28/2010 19:05	PAINT	2.25 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	151	Negative	1	0.4
108	12/28/2010 19:05	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FIRST	151	Negative	1	0.4
109	12/28/2010 19:05	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FIRST	151	Negative	1	0.14
110	12/28/2010 19:06	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	151	Negative	1	0.14
111	12/28/2010 19:06	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	151	Negative	1	0.06
112	12/28/2010 19:15	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	172	Negative	1	0.16
113	12/28/2010 19:16	PAINT	2.28 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	172	Negative	1	0.2
114	12/28/2010 19:16	PAINT	3.39 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	FIRST	172	Negative	1	0.7
115	12/28/2010 19:16	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	FIRST	172	Negative	1	0.7
116	12/28/2010 19:17	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	FIRST	172	Negative	1	0.6
117	12/28/2010 19:17	PAINT	2.28 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	FIRST	172	Negative	1	0.7
118	12/28/2010 19:17	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	172	Negative	1	0.16
119	12/28/2010 19:18	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	172	Negative	1	0.15
120	12/28/2010 19:18	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	172	Negative	1	0.15
121	12/28/2010 19:18	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	172	Negative	1	0.12
122	12/28/2010 19:18	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	172	Negative	1	0.16
123	12/28/2010 19:19	PAINT	2.83 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	172	Negative	1	0.15
124	12/28/2010 19:56	PAINT	3.4 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	112	Negative	1	0.13
125	12/28/2010 19:56	PAINT	2.83 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	112	Negative	1	0.5
126	12/28/2010 19:56	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	112	Negative	1	0.08
127	12/28/2010 19:56	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FIRST	112	Negative	1	0
128	12/28/2010 19:57	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FIRST	112	Negative	1	0.16
129	12/28/2010 19:58	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	112	Negative	1	0.18
130	12/28/2010 19:58	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FIRST	112	Negative	1	0.01
131	12/28/2010 20:08	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	152	Negative	1	0.13
132	12/28/2010 20:09	PAINT	3.4 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	152	Negative	1	0.7
133	12/28/2010 20:09	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	152	Negative	1	0.19
134	12/28/2010 20:09	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	152	Negative	1	0.19
135	12/28/2010 20:10	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	152	Negative	1	0.15
136	12/28/2010 20:10	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	152	Negative	1	0.13
137	12/28/2010 20:11	PAINT	2.83 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	RED	CLARK HALL	ESD	FIRST	152	Negative	1	0.7
138	12/28/2010 20:11	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	RED	CLARK HALL	ESD	FIRST	152	Negative	1	0.5
139	12/28/2010 20:21	PAINT	6.22 mg / cm ^2	Final						CLARK HALL	ESD	FIRST		Negative	1	0.9
140	12/28/2010 20:21	PAINT	6.24 mg / cm ^2	Final						CLARK HALL	ESD	FIRST		Negative	1	0.9

141	12/28/2010 20:22	PAINT	6.24	mg / cm ^2	Final							CLARK HALL	ESD	FIRST		Negative	1	0.9
																		0.93
142	12/29/2010 11:36	SHUTTER_CAL	62.18	cps	Final											Positive	1	1
143	12/29/2010 11:38	PAINT	20.33	mg / cm ^2	Final											Negative	1	0.9
144	12/29/2010 11:38	PAINT	6.8	mg / cm ^2	Final											Negative	1	0.9
145	12/29/2010 11:38	PAINT	6.21	mg / cm ^2	Final													
146	12/29/2010 11:54	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE		CLARK HALL	ESD	FIRST	100E	Negative	1	0.4
147	12/29/2010 11:55	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE		CLARK HALL	ESD	FIRST	100E	Negative	1	0.15
148	12/29/2010 11:55	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE		CLARK HALL	ESD	FIRST	100E	Negative	1	0.12
149	12/29/2010 11:56	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE		CLARK HALL	ESD	FIRST	100E	Negative	1	0.06
150	12/29/2010 11:56	PAINT	3.4	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE		CLARK HALL	ESD	FIRST	100E	Negative	1	0.4
151	12/29/2010 11:57	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE		CLARK HALL	ESD	FIRST	100E	Negative	1	0.04
152	12/29/2010 11:58	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE		CLARK HALL	ESD	FIRST	100E	Negative	1	0.08
153	12/29/2010 12:02	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE		CLARK HALL	ESD	FIRST	117	Negative	1	0.19
154	12/29/2010 12:02	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE		CLARK HALL	ESD	FIRST	117	Negative	1	0.04
155	12/29/2010 12:03	PAINT	2.81	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE		CLARK HALL	ESD	FIRST	117	Negative	1	0.5
156	12/29/2010 12:03	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE		CLARK HALL	ESD	FIRST	117	Negative	1	0.15
157	12/29/2010 12:05	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE		CLARK HALL	ESD	FIRST	119	Negative	1	0.1
158	12/29/2010 12:05	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE		CLARK HALL	ESD	FIRST	119	Negative	1	0.08
159	12/29/2010 12:06	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE		CLARK HALL	ESD	FIRST	119	Negative	1	0.4
160	12/29/2010 12:06	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE		CLARK HALL	ESD	FIRST	119	Negative	1	0.16
161	12/29/2010 12:08	PAINT	1.13	mg / cm ^2	Final	DOOR	WOOD	B	INTACT			CLARK HALL	ESD	FIRST	119	Negative	1	0.03
162	12/29/2010 12:08	PAINT	1.14	mg / cm ^2	Final	DOOR JAMB	METAL	B	INTACT	WHITE		CLARK HALL	ESD	FIRST	119	Negative	1	0.04
163	12/29/2010 12:09	PAINT	1.14	mg / cm ^2	Final	DOOR JAMB	METAL	B	INTACT	WHITE		CLARK HALL	ESD	FIRST	119	Negative	1	0.04
164	12/29/2010 12:13	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE		CLARK HALL	ESD	FIRST	121	Negative	1	0.23
165	12/29/2010 12:13	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED		CLARK HALL	ESD	FIRST	121	Negative	1	0.4
166	12/29/2010 12:14	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE		CLARK HALL	ESD	FIRST	121	Negative	1	0.14
167	12/29/2010 12:14	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE		CLARK HALL	ESD	FIRST	121	Negative	1	0.2
168	12/29/2010 12:15	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE		CLARK HALL	ESD	FIRST	123	Negative	1	0.23
169	12/29/2010 12:16	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE		CLARK HALL	ESD	FIRST	123	Negative	1	0.3
170	12/29/2010 12:16	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE		CLARK HALL	ESD	FIRST	123	Negative	1	0.2
171	12/29/2010 12:16	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE		CLARK HALL	ESD	FIRST	123	Negative	1	0.15
172	12/29/2010 12:18	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE		CLARK HALL	ESD	FIRST	125	Negative	1	0.15
173	12/29/2010 12:18	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED		CLARK HALL	ESD	FIRST	125	Negative	1	0.4
174	12/29/2010 12:18	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED		CLARK HALL	ESD	FIRST	125	Negative	1	0.15
175	12/29/2010 12:19	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE		CLARK HALL	ESD	FIRST	125	Negative	1	0.26
176	12/29/2010 12:22	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE		CLARK HALL	ESD	FIRST	126A	Negative	1	0.18
177	12/29/2010 12:22	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE		CLARK HALL	ESD	FIRST	126A	Negative	1	0.16
178	12/29/2010 12:23	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE		CLARK HALL	ESD	FIRST	126A	Negative	1	0.14
179	12/29/2010 12:23	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE		CLARK HALL	ESD	FIRST	126A	Negative	1	0.11
180	12/29/2010 12:24	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE		CLARK HALL	ESD	FIRST	126	Negative	1	0.12
181	12/29/2010 12:24	PAINT	2.29	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE		CLARK HALL	ESD	FIRST	126	Negative	1	0.14
182	12/29/2010 12:25	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE		CLARK HALL	ESD	FIRST	126	Negative	1	0.6
183	12/29/2010 12:25	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE		CLARK HALL	ESD	FIRST	126	Negative	1	0.13
184	12/29/2010 12:32	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BROWN		CLARK HALL	ESD	FIRST	122	Negative	1	0.6
185	12/29/2010 12:33	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BROWN		CLARK HALL	ESD	FIRST	122	Negative	1	0.25
186	12/29/2010 12:33	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BROWN		CLARK HALL	ESD	FIRST	122	Negative	1	0.19
187	12/29/2010 12:33	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BROWN		CLARK HALL	ESD	FIRST	122	Negative	1	0.11

188	12/29/2010 12:37	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	126A	Negative	1	0.12
189	12/29/2010 12:37	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FIRST	126A	Negative	1	0.08
190	12/29/2010 12:38	PAINT	3.39 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	FIRST	126A	Negative	1	0.6
191	12/29/2010 12:38	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	126A	Negative	1	0.11
192	12/29/2010 12:47	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FIRST	116	Negative	1	0.1
193	12/29/2010 12:47	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FIRST	116	Negative	1	0.5
194	12/29/2010 12:47	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FIRST	116	Negative	1	0.09
195	12/29/2010 12:48	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FIRST	116	Negative	1	0.18
196	12/29/2010 12:51	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	146	Negative	1	0.17
197	12/29/2010 12:52	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	FIRST	146	Negative	1	0.6
198	12/29/2010 12:52	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	146	Negative	1	0.1
199	12/29/2010 12:52	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	146	Negative	1	0.12
200	12/29/2010 12:53	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	146	Negative	1	0.08
201	12/29/2010 13:44	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	153	Negative	1	0.02
202	12/29/2010 13:45	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FIRST	153	Negative	1	0.03
203	12/29/2010 13:45	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	153	Negative	1	0.02
204	12/29/2010 13:45	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	153	Negative	1	0.03
205	12/29/2010 13:46	PAINT	1.15 mg / cm ^2	Final	DOOR	METAL	C	INTACT	BLUE	CLARK HALL	ESD	FIRST	153	Negative	1	0
206	12/29/2010 13:46	PAINT	1.13 mg / cm ^2	Final	DOOR	METAL	C	INTACT	BLUE	CLARK HALL	ESD	FIRST	153	Negative	1	0
207	12/29/2010 13:47	PAINT	1.13 mg / cm ^2	Final	DOOR JAMB	METAL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	153	Negative	1	0.18
208	12/29/2010 13:47	PAINT	1.13 mg / cm ^2	Final	DOOR JAMB	METAL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	153	Negative	1	0.07
209	12/29/2010 13:50	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	157	Negative	1	0.06
210	12/29/2010 13:50	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	157	Negative	1	0.07
211	12/29/2010 13:50	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	157	Negative	1	0.04
212	12/29/2010 13:51	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	157	Negative	1	0.07
213	12/29/2010 14:03	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	161	Negative	1	0.05
214	12/29/2010 14:04	PAINT	3.4 mg / cm ^2	Final	WALL	CONCRETE	B	INTACT	BEIGE	CLARK HALL	ESD	FIRST	161	Negative	1	0.11
215	12/29/2010 14:04	PAINT	2.83 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	161	Negative	1	0.07
216	12/29/2010 14:05	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	161	Negative	1	0.1
217	12/29/2010 14:18	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	105	Negative	1	0.13
218	12/29/2010 14:18	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FIRST	105	Negative	1	0.12
219	12/29/2010 14:19	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	105	Negative	1	0.11
220	12/29/2010 14:19	PAINT	2.83 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	105	Negative	1	0.11
221	12/29/2010 14:26	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	107	Negative	1	0.14
222	12/29/2010 14:27	PAINT	3.97 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	FIRST	107	Negative	1	0.7
223	12/29/2010 14:27	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	FIRST	107	Negative	1	0.1
224	12/29/2010 14:27	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	RED	CLARK HALL	ESD	FIRST	107	Negative	1	0.07
225	12/29/2010 14:28	PAINT	1.13 mg / cm ^2	Final	WALL	CERAMIC TILE	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	107	Positive	1	2.6
226	12/29/2010 14:31	PAINT	1.14 mg / cm ^2	Final	WALL	CERAMIC TILE	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	107	Positive	1	3.5
227	12/29/2010 14:32	PAINT	1.14 mg / cm ^2	Final	WALL	CERAMIC TILE	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	107	Negative	1	0.11
228	12/29/2010 14:32	PAINT	1.14 mg / cm ^2	Final	WALL	CERAMIC TILE	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	107	Negative	1	0.01
229	12/29/2010 14:44	PAINT	1.14 mg / cm ^2	Final	WALL	CERAMIC TILE	B	INTACT	BEIGE	CLARK HALL	ESD	FIRST	111	Positive	1	3.3
230	12/29/2010 14:44	PAINT	1.14 mg / cm ^2	Final	WALL	CERAMIC TILE	B	INTACT	BEIGE	CLARK HALL	ESD	FIRST	111	Positive	1	2.9
231	12/29/2010 14:45	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	111	Negative	1	0.11
232	12/29/2010 14:45	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FIRST	111	Negative	1	0.11
233	12/29/2010 14:45	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FIRST	111	Negative	1	0.13
234	12/29/2010 14:46	PAINT	3.39 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FIRST	111	Negative	1	0.7

235	12/29/2010 14:46	PAINT	5.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FIRST	111	Negative	1	0.6
236	12/29/2010 15:03	PAINT	6.76	mg / cm ^2	Final										Negative	1	0.9
237	12/29/2010 15:03	PAINT	6.81	mg / cm ^2	Final										Negative	1	0.9
238	12/29/2010 15:03	PAINT	6.23	mg / cm ^2	Final										Negative	1	0.9
239	12/29/2010 16:18	SHUTTER_CAL	62.22	cps	Final												0.97
240	12/29/2010 16:19	PAINT	7.91	mg / cm ^2	Final										Negative	1	0.9
241	12/29/2010 16:19	PAINT	19.84	mg / cm ^2	Final										Positive	1	1
242	12/29/2010 16:19	PAINT	6.78	mg / cm ^2	Final										Negative	1	0.9
243	12/29/2010 16:51	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	277	Negative	1	0.07
244	12/29/2010 16:51	PAINT	2.83	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	277	Negative	1	0.09
245	12/29/2010 16:52	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	SECOND	277	Negative	1	0.09
246	12/29/2010 16:52	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	RED	CLARK HALL	ESD	SECOND	277	Negative	1	0.4
247	12/29/2010 16:53	PAINT	1.13	mg / cm ^2	Final	DOOR	WOOD	D	INTACT		CLARK HALL	ESD	SECOND	277	Negative	1	0
248	12/29/2010 16:54	PAINT	1.13	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT		CLARK HALL	ESD	SECOND	277	Negative	1	0.09
249	12/29/2010 16:54	PAINT	1.14	mg / cm ^2	Final	DOOR JAMB	METAL	A	INTACT		CLARK HALL	ESD	SECOND	277	Negative	1	0.04
250	12/29/2010 17:01	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	275	Negative	1	0.1
251	12/29/2010 17:01	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	275	Negative	1	0.21
252	12/29/2010 17:02	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	275	Negative	1	0.11
253	12/29/2010 17:02	PAINT	3.4	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	275	Negative	1	0.4
254	12/29/2010 17:07	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	273	Negative	1	0.4
255	12/29/2010 17:07	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	273	Negative	1	0.06
256	12/29/2010 17:09	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	273	Negative	1	0.23
257	12/29/2010 17:09	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	273	Negative	1	0.07
258	12/29/2010 17:09	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	273	Negative	1	0.18
259	12/29/2010 17:09	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	273	Negative	1	0.05
260	12/29/2010 17:10	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	273	Negative	1	0.13
261	12/29/2010 17:12	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	273A	Negative	1	0.09
262	12/29/2010 17:13	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	273A	Negative	1	0.4
263	12/29/2010 17:13	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	273A	Negative	1	0.06
264	12/29/2010 17:14	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	273A	Negative	1	0.06
265	12/29/2010 17:17	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	273B	Negative	1	0
266	12/29/2010 17:17	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	273B	Negative	1	0.24
267	12/29/2010 17:18	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	273B	Negative	1	0.13
268	12/29/2010 17:18	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	273B	Negative	1	0.05
269	12/29/2010 17:24	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	273B	Negative	1	0.05
270	12/29/2010 17:25	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	273B	Negative	1	0.06
271	12/29/2010 17:25	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	273B	Negative	1	0.06
272	12/29/2010 17:25	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	273B	Negative	1	0.06
273	12/29/2010 17:28	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	279	Negative	1	0.13
274	12/29/2010 17:47	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	279	Negative	1	0.08
275	12/29/2010 17:47	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	279	Negative	1	0.1
276	12/29/2010 17:48	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	279	Negative	1	0.15
277	12/29/2010 17:51	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	281	Negative	1	0.13
278	12/29/2010 17:51	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	281	Negative	1	0.23
279	12/29/2010 17:52	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	SECOND	281	Negative	1	0.14
280	12/29/2010 17:52	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	281	Negative	1	0.18
281	12/29/2010 17:53	PAINT	2.28	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	283	Negative	1	0.2

282	12/29/2010 17:54	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	283	Negative	1	0.18
283	12/29/2010 17:54	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	SECOND	283	Negative	1	0.2
284	12/29/2010 17:54	PAINT	3.96 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	283	Negative	1	0.8
285	12/29/2010 17:56	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	285	Negative	1	0.1
286	12/29/2010 17:56	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	285	Negative	1	0.14
287	12/29/2010 17:57	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	285	Negative	1	0.29
288	12/29/2010 17:57	PAINT	4.53 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	285	Negative	1	0.5
289	12/29/2010 17:59	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	287	Negative	1	0.12
290	12/29/2010 17:59	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	287	Negative	1	0.09
291	12/29/2010 17:59	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	287	Negative	1	0.15
292	12/29/2010 18:00	PAINT	3.4 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	287	Negative	1	0.7
293	12/29/2010 18:02	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	289	Negative	1	0.5
294	12/29/2010 18:02	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	289	Negative	1	0.11
295	12/29/2010 18:02	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	289	Negative	1	0.14
296	12/29/2010 18:03	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	289	Negative	1	0.06
297	12/29/2010 18:04	PAINT	3.4 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	291	Negative	1	0.5
298	12/29/2010 18:04	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	291	Negative	1	0.14
299	12/29/2010 18:05	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	291	Negative	1	0.15
300	12/29/2010 18:05	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	291	Negative	1	0.17
301	12/29/2010 18:07	PAINT	3.4 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	293	Negative	1	0.6
302	12/29/2010 18:07	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	293	Negative	1	0.16
303	12/29/2010 18:07	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	293	Negative	1	0.11
304	12/29/2010 18:08	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	293	Negative	1	0.07
305	12/29/2010 18:09	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	295	Negative	1	0.22
306	12/29/2010 18:10	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	295	Negative	1	0.06
307	12/29/2010 18:10	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	295	Negative	1	0.18
308	12/29/2010 18:10	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	295	Negative	1	0.7
309	12/29/2010 18:12	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	297	Negative	1	0.12
310	12/29/2010 18:12	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	297	Negative	1	0.09
311	12/29/2010 18:12	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	297	Negative	1	0.5
312	12/29/2010 18:13	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	297	Negative	1	0.21
313	12/29/2010 18:15	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	299A	Negative	1	0.23
314	12/29/2010 18:15	PAINT	3.39 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	299A	Negative	1	0.4
315	12/29/2010 18:15	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	299A	Negative	1	0.11
316	12/29/2010 18:15	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	299A	Negative	1	0.23
317	12/29/2010 18:17	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	299	Negative	1	0.12
318	12/29/2010 18:17	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	299	Negative	1	0.14
319	12/29/2010 18:18	PAINT	2.26 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	299	Negative	1	0.12
320	12/29/2010 18:18	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	299	Negative	1	0.15
321	12/29/2010 18:20	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	201	Negative	1	0.15
322	12/29/2010 18:20	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	201	Negative	1	0.4
323	12/29/2010 18:21	PAINT	3.37 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	201	Negative	1	0.11
324	12/29/2010 18:21	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	201	Negative	1	0.16
325	12/29/2010 18:23	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	203	Negative	1	0.14
326	12/29/2010 18:24	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	203	Negative	1	0.4
327	12/29/2010 18:24	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	203	Negative	1	0.11
328	12/29/2010 18:25	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	203	Negative	1	0.26

329	12/29/2010 19:03	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	205	Negative	1	0.1
330	12/29/2010 19:03	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	205	Negative	1	0.3
331	12/29/2010 19:04	PAINT	3.4 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	205	Negative	1	0.5
332	12/29/2010 19:04	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	205	Negative	1	0.06
333	12/29/2010 19:06	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	207	Negative	1	0.07
334	12/29/2010 19:06	PAINT	3.39 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	207	Negative	1	0.5
335	12/29/2010 19:07	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	207	Negative	1	0.11
336	12/29/2010 19:07	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	207	Negative	1	0.16
337	12/29/2010 19:10	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	209	Negative	1	0.5
338	12/29/2010 19:11	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	209	Negative	1	0.12
339	12/29/2010 19:11	PAINT	2.82 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	209	Negative	1	0.4
340	12/29/2010 19:12	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	209	Negative	1	0.15
341	12/29/2010 19:16	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	211	Negative	1	0
342	12/29/2010 19:16	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	211	Negative	1	0
343	12/29/2010 19:17	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	211	Negative	1	0.02
344	12/29/2010 19:17	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	211	Negative	1	0
345	12/29/2010 19:21	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	211A	Negative	1	0.1
346	12/29/2010 19:21	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	211A	Negative	1	0.04
347	12/29/2010 19:21	PAINT	2.83 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	211A	Negative	1	0.5
348	12/29/2010 19:21	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	211A	Negative	1	0.14
349	12/29/2010 19:28	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	221C	Negative	1	0.09
350	12/29/2010 19:29	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	221C	Negative	1	0.25
351	12/29/2010 19:29	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	221C	Negative	1	0.17
352	12/29/2010 19:29	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	221C	Negative	1	0.5
353	12/29/2010 19:31	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	221B	Negative	1	0.19
354	12/29/2010 19:31	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	221B	Negative	1	0.14
355	12/29/2010 19:31	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	221B	Negative	1	0.19
356	12/29/2010 19:31	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	221B	Negative	1	0.18
357	12/29/2010 19:35	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	221A	Negative	1	0.15
358	12/29/2010 19:36	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	221A	Negative	1	0.08
359	12/29/2010 19:37	PAINT	2.84 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	221A	Negative	1	0.26
360	12/29/2010 19:39	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	221	Negative	1	0.16
361	12/29/2010 19:40	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	221	Negative	1	0.18
362	12/29/2010 19:40	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	221	Negative	1	0.11
363	12/29/2010 19:45	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	219	Negative	1	0.25
364	12/29/2010 19:45	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	219	Negative	1	0.1
365	12/29/2010 19:45	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	219	Negative	1	0.24
366	12/29/2010 19:46	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	219	Negative	1	0.27
367	12/29/2010 19:48	PAINT	2.25 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	223	Negative	1	0.5
368	12/29/2010 19:48	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	223	Negative	1	0.18
369	12/29/2010 19:49	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	223	Negative	1	0.14
370	12/29/2010 19:49	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	223	Negative	1	0.17
371	12/29/2010 19:51	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	231	Negative	1	0.13
372	12/29/2010 19:51	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	231	Negative	1	0.14
373	12/29/2010 19:52	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	231	Negative	1	0.12
374	12/29/2010 19:52	PAINT	3.4 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	231	Negative	1	0.4
375	12/29/2010 19:54	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	233	Negative	1	0.12

376	12/29/2010 19:54	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	233	Negative	1	0.12
377	12/29/2010 19:54	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	233	Negative	1	0.16
378	12/29/2010 19:54	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	233	Negative	1	0.4
379	12/29/2010 19:56	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	235	Negative	1	0.13
380	12/29/2010 19:56	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	235	Negative	1	0.23
381	12/29/2010 19:57	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	235	Negative	1	0.06
382	12/29/2010 19:57	PAINT	3.41	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	RED	CLARK HALL	ESD	SECOND	235	Negative	1	0.4
383	12/29/2010 19:58	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	237	Negative	1	0.08
384	12/29/2010 19:58	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	237	Negative	1	0.18
385	12/29/2010 19:59	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	237	Negative	1	0.08
386	12/29/2010 19:59	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	237	Negative	1	0.5
387	12/29/2010 20:00	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	239	Negative	1	0.11
388	12/29/2010 20:01	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	239	Negative	1	0.09
389	12/29/2010 20:01	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	239	Negative	1	0.07
390	12/29/2010 20:01	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	239	Negative	1	0.4
391	12/29/2010 20:03	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	241	Negative	1	0.06
392	12/29/2010 20:03	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	241	Negative	1	0.15
393	12/29/2010 20:03	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	241	Negative	1	0
394	12/29/2010 20:03	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	241	Negative	1	0.08
395	12/29/2010 20:05	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	243	Negative	1	0.1
396	12/29/2010 20:06	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	243	Negative	1	0.09
397	12/29/2010 20:06	PAINT	3.4	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	SECOND	243	Negative	1	0.5
398	12/29/2010 20:06	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	243	Negative	1	0.08
399	12/29/2010 20:11	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	SECOND	245	Negative	1	0.06
400	12/29/2010 20:11	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	SECOND	245	Negative	1	0.1
401	12/29/2010 20:11	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	SECOND	245	Negative	1	0.6
402	12/29/2010 20:11	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	SECOND	245	Negative	1	0.08
403	12/29/2010 20:13	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	247	Negative	1	0.06
404	12/29/2010 20:13	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	247	Negative	1	0.14
405	12/29/2010 20:13	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	SECOND	247	Negative	1	0.4
406	12/29/2010 20:14	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	247	Negative	1	0.09
407	12/29/2010 20:15	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	249	Negative	1	0.16
408	12/29/2010 20:15	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	249	Negative	1	0.09
409	12/29/2010 20:16	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	SECOND	249	Negative	1	0.5
410	12/29/2010 20:16	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	249	Negative	1	0.08
411	12/29/2010 20:19	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	RED	CLARK HALL	ESD	SECOND	251	Negative	1	0.5
412	12/29/2010 20:19	PAINT	2.83	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	SECOND	251	Negative	1	0.12
413	12/29/2010 20:20	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	SECOND	251	Negative	1	0.17
414	12/29/2010 20:20	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	251	Negative	1	0.12
415	12/29/2010 20:22	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	253	Negative	1	0.07
416	12/29/2010 20:23	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	253	Negative	1	0.6
417	12/29/2010 20:23	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	253	Negative	1	0.1
418	12/29/2010 20:23	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	253	Negative	1	0.11
419	12/29/2010 20:25	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	255	Negative	1	0.13
420	12/29/2010 20:25	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	255	Negative	1	0.6
421	12/29/2010 20:25	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	255	Negative	1	0.1
422	12/29/2010 20:25	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	255	Negative	1	0.4

423	12/29/2010 20:26	PAINT	3.38	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	257	Negative	1	0.13
424	12/29/2010 20:27	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	257	Negative	1	0.5
425	12/29/2010 20:27	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	257	Negative	1	0.09
426	12/29/2010 20:27	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	257	Negative	1	0.14
427	12/29/2010 20:28	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	259	Negative	1	0.14
428	12/29/2010 20:28	PAINT	3.41	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	259	Negative	1	0.5
429	12/29/2010 20:29	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	259	Negative	1	0.09
430	12/29/2010 20:29	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	259	Negative	1	0.24
431	12/29/2010 20:30	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	261	Negative	1	0.11
432	12/29/2010 20:30	PAINT	3.41	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	261	Negative	1	0.4
433	12/29/2010 20:31	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	261	Negative	1	0.14
434	12/29/2010 20:31	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	261	Negative	1	0.13
435	12/29/2010 20:32	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	263	Negative	1	0.28
436	12/29/2010 20:33	PAINT	3.38	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	263	Negative	1	0.6
437	12/29/2010 20:33	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	263	Negative	1	0.22
438	12/29/2010 20:33	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	263	Negative	1	0.18
439	12/29/2010 20:39	PAINT	6.22	mg / cm ^2	Final						CLARK HALL	ESD	SECOND		Null	1	1
440	12/29/2010 20:39	PAINT	19.81	mg / cm ^2	Final						CLARK HALL	ESD	SECOND		Positive	1	1
441	12/29/2010 20:39	PAINT	6.78	mg / cm ^2	Final						CLARK HALL	ESD	SECOND		Negative	1	0.9
442	12/30/2010 16:58	SHUTTER_CAL	62.21	cps	Final												0.95
443	12/30/2010 16:58	PAINT	9.04	mg / cm ^2	Final										Positive	1	1.1
444	12/30/2010 16:58	PAINT	20.34	mg / cm ^2	Final										Positive	1	1
445	12/30/2010 16:59	PAINT	7.32	mg / cm ^2	Final										Negative	1	0.9
446	12/30/2010 17:08	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	204	Negative	1	0.09
447	12/30/2010 17:09	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	204	Negative	1	0.15
448	12/30/2010 17:09	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	204	Negative	1	0
449	12/30/2010 17:09	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	204	Negative	1	0
450	12/30/2010 17:09	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	204	Negative	1	0.12
451	12/30/2010 17:10	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	204	Negative	1	0.12
452	12/30/2010 17:14	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	212	Negative	1	0
453	12/30/2010 17:14	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	212	Negative	1	0
454	12/30/2010 17:14	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	212	Negative	1	0.01
455	12/30/2010 17:15	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	212	Negative	1	0
456	12/30/2010 17:16	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	278	Negative	1	0
457	12/30/2010 17:16	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	278	Negative	1	0.18
458	12/30/2010 17:17	PAINT	2.28	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	278	Negative	1	0.19
459	12/30/2010 17:17	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	278	Negative	1	0.16
460	12/30/2010 17:19	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	214	Negative	1	0.1
461	12/30/2010 17:19	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	214	Negative	1	0.09
462	12/30/2010 17:20	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	214	Negative	1	0.12
463	12/30/2010 17:20	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	214	Negative	1	0.06
464	12/30/2010 17:21	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	272	Negative	1	0.5
465	12/30/2010 17:22	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	272	Negative	1	0.13
466	12/30/2010 17:22	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	272	Negative	1	0.15
467	12/30/2010 17:22	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	272	Negative	1	0.1
468	12/30/2010 17:24	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	216	Negative	1	0.05
469	12/30/2010 17:25	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	216	Negative	1	0.12

470	12/30/2010 17:25	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	216	Negative	1	0.4
471	12/30/2010 17:25	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	216	Negative	1	0.11
472	12/30/2010 17:27	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	224	Negative	1	0
473	12/30/2010 17:27	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	224	Negative	1	0
474	12/30/2010 17:28	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	224	Negative	1	0.01
475	12/30/2010 17:28	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	224	Negative	1	0
476	12/30/2010 17:29	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	226	Negative	1	0.12
477	12/30/2010 17:30	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	226	Negative	1	0.11
478	12/30/2010 17:30	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	SECOND	226	Negative	1	0.5
479	12/30/2010 17:30	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	226	Negative	1	0.1
480	12/30/2010 17:33	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	264	Negative	1	0.5
481	12/30/2010 17:33	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	264	Negative	1	0.11
482	12/30/2010 17:33	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	SECOND	264	Negative	1	0.11
483	12/30/2010 17:33	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	264	Negative	1	0.08
484	12/30/2010 17:37	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	228	Negative	1	0.11
485	12/30/2010 17:37	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	228	Negative	1	0.09
486	12/30/2010 17:38	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	SECOND	228	Negative	1	0.6
487	12/30/2010 17:38	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	228	Negative	1	0.28
488	12/30/2010 17:40	PAINT	3.37	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	234	Negative	1	0.4
489	12/30/2010 17:40	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	234	Negative	1	0.16
490	12/30/2010 17:41	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	SECOND	234	Negative	1	0.21
491	12/30/2010 17:41	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	234	Negative	1	0.08
492	12/30/2010 17:44	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	258	Negative	1	0
493	12/30/2010 17:44	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	258	Negative	1	0
494	12/30/2010 17:44	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	SECOND	258	Negative	1	0
495	12/30/2010 17:45	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	258	Negative	1	0
496	12/30/2010 17:48	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	SECOND	262	Negative	1	0.5
497	12/30/2010 17:48	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	SECOND	262	Negative	1	0.09
498	12/30/2010 17:48	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	SECOND	262	Negative	1	0.2
499	12/30/2010 17:49	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	SECOND	262	Negative	1	0.1
500	12/30/2010 17:52	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	RED	CLARK HALL	ESD	SECOND	267	Negative	1	0
501	12/30/2010 17:52	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	SECOND	267	Negative	1	0
502	12/30/2010 17:52	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	SECOND	267	Negative	1	0
503	12/30/2010 17:52	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	RED	CLARK HALL	ESD	SECOND	267	Negative	1	0
504	12/30/2010 17:55	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	RED	CLARK HALL	ESD	SECOND	266	Negative	1	0.09
505	12/30/2010 17:55	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	SECOND	266	Negative	1	0.09
506	12/30/2010 17:55	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	RED	CLARK HALL	ESD	SECOND	266	Negative	1	0.15
507	12/30/2010 17:55	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	RED	CLARK HALL	ESD	SECOND	266	Negative	1	0.09
508	12/30/2010 17:58	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	RED	CLARK HALL	ESD	SECOND	269	Negative	1	0.09
509	12/30/2010 17:58	PAINT	2.83	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	RED	CLARK HALL	ESD	SECOND	269	Negative	1	0.4
510	12/30/2010 17:58	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	RED	CLARK HALL	ESD	SECOND	269	Negative	1	0.06
511	12/30/2010 17:58	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	RED	CLARK HALL	ESD	SECOND	269	Negative	1	0.1
512	12/30/2010 18:03	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	SECOND	222	Negative	1	0.18
513	12/30/2010 18:03	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	SECOND	222	Negative	1	0.2
514	12/30/2010 18:03	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	SECOND	222	Negative	1	0.7
515	12/30/2010 18:03	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	SECOND	222	Negative	1	0.24
516	12/30/2010 18:11	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	369	Negative	1	0.1

517	12/30/2010 18:12	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	369	Negative	1	0.06
518	12/30/2010 18:12	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	369	Negative	1	0.08
519	12/30/2010 18:12	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	369	Negative	1	0.13
520	12/30/2010 18:15	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	373	Negative	1	0.19
521	12/30/2010 18:15	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	373	Negative	1	0.25
522	12/30/2010 18:15	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	373	Negative	1	0.17
523	12/30/2010 18:15	PAINT	2.28	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	373	Negative	1	0.27
524	12/30/2010 18:17	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	375	Negative	1	0.26
525	12/30/2010 18:18	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	375	Negative	1	0.09
526	12/30/2010 18:18	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	375	Negative	1	0.12
527	12/30/2010 18:18	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	375	Negative	1	0.15
528	12/30/2010 18:19	PAINT	4.52	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	375	Negative	1	0.7
529	12/30/2010 18:22	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	377	Negative	1	0.16
530	12/30/2010 18:22	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	377	Negative	1	0.12
531	12/30/2010 18:23	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	377	Negative	1	0.22
532	12/30/2010 18:24	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	377	Negative	1	0.5
533	12/30/2010 18:25	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	379	Negative	1	0.09
534	12/30/2010 18:26	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	379	Negative	1	0.13
535	12/30/2010 18:26	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	379	Negative	1	0.11
536	12/30/2010 18:26	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	379	Negative	1	0.5
537	12/30/2010 18:28	PAINT	3.42	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	381	Negative	1	0.6
538	12/30/2010 18:28	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	381	Negative	1	0.13
539	12/30/2010 18:29	PAINT	2.26	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	381	Negative	1	0.1
540	12/30/2010 18:29	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	381	Negative	1	0.24
541	12/30/2010 18:31	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	383	Negative	1	0.5
542	12/30/2010 18:31	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	383	Negative	1	0.15
543	12/30/2010 18:32	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	383	Negative	1	0.14
544	12/30/2010 18:32	PAINT	1.14	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	383	Negative	1	0.22
545	12/30/2010 18:34	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	385	Negative	1	0.5
546	12/30/2010 18:34	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	385	Negative	1	0.1
547	12/30/2010 18:34	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	385	Negative	1	0.11
548	12/30/2010 18:34	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	385	Negative	1	0.07
549	12/30/2010 18:36	PAINT	1.71	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	387	Negative	1	0.26
550	12/30/2010 18:36	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	387	Negative	1	0.06
551	12/30/2010 18:37	PAINT	3.39	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	387	Negative	1	0.24
552	12/30/2010 18:37	PAINT	2.82	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	387	Negative	1	0.5
553	12/30/2010 18:41	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	389	Negative	1	0.17
554	12/30/2010 18:42	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	389	Negative	1	0.13
555	12/30/2010 18:42	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	389	Negative	1	0.21
556	12/30/2010 18:42	PAINT	2.84	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	389	Negative	1	0.5
557	12/30/2010 18:47	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	393	Negative	1	0.18
558	12/30/2010 18:47	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	393	Negative	1	0.28
559	12/30/2010 18:47	PAINT	3.37	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	THIRD	393	Negative	1	0.7
560	12/30/2010 18:48	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	THIRD	393	Negative	1	0.18
561	12/30/2010 18:49	PAINT	2.27	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	THIRD	393A	Negative	1	0.2
562	12/30/2010 18:50	PAINT	2.83	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	THIRD	393A	Negative	1	0.6
563	12/30/2010 18:50	PAINT	1.7	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	THIRD	393A	Negative	1	0.24

564	12/30/2010 18:50	PAINT	1.71 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	393A	Negative	1	0.17
565	12/30/2010 18:54	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	303	Negative	1	0.3
566	12/30/2010 18:55	PAINT	3.4 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	303	Negative	1	0.7
567	12/30/2010 18:55	PAINT	2.27 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	303	Negative	1	0.13
568	12/30/2010 18:55	PAINT	3.39 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	303	Negative	1	0.13
569	12/30/2010 19:09	PAINT	6.79 mg / cm ^2	Final										Negative	1	0.9
570	12/30/2010 19:10	PAINT	6.24 mg / cm ^2	Final										Negative	1	0.9
571	12/30/2010 19:10	PAINT	7.34 mg / cm ^2	Final										Negative	1	0.9
572	1/3/2011 12:15	SHUTTER_CAL	62.11 cps	Final												1.02
573	1/3/2011 12:19	PAINT	20.1 mg / cm ^2	Final						CLARK HALL	ESD	THIRD		Positive	1	1
574	1/3/2011 12:20	PAINT	20.13 mg / cm ^2	Final						CLARK HALL	ESD	THIRD		Positive	1	1
575	1/3/2011 12:20	PAINT	6.7 mg / cm ^2	Final						CLARK HALL	ESD	THIRD		Negative	1	0.9
576	1/3/2011 12:35	PAINT	2.25 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD		Negative	1	0
577	1/3/2011 12:36	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD		Negative	1	0
578	1/3/2011 12:36	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD		Negative	1	0.03
579	1/3/2011 12:36	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD		Negative	1	0
580	1/3/2011 12:43	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	361	Negative	1	0.6
581	1/3/2011 12:43	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	361	Negative	1	0.22
582	1/3/2011 12:43	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	361	Negative	1	0.07
583	1/3/2011 12:44	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	361	Negative	1	0.09
584	1/3/2011 12:45	PAINT	3.37 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	359	Negative	1	0.6
585	1/3/2011 12:45	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	359	Negative	1	0.06
586	1/3/2011 12:46	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	359	Negative	1	0.12
587	1/3/2011 12:46	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	359	Negative	1	0.09
588	1/3/2011 12:50	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	353	Negative	1	0.24
589	1/3/2011 12:50	PAINT	2.78 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	353	Negative	1	0.5
590	1/3/2011 12:50	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	353	Negative	1	0.11
591	1/3/2011 12:50	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	353	Negative	1	0.25
592	1/3/2011 12:52	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	351	Negative	1	0.21
593	1/3/2011 12:52	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	351	Negative	1	0.5
594	1/3/2011 12:52	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	351	Negative	1	0.13
595	1/3/2011 12:52	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	351	Negative	1	0.24
596	1/3/2011 12:53	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	349	Negative	1	0.17
597	1/3/2011 12:54	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	349	Negative	1	0.6
598	1/3/2011 12:54	PAINT	2.22 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	349	Negative	1	0.06
599	1/3/2011 12:54	PAINT	3.35 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	349	Negative	1	0.17
600	1/3/2011 12:55	PAINT	2.77 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	347	Negative	1	0.18
601	1/3/2011 12:55	PAINT	2.81 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	347	Negative	1	0.4
602	1/3/2011 12:56	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	347	Negative	1	0.18
603	1/3/2011 12:56	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	347	Negative	1	0.15
604	1/3/2011 12:57	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	345	Negative	1	0.17
605	1/3/2011 12:57	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	345	Negative	1	0.4
606	1/3/2011 12:57	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	345	Negative	1	0.07
607	1/3/2011 12:58	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	345	Negative	1	0.13
608	1/3/2011 12:58	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	343	Negative	1	0.23
609	1/3/2011 12:59	PAINT	3.34 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	343	Negative	1	0.4
610	1/3/2011 12:59	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	343	Negative	1	0.12

611	1/3/2011 12:59	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	343	Negative	1	0.17
612	1/3/2011 13:00	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	341	Negative	1	0.2
613	1/3/2011 13:00	PAINT	3.35	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	341	Negative	1	0.5
614	1/3/2011 13:01	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	341	Negative	1	0.26
615	1/3/2011 13:01	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	341	Negative	1	0.13
616	1/3/2011 13:03	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	344	Negative	1	0.14
617	1/3/2011 13:04	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	344	Negative	1	0.4
618	1/3/2011 13:04	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	344	Negative	1	0.1
619	1/3/2011 13:04	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	344	Negative	1	0.11
620	1/3/2011 13:05	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	342	Negative	1	0.1
621	1/3/2011 13:05	PAINT	3.9	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	342	Negative	1	0.4
622	1/3/2011 13:06	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	342	Negative	1	0.13
623	1/3/2011 13:06	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	342	Negative	1	0.14
624	1/3/2011 13:07	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	338A	Negative	1	0
625	1/3/2011 13:07	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	338A	Negative	1	0
626	1/3/2011 13:08	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	338A	Negative	1	0
627	1/3/2011 13:08	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	338A	Negative	1	0
628	1/3/2011 13:09	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	338	Negative	1	0
629	1/3/2011 13:09	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	338	Negative	1	0.01
630	1/3/2011 13:09	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	338	Negative	1	0
631	1/3/2011 13:09	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	338	Negative	1	0
632	1/3/2011 13:11	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	339	Negative	1	0.11
633	1/3/2011 13:11	PAINT	2.22	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	339	Negative	1	0.6
634	1/3/2011 13:12	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	339	Negative	1	0.17
635	1/3/2011 13:12	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	339	Negative	1	0.1
636	1/3/2011 13:13	PAINT	2.22	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	337	Negative	1	0.15
637	1/3/2011 13:14	PAINT	2.23	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	337	Negative	1	0.5
638	1/3/2011 13:14	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	337	Negative	1	0.14
639	1/3/2011 13:14	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	337	Negative	1	0.27
640	1/3/2011 13:16	PAINT	2.8	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	335	Negative	1	0.06
641	1/3/2011 13:16	PAINT	2.79	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	335	Negative	1	0.5
642	1/3/2011 13:16	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	335	Negative	1	0.17
643	1/3/2011 13:16	PAINT	2.23	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	335	Negative	1	0.18
644	1/3/2011 13:17	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	333	Negative	1	0.07
645	1/3/2011 13:18	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	333	Negative	1	0.5
646	1/3/2011 13:18	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	333	Negative	1	0.14
647	1/3/2011 13:18	PAINT	2.23	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	333	Negative	1	0.17
648	1/3/2011 13:20	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	331A	Negative	1	0.09
649	1/3/2011 13:20	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	331A	Negative	1	0.1
650	1/3/2011 13:21	PAINT	3.35	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	331A	Negative	1	0.5
651	1/3/2011 13:21	PAINT	3.32	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	331A	Negative	1	0.15
652	1/3/2011 13:22	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	331	Negative	1	0.17
653	1/3/2011 13:22	PAINT	2.24	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	331	Negative	1	0.14
654	1/3/2011 13:22	PAINT	2.25	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	331	Negative	1	0.13
655	1/3/2011 13:23	PAINT	2.24	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	331	Negative	1	0.5
656	1/3/2011 13:25	PAINT	2.23	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	325	Negative	1	0.13
657	1/3/2011 13:25	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	325	Negative	1	0.06

658	1/3/2011 13:25	PAINT	6.15 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	325	Negative	1	0.6
659	1/3/2011 13:25	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	325	Negative	1	0.13
660	1/3/2011 13:27	PAINT	3.35 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	323	Negative	1	0.6
661	1/3/2011 13:27	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	323	Negative	1	0.12
662	1/3/2011 13:28	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	323	Negative	1	0.12
663	1/3/2011 13:28	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	323	Negative	1	0.11
664	1/3/2011 13:31	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	321	Negative	1	0.17
665	1/3/2011 13:31	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	321	Negative	1	0.09
666	1/3/2011 13:31	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	321	Negative	1	0.04
667	1/3/2011 13:32	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	321	Negative	1	0.06
668	1/3/2011 13:34	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	311	Negative	1	0
669	1/3/2011 13:35	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	311	Negative	1	0.03
670	1/3/2011 13:35	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	311	Negative	1	0
671	1/3/2011 13:35	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	311	Negative	1	0
672	1/3/2011 13:36	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	309	Negative	1	0.13
673	1/3/2011 13:37	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	309	Negative	1	0.05
674	1/3/2011 13:37	PAINT	2.77 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	309	Negative	1	0.4
675	1/3/2011 13:37	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	309	Negative	1	0.08
676	1/3/2011 13:38	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	307	Negative	1	0.11
677	1/3/2011 13:39	PAINT	2.22 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	307	Negative	1	0.09
678	1/3/2011 13:39	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	307	Negative	1	0.19
679	1/3/2011 13:39	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	307	Negative	1	0.06
680	1/3/2011 13:45	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BROWN	CLARK HALL	ESD	THIRD	317	Negative	1	0.16
681	1/3/2011 13:45	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BROWN	CLARK HALL	ESD	THIRD	317	Negative	1	0.19
682	1/3/2011 13:46	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BROWN	CLARK HALL	ESD	THIRD	317	Negative	1	0.14
683	1/3/2011 13:46	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	RED	CLARK HALL	ESD	THIRD	317	Negative	1	0.6
684	1/3/2011 13:47	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	THIRD	317	Positive	1	3.9
685	1/3/2011 13:47	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	THIRD	317	Positive	1	4.1
686	1/3/2011 13:53	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	THIRD	313	Negative	1	0.08
687	1/3/2011 13:54	PAINT	3.35 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	THIRD	313	Negative	1	0.6
688	1/3/2011 13:54	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	THIRD	313	Negative	1	0.07
689	1/3/2011 13:54	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	THIRD	313	Negative	1	0.11
690	1/3/2011 13:55	PAINT	1.12 mg / cm ^2	Final	WALL	CONCRETE	B	INTACT	BEIGE	CLARK HALL	ESD	THIRD	313	Positive	1	3.2
691	1/3/2011 13:55	PAINT	1.11 mg / cm ^2	Final	WALL	CONCRETE	D	INTACT	BEIGE	CLARK HALL	ESD	THIRD	313	Positive	1	2.9
692	1/3/2011 13:59	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	300SV	Negative	1	0.03
693	1/3/2011 13:59	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	300SV	Negative	1	0.08
694	1/3/2011 13:59	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	300SV	Negative	1	0
695	1/3/2011 13:59	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	300SV	Negative	1	0.5
696	1/3/2011 14:01	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	312	Negative	1	0.08
697	1/3/2011 14:01	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	312	Negative	1	0.5
698	1/3/2011 14:02	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	312	Negative	1	0.11
699	1/3/2011 14:02	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	312	Negative	1	0.17
700	1/3/2011 14:04	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	306	Negative	1	0
701	1/3/2011 14:05	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	306	Negative	1	0.04
702	1/3/2011 14:05	PAINT	3.34 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	306	Negative	1	0.5
703	1/3/2011 14:06	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	306	Negative	1	0.12
704	1/3/2011 14:08	PAINT	3.38 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	THIRD	304	Negative	1	0.5

705	1/3/2011 14:08	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	THIRD	304	Negative	1	0
706	1/3/2011 14:09	PAINT	2.25 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	THIRD	304	Negative	1	0
707	1/3/2011 14:15	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	372	Negative	1	0.21
708	1/3/2011 14:15	PAINT	3.92 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	372	Negative	1	0.8
709	1/3/2011 14:16	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	372	Negative	1	0.16
710	1/3/2011 14:16	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	372	Negative	1	0.13
711	1/3/2011 14:18	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	364	Negative	1	0.12
712	1/3/2011 14:18	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	364	Negative	1	0.14
713	1/3/2011 14:19	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	364	Negative	1	0.08
714	1/3/2011 14:19	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	364	Negative	1	0.1
715	1/3/2011 14:24	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	364A	Negative	1	0.6
716	1/3/2011 14:24	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	364A	Negative	1	0.09
717	1/3/2011 14:25	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	364A	Negative	1	0.1
718	1/3/2011 14:25	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	364A	Negative	1	0.08
719	1/3/2011 14:27	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	352	Negative	1	0.5
720	1/3/2011 14:27	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	352	Negative	1	0.01
721	1/3/2011 14:27	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	352	Negative	1	0.15
722	1/3/2011 14:28	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	352	Negative	1	0.12
723	1/3/2011 14:29	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	346	Negative	1	0.08
724	1/3/2011 14:30	PAINT	3.35 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	346	Negative	1	0.7
725	1/3/2011 14:31	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	346	Negative	1	0.17
726	1/3/2011 14:31	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	346	Negative	1	0.11
727	1/3/2011 14:35	PAINT	2.8 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	336	Negative	1	0.5
728	1/3/2011 14:35	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	336	Negative	1	0.15
729	1/3/2011 14:35	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	336	Negative	1	0.08
730	1/3/2011 14:36	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	336	Negative	1	0.16
731	1/3/2011 14:36	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	334	Negative	1	0.11
732	1/3/2011 14:37	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	334	Negative	1	0.05
733	1/3/2011 14:37	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	334	Negative	1	0.16
734	1/3/2011 14:37	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	334	Negative	1	0.04
735	1/3/2011 14:39	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	332	Negative	1	0.19
736	1/3/2011 14:39	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	332	Negative	1	0.7
737	1/3/2011 14:40	PAINT	2.25 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	332	Negative	1	0.1
738	1/3/2011 14:40	PAINT	2.22 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	332	Negative	1	0.15
739	1/3/2011 14:42	PAINT	2.22 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	326	Negative	1	0
740	1/3/2011 14:43	PAINT	1.66 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	326	Negative	1	0
741	1/3/2011 14:43	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	326	Negative	1	0
742	1/3/2011 14:44	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	326	Negative	1	0
743	1/3/2011 14:46	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	THIRD	326A	Negative	1	0
744	1/3/2011 14:46	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	THIRD	326A	Negative	1	0
745	1/3/2011 14:46	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	THIRD	326A	Negative	1	0
746	1/3/2011 14:46	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	THIRD	326A	Negative	1	0
747	1/3/2011 14:49	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	THIRD	318	Negative	1	0
748	1/3/2011 14:49	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	THIRD	318	Negative	1	0
749	1/3/2011 14:50	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	THIRD	318	Negative	1	0
750	1/3/2011 14:50	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	THIRD	318	Negative	1	0
751	1/3/2011 14:57	PAINT	20.1 mg / cm ^2	Final										Positive	1	1

752	1/3/2011 14:57	PAINT	6.69	mg / cm ^2	Final											Negative	1	0.9
753	1/3/2011 14:58	PAINT	20.12	mg / cm ^2	Final											Positive	1	1
754	1/3/2011 16:11	SHUTTER_CAL	62.18	cps	Final													0.86
755	1/3/2011 16:12	PAINT	2.22	mg / cm ^2	Final											Null	1	1
756	1/3/2011 16:13	PAINT	8.37	mg / cm ^2	Final											Negative	1	0.9
757	1/3/2011 16:13	PAINT	6.69	mg / cm ^2	Final											Negative	1	0.9
758	1/3/2011 16:13	PAINT	20.16	mg / cm ^2	Final											Positive	1	1
759	1/3/2011 16:19	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	453	Negative	1	0.11	
760	1/3/2011 16:20	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	453	Negative	1	0.17	
761	1/3/2011 16:20	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	453	Negative	1	0.1	
762	1/3/2011 16:20	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	453	Negative	1	0.11	
763	1/3/2011 16:22	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	451	Negative	1	0.16	
764	1/3/2011 16:22	PAINT	2.79	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	451	Negative	1	0.5	
765	1/3/2011 16:22	PAINT	2.24	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	451	Negative	1	0.11	
766	1/3/2011 16:23	PAINT	3.34	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	451	Negative	1	0.6	
767	1/3/2011 16:25	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	454	Negative	1	0.11	
768	1/3/2011 16:26	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	454	Negative	1	0.7	
769	1/3/2011 16:26	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	454	Negative	1	0.08	
770	1/3/2011 16:26	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	454	Negative	1	0.11	
771	1/3/2011 16:28	PAINT	2.8	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	454A	Negative	1	0.6	
772	1/3/2011 16:28	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	454A	Negative	1	0.26	
773	1/3/2011 16:28	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	454A	Negative	1	0.26	
774	1/3/2011 16:29	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	454A	Negative	1	0.15	
775	1/3/2011 16:30	PAINT	2.24	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	443A	Negative	1	0.18	
776	1/3/2011 16:31	PAINT	2.24	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	443A	Negative	1	0.6	
777	1/3/2011 16:31	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	443A	Negative	1	0.17	
778	1/3/2011 16:31	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	443A	Negative	1	0.16	
779	1/3/2011 16:33	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	443	Negative	1	0.06	
780	1/3/2011 16:33	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	443	Negative	1	0.15	
781	1/3/2011 16:33	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	443	Negative	1	0.6	
782	1/3/2011 16:34	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	443	Negative	1	0.11	
783	1/3/2011 16:35	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	441	Negative	1	0.17	
784	1/3/2011 16:35	PAINT	3.35	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	441	Negative	1	0.5	
785	1/3/2011 16:36	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	441	Negative	1	0.17	
786	1/3/2011 16:36	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	441	Negative	1	0.07	
787	1/3/2011 16:38	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	439	Negative	1	0.23	
788	1/3/2011 16:39	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	439	Negative	1	0.13	
789	1/3/2011 16:39	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	439	Negative	1	0.24	
790	1/3/2011 16:39	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	439	Negative	1	0.13	
791	1/3/2011 16:40	PAINT	2.23	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	437	Negative	1	0.15	
792	1/3/2011 16:41	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	437	Negative	1	0.18	
793	1/3/2011 16:41	PAINT	3.94	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	437	Negative	1	0.7	
794	1/3/2011 16:41	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	437	Negative	1	0.28	
795	1/3/2011 16:43	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435A	Negative	1	0.7	
796	1/3/2011 16:43	PAINT	2.8	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435A	Negative	1	0.14	
797	1/3/2011 16:43	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435A	Negative	1	0.26	
798	1/3/2011 16:43	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435A	Negative	1	0.11	

799	1/3/2011 16:44	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435A	Negative	1	0.13
800	1/3/2011 16:46	PAINT	2.22 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435	Negative	1	0.15
801	1/3/2011 16:46	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435	Negative	1	0.14
802	1/3/2011 16:46	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435	Negative	1	0.11
803	1/3/2011 16:47	PAINT	3.35 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	435	Negative	1	0.14
804	1/3/2011 16:49	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	433	Negative	1	0.5
805	1/3/2011 16:50	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	433	Negative	1	0.13
806	1/3/2011 16:50	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	433	Negative	1	0.3
807	1/3/2011 16:50	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	433	Negative	1	0.18
808	1/3/2011 16:52	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	433A	Negative	1	0.16
809	1/3/2011 16:52	PAINT	3.34 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	433A	Negative	1	0.7
810	1/3/2011 16:52	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	433A	Negative	1	0.11
811	1/3/2011 16:52	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	433A	Negative	1	0.11
812	1/3/2011 16:58	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	429	Negative	1	0.14
813	1/3/2011 16:58	PAINT	1.14 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	429	Negative	1	0.13
814	1/3/2011 16:58	PAINT	3.9 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	429	Negative	1	0.8
815	1/3/2011 16:59	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	429	Negative	1	0.21
816	1/3/2011 17:03	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLACK	CLARK HALL	ESD	FOURTH	429A	Negative	1	0.13
817	1/3/2011 17:03	PAINT	3.93 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLACK	CLARK HALL	ESD	FOURTH	429A	Negative	1	0.8
818	1/3/2011 17:03	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLACK	CLARK HALL	ESD	FOURTH	429A	Negative	1	0.11
819	1/3/2011 17:04	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLACK	CLARK HALL	ESD	FOURTH	429A	Negative	1	0.1
820	1/3/2011 17:06	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	427	Negative	1	0.1
821	1/3/2011 17:06	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	427	Negative	1	0.24
822	1/3/2011 17:06	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	427	Negative	1	0.17
823	1/3/2011 17:06	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	427	Negative	1	0.13
824	1/3/2011 17:08	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	427A	Negative	1	0.1
825	1/3/2011 17:08	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	427A	Negative	1	0.09
826	1/3/2011 17:09	PAINT	2.77 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	427A	Negative	1	0.15
827	1/3/2011 17:09	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	427A	Negative	1	0.15
828	1/3/2011 17:11	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	425	Negative	1	0.13
829	1/3/2011 17:12	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	425	Negative	1	0.14
830	1/3/2011 17:12	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	425	Negative	1	0.12
831	1/3/2011 17:12	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	425	Negative	1	0.7
832	1/3/2011 17:13	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	423	Negative	1	0.07
833	1/3/2011 17:14	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	423	Negative	1	0.18
834	1/3/2011 17:14	PAINT	1.66 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	423	Negative	1	0
835	1/3/2011 17:14	PAINT	2.21 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	423	Negative	1	0
836	1/3/2011 17:16	PAINT	0.55 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	419	Null	1	0.25
837	1/3/2011 17:16	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	419	Negative	1	0.13
838	1/3/2011 17:16	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	419	Negative	1	0.6
839	1/3/2011 17:17	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	419	Negative	1	0.11
840	1/3/2011 17:18	PAINT	2.8 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	417	Negative	1	0.08
841	1/3/2011 17:18	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	417	Negative	1	0.06
842	1/3/2011 17:18	PAINT	3.35 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	417	Negative	1	0.5
843	1/3/2011 17:19	PAINT	2.8 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	417	Negative	1	0.11
844	1/3/2011 17:27	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	407	Negative	1	0.02
845	1/3/2011 17:28	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	407	Negative	1	0

846	1/3/2011 17:28	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	407	Negative	1	0
847	1/3/2011 17:28	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	407	Negative	1	0
848	1/3/2011 17:31	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	417A	Negative	1	0.14
849	1/3/2011 17:32	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	417A	Negative	1	0.1
850	1/3/2011 17:32	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	417A	Negative	1	0.6
851	1/3/2011 17:32	PAINT	3.9 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	417A	Negative	1	0.06
852	1/3/2011 17:34	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	405A	Negative	1	0.12
853	1/3/2011 17:34	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	405A	Negative	1	0.07
854	1/3/2011 17:34	PAINT	3.37 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	405A	Negative	1	0.6
855	1/3/2011 17:34	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	405A	Negative	1	0.08
856	1/3/2011 17:36	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	405	Negative	1	0.04
857	1/3/2011 17:36	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	405	Negative	1	0.11
858	1/3/2011 17:37	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	405	Negative	1	0.04
859	1/3/2011 17:37	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	405	Negative	1	0.04
860	1/3/2011 17:40	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	409	Negative	1	0.05
861	1/3/2011 17:40	PAINT	1.7 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	FOURTH	409	Negative	1	0.5
862	1/3/2011 17:41	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	409	Negative	1	0.06
863	1/3/2011 17:41	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	409	Negative	1	0.03
864	1/3/2011 17:41	PAINT	1.12 mg / cm ^2	Final	WALL	CONCRETE	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	409	Positive	1	3.4
865	1/3/2011 17:42	PAINT	1.12 mg / cm ^2	Final	WALL	CONCRETE	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	409	Positive	1	2.5
866	1/3/2011 17:46	PAINT	1.67 mg / cm ^2	Final	WALL	CONCRETE	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	413	Negative	1	0.08
867	1/3/2011 17:47	PAINT	1.12 mg / cm ^2	Final	WALL	CONCRETE	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	413	Negative	1	0.04
868	1/3/2011 17:47	PAINT	2.23 mg / cm ^2	Final	WALL	CONCRETE	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	413	Negative	1	0.04
869	1/3/2011 17:47	PAINT	3.35 mg / cm ^2	Final	WALL	CONCRETE	D	INTACT	RED	CLARK HALL	ESD	FOURTH	413	Negative	1	0.5
870	1/3/2011 17:48	PAINT	1.12 mg / cm ^2	Final	WALL	CONCRETE	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	413	Positive	1	3.2
871	1/3/2011 17:48	PAINT	1.13 mg / cm ^2	Final	WALL	CONCRETE	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	413	Positive	1	3
872	1/3/2011 17:52	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	407	Negative	1	0.04
873	1/3/2011 17:52	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	407	Negative	1	0.04
874	1/3/2011 17:52	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	407	Negative	1	0.04
875	1/3/2011 17:52	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	407	Negative	1	0.13
876	1/3/2011 17:54	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	415	Negative	1	0.15
877	1/3/2011 17:54	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FOURTH	415	Negative	1	0.04
878	1/3/2011 17:55	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	415	Negative	1	0.11
879	1/3/2011 17:55	PAINT	2.21 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FOURTH	415	Negative	1	0.09
880	1/3/2011 18:20	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	408	Negative	1	0.19
881	1/3/2011 18:21	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	408	Negative	1	0.09
882	1/3/2011 18:21	PAINT	3.34 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	408	Negative	1	0.6
883	1/3/2011 18:21	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	408	Negative	1	0.21
884	1/3/2011 18:23	PAINT	2.25 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	414	Negative	1	0.09
885	1/3/2011 18:23	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	414	Negative	1	0
886	1/3/2011 18:23	PAINT	2.78 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	414	Negative	1	0.4
887	1/3/2011 18:24	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	414	Negative	1	0
888	1/3/2011 18:24	PAINT	3.34 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	416	Negative	1	0.25
889	1/3/2011 18:25	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	416	Negative	1	0
890	1/3/2011 18:25	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	416	Negative	1	0.04
891	1/3/2011 18:26	PAINT	2.8 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	416	Negative	1	0
892	1/3/2011 18:26	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	418	Negative	1	0.07

893	1/3/2011 18:27	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	418	Negative	1	0
894	1/3/2011 18:27	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	418	Negative	1	0.04
895	1/3/2011 18:27	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	418	Negative	1	0.11
896	1/3/2011 18:29	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	424	Negative	1	0.09
897	1/3/2011 18:29	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	424	Negative	1	0.08
898	1/3/2011 18:29	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	424	Negative	1	0.05
899	1/3/2011 18:30	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	424	Negative	1	0.1
900	1/3/2011 18:31	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	426	Negative	1	0.01
901	1/3/2011 18:31	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	426	Negative	1	0
902	1/3/2011 18:31	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	426	Negative	1	0
903	1/3/2011 18:32	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	426	Negative	1	0
904	1/3/2011 18:33	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLACK	CLARK HALL	ESD	FOURTH	432	Negative	1	0.07
905	1/3/2011 18:34	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLACK	CLARK HALL	ESD	FOURTH	432	Negative	1	0.14
906	1/3/2011 18:34	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLACK	CLARK HALL	ESD	FOURTH	432	Negative	1	0.04
907	1/3/2011 18:34	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLACK	CLARK HALL	ESD	FOURTH	432	Negative	1	0.05
908	1/3/2011 18:36	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	438	Negative	1	0
909	1/3/2011 18:36	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	438	Negative	1	0.12
910	1/3/2011 18:37	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	438	Negative	1	0.25
911	1/3/2011 18:38	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	444	Negative	1	0.11
912	1/3/2011 18:38	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FOURTH	444	Negative	1	0.5
913	1/3/2011 18:39	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	444	Negative	1	0.08
914	1/3/2011 18:39	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FOURTH	444	Negative	1	0.16
915	1/3/2011 18:40	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	446	Negative	1	0
916	1/3/2011 18:41	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FOURTH	446	Negative	1	0
917	1/3/2011 18:41	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	446	Negative	1	0
918	1/3/2011 18:41	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FOURTH	446	Negative	1	0
919	1/3/2011 18:42	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	448	Negative	1	0.25
920	1/3/2011 18:43	PAINT	1.66 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FOURTH	448	Negative	1	0.16
921	1/3/2011 18:43	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	448	Negative	1	0.14
922	1/3/2011 18:43	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FOURTH	448	Negative	1	0.23
923	1/3/2011 18:45	PAINT	1.12 mg / cm ^2	Final	WALL	METAL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	456	Negative	1	0.01
924	1/3/2011 18:45	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	456	Negative	1	0.06
925	1/3/2011 18:46	PAINT	1.12 mg / cm ^2	Final	DOOR JAMB	METAL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	456	Negative	1	0.22
926	1/3/2011 18:47	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	456	Negative	1	0.04
927	1/3/2011 18:50	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	445	Negative	1	0.08
928	1/3/2011 18:50	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	445	Negative	1	0
929	1/3/2011 18:51	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	445	Negative	1	0
930	1/3/2011 18:51	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	445	Negative	1	0.06
931	1/3/2011 18:53	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	447	Negative	1	0.09
932	1/3/2011 18:53	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	WHITE	CLARK HALL	ESD	FOURTH	447	Negative	1	0.4
933	1/3/2011 18:53	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	WHITE	CLARK HALL	ESD	FOURTH	447	Negative	1	0.1
934	1/3/2011 18:54	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	WHITE	CLARK HALL	ESD	FOURTH	447	Negative	1	0
935	1/3/2011 18:55	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	WHITE	CLARK HALL	ESD	FOURTH	449	Negative	1	0
936	1/3/2011 18:55	PAINT	1.69 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	RED	CLARK HALL	ESD	FOURTH	449	Negative	1	0.7
937	1/3/2011 18:56	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	449	Negative	1	0.19
938	1/3/2011 18:56	PAINT	1.66 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	449	Negative	1	0.12
939	1/3/2011 18:58	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	457	Negative	1	0.1

940	1/3/2011 18:58	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	457	Negative	1	0.14
941	1/3/2011 18:58	PAINT	2.21	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	457	Negative	1	0.07
942	1/3/2011 18:59	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	457	Negative	1	0.11
943	1/3/2011 19:00	PAINT	3.9	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	461A	Negative	1	0.8
944	1/3/2011 19:01	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	461A	Negative	1	0.18
945	1/3/2011 19:01	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	461A	Negative	1	0.24
946	1/3/2011 19:01	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	461A	Negative	1	0.27
947	1/3/2011 19:02	PAINT	2.78	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	461	Negative	1	0.15
948	1/3/2011 19:03	PAINT	3.37	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	461	Negative	1	0.5
949	1/3/2011 19:03	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	461	Negative	1	0.18
950	1/3/2011 19:03	PAINT	2.22	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	461	Negative	1	0.13
951	1/3/2011 19:05	PAINT	2.78	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	463	Negative	1	0.6
952	1/3/2011 19:05	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	463	Negative	1	0.07
953	1/3/2011 19:05	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	463	Negative	1	0.19
954	1/3/2011 19:06	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	463	Negative	1	0.05
955	1/3/2011 19:09	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467A	Negative	1	0.15
956	1/3/2011 19:09	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467A	Negative	1	0.16
957	1/3/2011 19:09	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467A	Negative	1	0.09
958	1/3/2011 19:10	PAINT	3.35	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467A	Negative	1	0.7
959	1/3/2011 19:11	PAINT	3.32	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467B	Negative	1	0.6
960	1/3/2011 19:11	PAINT	2.23	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467B	Negative	1	0.15
961	1/3/2011 19:11	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467B	Negative	1	0.29
962	1/3/2011 19:12	PAINT	2.24	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467B	Negative	1	0.14
963	1/3/2011 19:13	PAINT	2.79	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467C	Negative	1	0.6
964	1/3/2011 19:14	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467C	Negative	1	0.13
965	1/3/2011 19:14	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467C	Negative	1	0.2
966	1/3/2011 19:14	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467C	Negative	1	0.18
967	1/3/2011 19:16	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467	Negative	1	0.5
968	1/3/2011 19:17	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467	Negative	1	0
969	1/3/2011 19:17	PAINT	2.23	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467	Negative	1	0.05
970	1/3/2011 19:17	PAINT	1.69	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	467	Negative	1	0.04
971	1/3/2011 19:18	PAINT	2.24	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	469	Negative	1	0.1
972	1/3/2011 19:18	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	469	Negative	1	0.16
973	1/3/2011 19:19	PAINT	1.66	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	469	Negative	1	0.09
974	1/3/2011 19:19	PAINT	3.37	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BEIGE	CLARK HALL	ESD	FOURTH	469	Negative	1	0.5
975	1/3/2011 19:33	PAINT	10.06	mg / cm ^2	Final										Negative	1	0.9
976	1/3/2011 19:33	PAINT	5.02	mg / cm ^2	Final										Null	1	0.9
977	1/3/2011 19:33	PAINT	6.15	mg / cm ^2	Final										Negative	1	0.9
978	1/4/2011 11:11	SHUTTER_CAL	62.15	cps	Final												0.96
979	1/4/2011 11:12	PAINT	6.11	mg / cm ^2	Final										Negative	1	0.9
980	1/4/2011 11:13	PAINT	20.02	mg / cm ^2	Final										Positive	1	1
981	1/4/2011 11:13	PAINT	20.12	mg / cm ^2	Final										Positive	1	1
982	1/4/2011 11:17	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.7
983	1/4/2011 11:18	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.15
984	1/4/2011 11:18	PAINT	3.34	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.6
985	1/4/2011 11:19	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.03
986	1/4/2011 11:19	PAINT	1.67	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.05

987	1/4/2011 11:19	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.03
988	1/4/2011 11:23	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.14
989	1/4/2011 11:24	PAINT	1.1 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.1
990	1/4/2011 11:26	PAINT	2.23 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.04
991	1/4/2011 11:28	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.07
992	1/4/2011 11:29	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.03
993	1/4/2011 11:30	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FIRST	HALL 10(	Negative	1	0.07
994	1/4/2011 11:35	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.08
995	1/4/2011 11:36	PAINT	1.1 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.06
996	1/4/2011 11:37	PAINT	2.78 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.5
997	1/4/2011 11:37	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.04
998	1/4/2011 11:38	PAINT	1.13 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.02
999	1/4/2011 11:38	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.05
1000	1/4/2011 11:39	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.02
1001	1/4/2011 11:40	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.1
1002	1/4/2011 11:40	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.07
1003	1/4/2011 11:41	PAINT	2.22 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.5
1004	1/4/2011 11:42	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.03
1005	1/4/2011 11:42	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.11
1006	1/4/2011 11:44	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.04
1007	1/4/2011 11:44	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.09
1008	1/4/2011 11:45	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.13
1009	1/4/2011 11:45	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.1
1010	1/4/2011 11:46	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.17
1011	1/4/2011 11:46	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.07
1012	1/4/2011 11:47	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.07
1013	1/4/2011 11:48	PAINT	2.24 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	SECOND	HALL 20(	Negative	1	0.3
1014	1/4/2011 11:51	PAINT	2.22 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.06
1015	1/4/2011 11:52	PAINT	3.36 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.5
1016	1/4/2011 11:54	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.02
1017	1/4/2011 11:54	PAINT	2.77 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.4
1018	1/4/2011 11:54	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.04
1019	1/4/2011 11:55	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.14
1020	1/4/2011 11:56	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.03
1021	1/4/2011 11:56	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.03
1022	1/4/2011 11:57	PAINT	3.34 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.03
1023	1/4/2011 11:57	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.05
1024	1/4/2011 11:58	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.05
1025	1/4/2011 11:58	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.08
1026	1/4/2011 12:05	PAINT	1.68 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.04
1027	1/4/2011 12:05	PAINT	3.34 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.6
1028	1/4/2011 12:06	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.05
1029	1/4/2011 12:06	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.11
1030	1/4/2011 12:07	PAINT	1.67 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.1
1031	1/4/2011 12:07	PAINT	1.11 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.03
1032	1/4/2011 12:08	PAINT	1.12 mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.03
1033	1/4/2011 12:08	PAINT	2.79 mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	THIRD	HALL 30(	Negative	1	0.6

1034	1/4/2011 12:12	PAINT	2.24	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.05
1035	1/4/2011 12:13	PAINT	3.34	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.5
1036	1/4/2011 12:13	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.11
1037	1/4/2011 12:13	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.03
1038	1/4/2011 12:16	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.09
1039	1/4/2011 12:16	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.07
1040	1/4/2011 12:17	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.07
1041	1/4/2011 12:17	PAINT	2.23	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.03
1042	1/4/2011 12:18	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.05
1043	1/4/2011 12:18	PAINT	3.34	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.06
1044	1/4/2011 12:19	PAINT	3.37	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0
1045	1/4/2011 12:19	PAINT	3.36	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.4
1046	1/4/2011 12:20	PAINT	2.22	mg / cm ^2	Final	WALL	DRYWALL	A	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.04
1047	1/4/2011 12:20	PAINT	1.13	mg / cm ^2	Final	WALL	DRYWALL	C	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.02
1048	1/4/2011 12:22	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.02
1049	1/4/2011 12:22	PAINT	1.11	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.01
1050	1/4/2011 12:23	PAINT	1.68	mg / cm ^2	Final	WALL	DRYWALL	D	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.01
1051	1/4/2011 12:23	PAINT	1.12	mg / cm ^2	Final	WALL	DRYWALL	B	INTACT	BLUE	CLARK HALL	ESD	FOURTH	HALL 40(	Negative			1	0.12
1052	1/4/2011 12:29	PAINT	6.14	mg / cm ^2	Final										Negative			1	0.9
1053	1/4/2011 12:29	PAINT	6.11	mg / cm ^2	Final										Negative			1	0.9
1054	1/4/2011 12:29	PAINT	6.69	mg / cm ^2	Final										Negative			1	0.9
1055	1/4/2011 13:40	SHUTTER_CAL	62.24	cps	Final														1

APPENDIX D

SITE DRAWINGS

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:

1. The demolition of the 170,000 SF Johnson Hall will require extensive asbestos abatement. The scope also includes the reconnection of underground utilities and minimal improvements to the 30,000 SF Johnson Hall Annex to allow it to function on its own. Prior to the demolition of Johnson Hall, the design-builder will be responsible to renovate approximately 29,300 SF in Clark Hall for the temporary 3-year relocation of a significant number of Johnson Hall faculty and staff in a manner adequate to support their research capabilities for that duration of time. The project schedule will need to accommodate the relocation of the assigned Johnson Hall faculty and staff to Clark Hall prior to demolition. Existing classrooms in Johnson Hall must remain available through the end of Spring semester 2022. The demolition of Johnson Hall shall result in a site adequate to allow the construction of a future research building in its place in 2023. The design-builder will need to track the costs of the three phases (Johnson Hall Demolition, Clark Hall Renovation, Johnson Annex Renovation and Utility Reconnections) throughout the project.

C. Expected Owner-supplied Contractor-installed Work:

1. A limited number of existing research equipment may be provided for installation in Clark Hall. Any existing equipment needing installation will be determined during the design phase.

D. Expected Work by Owner:

1. Owner is responsible for removing all equipment, supplies, and loose material from Johnson Hall prior to demolition. Owner will decontaminate all spaces in Johnson and Clark Halls prior to work. Owner will update the existing Good Faith Survey for Johnson Hall prior to demolition. Owner will coordinate moving the occupants of Johnson Hall going into Clark Hall and their furniture.

1.02 SCHEDULE OF ALTERNATES – NOT USED

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: The Architect/Engineer is identified below, as members of the Owner team working on the Project:

a. Architectural Historian: Architectural History & Archaeology

1.06 SPECIAL CONDITIONS

A. Site Access:

1. Primary access to Johnson Hall will be from the parking lot north of Johnson Hall. Access to Johnson Hall and Johnson Annex may also be allowed from the parking lot south of Johnson Hall. Clark Hall may be accessed from the loading dock north of Clark, though access there will be limited and there must be enough space at the loading dock for at least one WSU vehicle at all times. Other entrances to Clark are available but these all include stairs. The contractor will provide a site access plan for approval by WSU prior to the start of work.

B. Schedule and Phasing:

1. The rooms to be renovated in Clark Hall will be unoccupied by the start of the project. It is anticipated that the renovation of Clark Hall will occur first in order to move out the occupants of Johnson Hall in a timely manner. Johnson Annex includes faculty and staff who will not be moving out of the building, and the relocation of utilities and renovation of Johnson Annex must accommodate these occupants. Johnson Hall classrooms will remain in use until after the spring semester of 2022, which ends May 7, 2022.

C. Owner Occupancy:

1. The square footage in Clark Hall included in the scope of this project is currently unoccupied. Johnson Hall occupants will be moved out of the building through April 2022. Classrooms in Johnson will remain in use until May 7, 2022. The occupants of Johnson Hall Annex will remain in the building throughout the renovation period and must be accommodated during construction and demolition.

D. Hazardous Material:

1. The respective departments are responsible to decommission and decontaminate all research labs in Clark and Johnson Halls prior to the start of construction or demolition.

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 if its actual design wage rates.

B. 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).

C. Contractor shall submit detailed supporting documentation to verify the above rates, if requested by Owner. All such rates shall be subject to audit.

D. 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 if 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

State of Washington
Department of Labor & Industries
Prevailing Wage Section - Telephone 360-902-5335
PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 7/7/2021

County	Trade	Job Classification	Wage	Holiday	Overtime	Note	*Risk Class
Whitman	Asbestos Abatement Workers	Journey Level	$42.54	5D	1H		View
Whitman	Boilermakers	Journey Level	$70.79	5N	1C		View
Whitman	Brick Mason	Journey Level	$51.84	5A	1M		View
Whitman	Building Service Employees	Janitor	$13.69		1		View
Whitman	Building Service Employees	Shampooer	$13.69		1		View
Whitman	Building Service Employees	Waxer	$13.69		1		View
Whitman	Building Service Employees	Window Cleaner	$13.69		1		View
Whitman	Cabinet Makers (In Shop)	Journey Level	$13.69		1		View
Whitman	Carpenters	Acoustical Worker	$49.27	7E	4X	8N	View
Whitman	Carpenters	Bridge, Dock & Wharf Carpenter	$50.53	7E	4X	8N	View
Whitman	Carpenters	Floor Layer & Floor Finisher	$49.27	7E	4X	8N	View
Whitman	Carpenters	Form Builder	$49.27	7E	4X	8N	View
Whitman	Carpenters	General Carpenter	$49.27	7E	4X	8N	View
Whitman	Carpenters	Heavy Construction Carpenter	$54.48	7E	4X	9E	View
Whitman	Carpenters	Scaffold/Shoring Erecting & Dismantling	$54.48	7E	4X	8N	View
Whitman	Cement Masons	Journey Level	$46.83	7B	1N		View
Whitman	Divers & Tenders	Assistant Tender	$56.73	7E	4X		View
Whitman	Divers & Tenders	Dive Supervisors	$104.98	7E	4X		View
Whitman	Divers & Tenders	Diver	$103.48	7E	4X	8V	View
Whitman	Divers & Tenders	Diver on Standby	$60.42	7E	4X		View
Whitman	Divers & Tenders	Diver Tender	$59.42	7E	4X		View
Whitman	Divers & Tenders	Diving Master	$70.53	7E	4X		View
Whitman	Divers & Tenders	Manifold Operator	$59.42	7E	4X		View
Whitman	Divers & Tenders	Manifold Operator Mixed Gas	$63.42	7E	4X		View
Whitman	Divers & Tenders	Remote Operated Vehicle Operator	$59.42	7E	4X		View
Whitman	Divers & Tenders	Remote Operated Vehicle Tender/Technician	$56.73	7E	4X		View
Whitman	Divers & Tenders	Surface RCV & ROV Operator	$59.42	7E	4X		View

Whitman	Dredge Workers	Assistant Engineer	$70.62	5D	3F		View
Whitman	Dredge Workers	Assistant Mate (Deckhand)	$70.07	5D	3F		View
Whitman	Dredge Workers	Boatmen	$70.62	5D	3F		View
Whitman	Dredge Workers	Engineer Welder	$71.97	5D	3F		View
Whitman	Dredge Workers	Leverman, Hydraulic	$73.41	5D	3F		View
Whitman	Dredge Workers	Mates	$70.62	5D	3F		View
Whitman	Dredge Workers	Oiler	$70.07	5D	3F		View
Whitman	Drywall Applicator	Journey Level	$49.27	7E	4X	8N	View
Whitman	Drywall Tapers	Journey Level	$44.38	7E	1P		View
Whitman	Electrical Fixture Maintenance Workers	Journey Level	$13.69		1		View
Whitman	Electricians - Inside	Journeyman	$57.77	7G	1E		View
Whitman	Electricians - Motor Shop	Craftsman	$15.37		1		View
Whitman	Electricians - Motor Shop	Journey Level	$14.69		1		View
Whitman	Electricians - Powerline Construction	Cable Splicer	$82.39	5A	4D		View
Whitman	Electricians - Powerline Construction	Certified Line Welder	$75.64	5A	4D		View
Whitman	Electricians - Powerline Construction	Groundperson	$49.17	5A	4D		View
Whitman	Electricians - Powerline Construction	Heavy Line Equipment Operator	$75.64	5A	4D		View
Whitman	Electricians - Powerline Construction	Journey Level Lineperson	$75.64	5A	4D		View
Whitman	Electricians - Powerline Construction	Line Equipment Operator	$64.54	5A	4D		View
Whitman	Electricians - Powerline Construction	Meter Installer	$49.17	5A	4D	8W	View
Whitman	Electricians - Powerline Construction	Pole Sprayer	$75.64	5A	4D		View
Whitman	Electricians - Powerline Construction	Powderperson	$56.49	5A	4D		View
Whitman	Electronic Technicians	Journey Level	$46.21	5I	1B		View
Whitman	Elevator Constructors	Mechanic	$100.51	7D	4A		View
Whitman	Elevator Constructors	Mechanic In Charge	$108.53	7D	4A		View
Whitman	Fabricated Precast Concrete Products	Journey Level	$13.69		1		View
Whitman	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	$13.69		1		View
Whitman	Fence Erectors	Fence Erector	$42.54	7B	1M	8Z	View
Whitman	Fence Erectors	Fence Erector	$42.54	7B	1M	8Z	View
Whitman	Flaggers	Journey Level	$40.44	7B	1M	8Z	View
Whitman	Glaziers	Journey Level	$34.56	7L	4L		View
Whitman	Heat & Frost Insulators And Asbestos Workers	Journey Level	$55.24	5K	1U		View
Whitman	Heating Equipment Mechanics	Journey Level	$58.36	6Z	1B		View
Whitman	Hod Carriers & Mason Tenders	Journey Level	$43.39	7B	1M	8Z	View
Whitman	Industrial Power Vacuum Cleaner	Journey Level	$13.69		1		View
Whitman	Inland Boatmen	Journey Level	$13.69		1		View

Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	$13.69		1		View
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$13.69		1		View
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$13.69		1		View
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$13.69		1		View
Whitman	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	$13.69		1		View
Whitman	Insulation Applicators	Journey Level	$49.27	7E	4X	8N	View
Whitman	Ironworkers	Journeyman	$64.91	7N	1O		View
Whitman	Laborers	Air And Hydraulic Track Drill	$43.08	7B	1M	8Z	View
Whitman	Laborers	Asphalt Raker	$43.08	7B	1M	8Z	View
Whitman	Laborers	Asphalt Roller, Walking	$42.81	7B	1M	8Z	View
Whitman	Laborers	Brick Pavers	$42.54	7B	1M	8Z	View
Whitman	Laborers	Brush Hog Feeder	$42.54	7B	1M	8Z	View
Whitman	Laborers	Brush Machine	$43.08	7B	1M	8Z	View
Whitman	Laborers	Caisson Worker, Free AIr	$43.08	7B	1M	8Z	View
Whitman	Laborers	Carpenter Tender	$42.54	7B	1M	8Z	View
Whitman	Laborers	Cement Finisher Tender	$42.81	7B	1M	8Z	View
Whitman	Laborers	Cement Handler	$42.54	7B	1M	8Z	View
Whitman	Laborers	Chain Saw Operator & Faller	$43.08	7B	1M	8Z	View
Whitman	Laborers	Clean-up Laborer	$42.54	7B	1M	8Z	View
Whitman	Laborers	Compaction Equipment	$42.81	7B	1M	8Z	View
Whitman	Laborers	Concrete Crewman	$42.54	7B	1M	8Z	View
Whitman	Laborers	Concrete Saw, Walking	$42.81	7B	1M	8Z	View
Whitman	Laborers	Concrete Signalman	$42.54	7B	1M	8Z	View
Whitman	Laborers	Concrete Stack	$43.08	7B	1M	8Z	View
Whitman	Laborers	Confined Space Attendant	$42.54	7B	1M	8Z	View
Whitman	Laborers	Crusher Feeder	$42.54	7B	1M	8Z	View
Whitman	Laborers	Demolition	$42.54	7B	1M	8Z	View
Whitman	Laborers	Demolition Torch	$42.81	7B	1M	8Z	View
Whitman	Laborers	Dope Pot Fireman, Non-mechanical	$42.81	7B	1M	8Z	View
Whitman	Laborers	Driller Helper (when Required To Move & Position Machine)	$42.81	7B	1M	8Z	View
Whitman	Laborers	Drills With Dual Masts	$43.36	7B	1M	8Z	View
Whitman	Laborers	Dry Stack Walls	$42.54	7B	1M	8Z	View
Whitman	Laborers	Dumpman	$42.54	7B	1M	8Z	View
Whitman	Laborers	Erosion Control Laborer	$42.54	7B	1M	8Z	View
Whitman	Laborers	Final Detail Cleanup (i.e, Dusting, Vacuuming, Window Cleaning; Not Construction Debris Cleanup)	$40.44	7B	1M	8Z	View

Whitman	Laborers	Firewatch	$42.54	7B	1M	8Z	View
Whitman	Laborers	Form Cleaning Machine Feeder, Stacker	$42.54	7B	1M	8Z	View
Whitman	Laborers	Form Setter, Paving	$42.81	7B	1M	8Z	View
Whitman	Laborers	General Laborer	$42.54	7B	1M	8Z	View
Whitman	Laborers	Grade Checker	$45.07	7B	1M	8Z	View
Whitman	Laborers	Grout Machine Header Tender	$42.54	7B	1M	8Z	View
Whitman	Laborers	Guard Rail	$42.54	7B	1M	8Z	View
Whitman	Laborers	Gunite	$43.08	7B	1M	8Z	View
Whitman	Laborers	Hazardous Waste Worker (level A)	$43.36	7B	1M	8Z	View
Whitman	Laborers	Hazardous Waste Worker (level B)	$43.08	7B	1M	8Z	View
Whitman	Laborers	Hazardous Waste Worker (level C)	$42.81	7B	1M	8Z	View
Whitman	Laborers	Hazardous Waste Worker (level D)	$42.54	7B	1M	8Z	View
Whitman	Laborers	Hdpe Or Similar Liner Installer	$42.54	7B	1M	8Z	View
Whitman	Laborers	High Scaler	$43.08	7B	1M	8Z	View
Whitman	Laborers	Jackhammer Operator Miner, Class "b"	$42.81	7B	1M	8Z	View
Whitman	Laborers	Laser Beam Operator	$43.08	7B	1M	8Z	View
Whitman	Laborers	Miner, Class "a"	$42.54	7B	1M	8Z	View
Whitman	Laborers	Miner, Class "c"	$43.08	7B	1M	8Z	View
Whitman	Laborers	Miner, Class "d"	$43.36	7B	1M	8Z	View
Whitman	Laborers	Monitor Operator, Air Track Or Similar Mounting	$43.08	7B	1M	8Z	View
Whitman	Laborers	Mortar Mixer	$43.08	7B	1M	8Z	View
Whitman	Laborers	Nipper	$42.54	7B	1M	8Z	View
Whitman	Laborers	Nozzleman	$43.08	7B	1M	8Z	View
Whitman	Laborers	Nozzleman, Water (to Include Fire Hose), Air Or Steam	$42.81	7B	1M	8Z	View
Whitman	Laborers	Pavement Breaker, 90 Lbs. & Over	$43.08	7B	1M	8Z	View
Whitman	Laborers	Pavement Breaker, Under 90 Lbs.	$42.81	7B	1M	8Z	View
Whitman	Laborers	Pipelayer	$43.08	7B	1M	8Z	View
Whitman	Laborers	Pipelayer, Corrugated Metal Culvert And Multi-plate.	$42.81	7B	1M	8Z	View
Whitman	Laborers	Pipewrapper	$43.08	7B	1M	8Z	View
Whitman	Laborers	Plasterer Tenders	$43.08	7B	1M	8Z	View
Whitman	Laborers	Pot Tender	$42.81	7B	1M	8Z	View
Whitman	Laborers	Powderman	$44.73	7B	1M	8Z	View
Whitman	Laborers	Powederman Helper	$42.81	7B	1M	8Z	View
Whitman	Laborers	Power Buggy Operator	$42.81	7B	1M	8Z	View
Whitman	Laborers	Power Tool Operator, Gas, Electric, Pneumatic	$42.81	7B	1M	8Z	View
Whitman	Laborers	Railroad Equipment, Power Driven, Except Dual Mobile	$42.81	7B	1M	8Z	View
Whitman	Laborers	Railroad Power Spiker Or	$42.81	7B	1M	8Z	View

		Puller, Dual Mobile					
Whitman	Laborers	Remote Equipment Operator	$43.36	7B	1M	8Z	View
Whitman	Laborers	Remote Equipment Operator (i.e Compaction And Demolition)	$42.81	7B	1M	8Z	View
Whitman	Laborers	Rigger/signal Person	$42.81	7B	1M	8Z	View
Whitman	Laborers	Riprap Person	$42.54	7B	1M	8Z	View
Whitman	Laborers	Rodder & Spreader	$42.81	7B	1M	8Z	View
Whitman	Laborers	Sandblast Tailhoseman	$42.54	7B	1M	8Z	View
Whitman	Laborers	Scaffold Erector, Wood Or Steel	$42.54	7B	1M	8Z	View
Whitman	Laborers	Stake Jumper	$42.54	7B	1M	8Z	View
Whitman	Laborers	Structural Mover	$42.54	7B	1M	8Z	View
Whitman	Laborers	Tailhoseman (water Nozzle)	$42.54	7B	1M	8Z	View
Whitman	Laborers	Timber Bucker & Faller (by Hand)	$42.54	7B	1M	8Z	View
Whitman	Laborers	Track Laborer (rr)	$42.54	7B	1M	8Z	View
Whitman	Laborers	Traffic Control Laborer	$40.44	7B	1M	9D	View
Whitman	Laborers	Traffic Control Supervisor	$41.44	7B	1M	9E	View
Whitman	Laborers	Trencher, Shawnee	$42.81	7B	1M	8Z	View
Whitman	Laborers	Trenchless Technology Technician	$43.08	7B	1M	8Z	View
Whitman	Laborers	Truck Loader	$42.54	7B	1M	8Z	View
Whitman	Laborers	Tugger Operator	$42.81	7B	1M	8Z	View
Whitman	Laborers	Vibrators, All	$43.08	7B	1M	8Z	View
Whitman	Laborers	Wagon Drills	$42.81	7B	1M	8Z	View
Whitman	Laborers	Water Pipe Liner	$42.81	7B	1M	8Z	View
Whitman	Laborers	Welder, Electrical, Manual Or Automatic (hdpe Or Similar Pipe And Liner)	$43.36	7B	1M	8Z	View
Whitman	Laborers	Well-point Person	$42.54	7B	1M	8Z	View
Whitman	Laborers	Wheelbarrow, Power Driven	$42.81	7B	1M	8Z	View
Whitman	Laborers - Underground Sewer & Water	General Laborer & Topman	$42.54	7B	1M	8Z	View
Whitman	Laborers - Underground Sewer & Water	Pipe Layer	$43.08	7B	1M	8Z	View
Whitman	Landscape Construction	Landscape Laborer	$40.44	7B	1M	9D	View
Whitman	Landscape Construction	Landscape Operator	$48.95	7B	4W	9A	View
Whitman	Landscape Maintenance	Groundskeeper	$13.69		1		View
Whitman	Lathers	Journey Level	$49.27	7E	4X	8N	View
Whitman	Marble Setters	Journey Level	$51.84	5A	1M		View
Whitman	Metal Fabrication (In Shop)	Fitter	$13.69		1		View
Whitman	Metal Fabrication (In Shop)	Laborer	$13.69		1		View
Whitman	Metal Fabrication (In Shop)	Machine Operator	$13.69		1		View
Whitman	Metal Fabrication (In Shop)	Painter	$13.69		1		View
Whitman	Metal Fabrication (In Shop)	Welder	$13.69		1		View
Whitman	Millwright	Journey Level	$68.90	5A	1B		View
Whitman	Modular Buildings	Journey Level	$13.69		1		View
Whitman	Painters	Commercial Painter	$38.59	6Z	1W		View

Whitman	Painters	Industrial Painter	$45.99	6Z	1W	9D	View
Whitman	Pile Driver	General Pile Driver	$50.53	7E	4X	8N	View
Whitman	Pile Driver	Heavy Construction Pile Driver	$55.73	7E	4X	9E	View
Whitman	Plasterers	Journey Level	$46.51	7K	1N		View
Whitman	Playground & Park Equipment Installers	Journey Level	$13.69		1		View
Whitman	Plumbers & Pipefitters	Journey Level	$85.00	6Z	1Q		View
Whitman	Power Equipment Operators	A-frame Truck (2 Or More Drums)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	A-frame Truck (single Drum)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Asphalt Plant Operator	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Assistant Plant Operator, Fireman Or Pugmixer (asphalt)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Assistant Refrigeration Plant & Chiller Operator (over 1000 Ton)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Assistant Refrigeration Plant (under 1000 Ton)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Automatic Subgrader (ditches & Trimmers)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Backfillers (cleveland & Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Backhoe & Hoe Ram (under 3/4 Yd.)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Backhoe (45,000 Gw & Under)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Backhoe (45,000 Gw To 110,000 Gw)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Backhoe (over 110,000 Gw)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Backhoes & Hoe Ram (3 Yds & Over)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Backhoes & Hoe Ram (3/4 Yd. To 3 Yd.)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Bagley Or Stationary Scraper	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Batch & Wet Mix Operator (multiple Units, 2 & Incl. 4)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Batch Plant & Wet Mix Operator, Single Unit (concrete)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Batch Plant (over 4 Units)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Belt Finishing Machine	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Belt Loader (kocal Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Belt-crete Conveyors With Power Pack Or Similar	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Bending Machine	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Bit Grinders	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Blade (finish & Bluetop), Automatic, Cmi, Abc, Finish Athey & Huber & Similar When Used As Automatic	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Blade Operator (motor Patrol & Attachments)	$49.39	7B	4W	9A	View

Whitman	Power Equipment Operators	Blower Operator (cement)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Boat Operator	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Bob Cat (skid Steer)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Bolt Threading Machine	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Boom Cats (side)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Boring Machine (earth)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Boring Machine (Rock Under 8 inch Bit - Quarry Master, Joy Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Bump Cutter (wayne, Saginau Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Cableway Controller (dispatcher)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Cableway Operators	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Canal Lining Machine (concrete)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Carrydeck & Boom Truck (under 25 Tons)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Cement Hog	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Chipper (without Crane) Cleaning & Doping Machine (pipeline)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Clamshell, Dragline	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators	Compactor (self-propelled With Blade)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Compressor (2000 Cfm Or Over, 2 Or More, Gas Diesel Or Electric Power)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Compressors (under 2000 Cfm, Gas, Diesel Or Electric Power)	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Concrete Cleaning / Decontamination Machine Operator	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Concrete Pump Boon Truck	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Concrete Pumps (squeeze-crete, Flow-crete, Whitman & Similar)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Concrete Saw (multiple Cut)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Concrete Slip Form Paver	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Conveyor Aggregate Delivery Systems (c.a.d.)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Crane Oiler- Driver (cdl Required) & Cable Tender, Mucking Machine	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Cranes (100 to 299 Tons) And All Climbing, Overhead, Rail & Tower. All Attachments Incl.	$51.26	7B	4W	9A	View
Whitman	Power Equipment Operators	Cranes (25 Tons & Under), All Attachments Incl. Clamshell, Dragline	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Cranes (25 Tons To And Including 45 Tons), All	$49.39	7B	4W	9A	View

		Attachments Incl. Clamshell, Dragline					
Whitman	Power Equipment Operators	Cranes (300 Tons and Over) And All Climbing, Overhead, Rail & Tower. All Attachments Incl.	$51.76	7B	4W	9A	View
Whitman	Power Equipment Operators	Cranes (45 Tons To 85 Tons), All Attachments Incl. Clamshell And Dragline	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Cranes (86 to 99 Tons) And All Climbing, Overhead, Rail & Tower. All Attachments Incl.	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators	Crusher Feeder	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Crusher, Grizzle & Screening Plant Operator	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Curb Extruder (asphalt Or Concrete)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Deck Engineer	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Deck Hand	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Derricks & Stifflegs (65 Tons & Over)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Derricks & Stifflegs (under 65 Tons)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Distributor Leverman	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Ditch Witch Or Similar	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Dope Pots (power Agitated	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Dozer / Tractor (up To D-6 Or Equivalent) And Traxcavator	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Dozer / Tractors (d-6 & Equivalent & Over)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Dozer, 834 R/t & Similar	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Drill Doctor	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Driller Licensed	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators	Drillers Helper	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Drilling Equipment (8 inch Bit & Over - Robbins, Reverse Circulation & Similar)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Drills (churn, Core, Calyx Or Diamond)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Elevating Belt (holland Type)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Elevating Belt-type Loader (euclid, Barber Green & Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Elevating Grader-type Loader (dumor, Adams Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Elevator Hoisting Materials	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Equipment Serviceman, Greaser & Oiler	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Fireman & Heater Tender	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Fork Lift Or Lumber Stacker, Hydra-life & Similar	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Generator Plant Engineers	$48.79	7B	4W	9A	View

		(diesel Or Electric)					
Whitman	Power Equipment Operators	Gin Trucks (pipeline)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Grade Checker	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Gunite Combination Mixer & Compressor	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	H.d. Mechanic	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	H.d. Welder	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Heavy Equipment Robotics Operator	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Helicopter Pilot	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators	Helper, Mechanic Or Welder, H.D	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Hoe Ram	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Hoist (2 Or More Drums Or Tower Hoist)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Hoist, Single Drum	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Hydraulic Platform Trailers (goldhofer, Shaurerly And Similar)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Hydro-seeder, Mulcher, Nozzleman	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Lime Batch Tank Operator (recycle Train)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Lime Brain Operator (recycle Train)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Loader (360 Degrees Revolving Koehring Scooper Or Similar)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Loader Operator (front-end & Overhead, 4 Yds. Incl. 8 Yds.)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Loaders (bucket Elevators And Conveyors)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Loaders (overhead & Front-end, Over 8 Yds. To 10 Yds.)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Loaders (overhead & Front-end, Under 4 Yds.. R/t)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Loaders (overhead And Front-end, 10 Yds. & Over)	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators	Locomotive Engineer	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Longitudinal Float	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Master Environmental Maintenance Technician	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Mixer (portable - Concrete)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Mixermobile	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Mobile Crusher Operator (recycle Train)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Mucking Machine	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Multiple Dozer Units With Single Blade	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Pavement Breaker, Hydra-hammer & Similar	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Paving (dual Drum)	$49.11	7B	4W	9A	View

Whitman	Power Equipment Operators	Paving Machine (asphalt And Concrete)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Piledriving Engineers	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Plant Oiler	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Posthole Auger Or Punch	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Power Broom	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Pump (grout Or Jet)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Pumpman	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Quad-track Or Similar Equipment	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Railroad Ballast Regulation Operator (self-propelled)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Railroad Power Tamper Operator (self-propelled)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Railroad Tamper Jack Operator (self-propelled)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Railroad Track Liner Operator (self-propelled)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Refrigeration Plant Engineer (1000 Tons & Over)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Refrigeration Plant Engineer (under 1000 Ton)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Rollerman (finishing Asphalt Pavement)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Rollers, All Types On Subgrade, Including Seal And Chip Coating (farm Type, Case, John Deere And Similar,or Compacting Vibrator), Except When Pulled B	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Roto Mill (pavement Grinder)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Rotomill Groundsman	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Rubber-tired Scrapers (multiple Engine With Three Or More Scrapers)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Rubber-tired Skidders (r/t With Or Without Attachments)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Scrapers, All, Rubber-tired	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Screed Operator	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Shovels (3 Yds. & Over)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Shovels (under 3 Yds.)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Signalman (whirleys, Highline, Hammerheads Or Similar)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators	Soil Stabilizer (p & H Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Spray Curing Machine (concrete)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Spreader Box (self-propelled)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Spreader Machine	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Steam Cleaner	$47.86	7B	4W	9A	View

Whitman	Power Equipment Operators	Straddle Buggy (ross & Similar On Construction Job Only)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Surface Heater & Planer Machine	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Tractor (farm Type R/t With Attachments, Except Backhoe)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Traverse Finish Machine	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Trenching Machines (7 Ft. Depth & Over)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Trenching Machines (under 7 Ft. Depth Capacity)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Tug Boat Operator	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Tugger Operator	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators	Turnhead (with Re-screening)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Turnhead Operator	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators	Ultra High Pressure Wateriet Cutting Tool System Operator, (30,000 Psi)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Vactor Guzzler, Super Sucker	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators	Vacuum Blasting Machine Operator	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators	Vacuum Drill (reverse Circulation Drill Under 8 Inch Bit)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators	Welding Machine	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators	Whirleys & Hammerheads, All	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	A-frame Truck (2 Or More Drums)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	A-frame Truck (single Drum)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant Operator	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Assistant Plant Operator, Fireman Or Pugmixer (asphalt)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Assistant Refrigeration Plant & Chiller Operator (over 1000 Ton)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Assistant Refrigeration Plant (under 1000 Ton)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Automatic Subgrader (ditches & Trimmers)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Backfillers (cleveland & Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Backhoe & Hoe Ram (under 3/4 Yd.)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Backhoe (45,000 Gw & Under)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Backhoe (45,000 Gw To 110,000 Gw)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Backhoe (over 110,000 Gw)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-	Backhoes & Hoe Ram (3 Yds &	$49.66	7B	4W	9A	View

	Underground Sewer & Water	Over)					
Whitman	Power Equipment Operators-Underground Sewer & Water	Backhoes & Hoe Ram (3/4 Yd. To 3 Yd.)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Bagley Or Stationary Scraper	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Batch & Wet Mix Operator (multiple Units, 2 & Incl. 4)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Batch Plant & Wet Mix Operator, Single Unit (concrete)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Batch Plant (over 4 Units)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Belt Finishing Machine	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Belt Loader (kocal Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Belt-crete Conveyors With Power Pack Or Similar	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Bending Machine	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Bit Grinders	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Blade (finish & Bluetop), Automatic, Cmi, Abc, Finish Athey & Huber & Similar When Used As Automatic	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Blade Operator (motor Patrol & Attachments)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Blower Operator (cement)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Boat Operator	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Bob Cat (skid Steer)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Bolt Threading Machine	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Boom Cats (side)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Boring Machine (earth)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Boring Machine (Rock Under 8 inch Bit - Quarry Master, Joy Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Bump Cutter (wayne, Saginau Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Cableway Controller (dispatcher)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Cableway Operators	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Canal Lining Machine (concrete)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Carrydeck & Boom Truck (under 25 Tons)	$49.11	7B	4W	9A	View

Whitman	Power Equipment Operators-Underground Sewer & Water	Cement Hog	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Chipper (without Crane) Cleaning & Doping Machine (pipeline)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Clamshell, Dragline	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Compactor (self-propelled With Blade)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Compressor (2000 Cfm Or Over, 2 Or More, Gas Diesel Or Electric Power)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Compressors (under 2000 Cfm, Gas, Diesel Or Electric Power)	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Concrete Cleaning / Decontamination Machine Operator	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Concrete Pump Boon Truck	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Concrete Pumps (squeeze-crete, Flow-crete, Whitman & Similar)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Concrete Saw (multiple Cut)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Concrete Slip Form Paver	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Conveyor Aggregate Delivery Systems (c.a.d.)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Crane Oiler- Driver (cdl Required) & Cable Tender, Mucking Machine	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Cranes (100 to 299 Tons) And All Climbing, Overhead, Rail & Tower. All Attachments Incl.	$51.26	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Cranes (25 Tons & Under), All Attachments Incl. Clamshell, Dragline	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Cranes (25 Tons To And Including 45 Tons), All Attachments Incl. Clamshell, Dragline	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Cranes (300 Tons and Over) And All Climbing, Overhead, Rail & Tower. All Attachments Incl.	$51.76	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Cranes (45 Tons To 85 Tons), All Attachments Incl. Clamshell And Dragline	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Cranes (86 to 99 Tons) And All Climbing, Overhead, Rail & Tower. All Attachments Incl.	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Crusher Feeder	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Crusher, Grizzle & Screening Plant Operator	$49.39	7B	4W	9A	View

Whitman	Power Equipment Operators-Underground Sewer & Water	Curb Extruder (asphalt Or Concrete)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Deck Engineer	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Deck Hand	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Derricks & Stifflegs (65 Tons & Over)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Derricks & Stifflegs (under 65 Tons)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Distributor Leverman	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Ditch Witch Or Similar	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Dope Pots (power Agitated	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Dozer / Tractor (up To D-6 Or Equivalent) And Traxcavator	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Dozer / Tractors (d-6 & Equivalent & Over)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Dozer, 834 R/t & Similar	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Drill Doctor	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Driller Licensed	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Drillers Helper	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Drilling Equipment (8 inch Bit & Over - Robbins, Reverse Circulation & Similar)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Drills (churn, Core, Calyx Or Diamond)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Elevating Belt (holland Type)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Elevating Belt-type Loader (euclid, Barber Green & Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Elevating Grader-type Loader (dumor, Adams Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Elevator Hoisting Materials	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Equipment Serviceman, Greaser & Oiler	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Fireman & Heater Tender	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Fork Lift Or Lumber Stacker, Hydra-life & Similar	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Generator Plant Engineers (diesel Or Electric)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Gin Trucks (pipeline)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-	Grade Checker	$49.11	7B	4W	9A	View

	Underground Sewer & Water						
Whitman	Power Equipment Operators-Underground Sewer & Water	Gunite Combination Mixer & Compressor	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	H.d. Mechanic	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	H.d. Welder	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Heavy Equipment Robotics Operator	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Helicopter Pilot	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Helper, Mechanic Or Welder, H.D	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Hoe Ram	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Hoist (2 Or More Drums Or Tower Hoist)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Hoist, Single Drum	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Hydraulic Platform Trailers (goldhofer, Shaurerly And Similar)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Hydro-seeder, Mulcher, Nozzleman	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Lime Batch Tank Operator (recycle Train)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Lime Brain Operator (recycle Train)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Loader (360 Degrees Revolving Koehring Scooper Or Similar)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Loader Operator (front-end & Overhead, 4 Yds. Incl. 8 Yds.)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Loaders (bucket Elevators And Conveyors)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Loaders (overhead & Front-end, Over 8 Yds. To 10 Yds.)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Loaders (overhead & Front-end, Under 4 Yds.. R/t)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Loaders (overhead And Front-end, 10 Yds. & Over)	$50.76	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Locomotive Engineer	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Longitudinal Float	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Master Environmental Maintenance Technician	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Mixer (portable - Concrete)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Mixermobile	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Mobile Crusher Operator (recycle Train)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-	Mucking Machine	$48.79	7B	4W	9A	View

	Underground Sewer & Water						
Whitman	Power Equipment Operators-Underground Sewer & Water	Multiple Dozer Units With Single Blade	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Pavement Breaker, Hydra-hammer & Similar	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Paving (dual Drum)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Paving Machine (asphalt And Concrete)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Piledriving Engineers	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Plant Oiler	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Posthole Auger Or Punch	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Power Broom	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Pump (grout Or Jet)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Pumpman	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Quad-track Or Similar Equipment	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Railroad Ballast Regulation Operator (self-propelled)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Railroad Power Tamper Operator (self-propelled)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Railroad Tamper Jack Operator (self-propelled)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Railroad Track Liner Operator (self-propelled)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Refrigeration Plant Engineer (1000 Tons & Over)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Refrigeration Plant Engineer (under 1000 Ton)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Rollerman (finishing Asphalt Pavement)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Rollers, All Types On Subgrade, Including Seal And Chip Coating (farm Type, Case, John Deere And Similar,or Compacting Vibrator), Except When Pulled B	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Roto Mill (pavement Grinder)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Rotomill Groundsman	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Rubber-tired Scrapers (multiple Engine With Three Or More Scrapers)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Rubber-tired Skidders (r/t With Or Without Attachments)	$48.95	7B	4W	9A	View

Whitman	Power Equipment Operators-Underground Sewer & Water	Scrapers, All, Rubber-tired	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Screed Operator	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Shovels (3 Yds. & Over)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Shovels (under 3 Yds.)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Signalman (whirleys, Highline, Hammerheads Or Similar)	$49.11	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Soil Stabilizer (p & H Or Similar)	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Spray Curing Machine (concrete)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Spreader Box (self-propelled)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Spreader Machine	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Steam Cleaner	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Straddle Buggy (ross & Similar On Construction Job Only)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Surface Heater & Planer Machine	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Tractor (farm Type R/t With Attachments, Except Backhoe)	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Traverse Finish Machine	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Trenching Machines (7 Ft. Depth & Over)	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Trenching Machines (under 7 Ft. Depth Capacity)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Tug Boat Operator	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Tugger Operator	$48.18	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Turnhead (with Re-screening)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Turnhead Operator	$48.79	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Ultra High Pressure Wateriet Cutting Tool System Operator, (30,000 Psi)	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Vactor Guzzler, Super Sucker	$49.39	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Vacuum Blasting Machine Operator	$49.66	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Vacuum Drill (reverse Circulation Drill Under 8 Inch Bit)	$48.95	7B	4W	9A	View
Whitman	Power Equipment Operators-Underground Sewer & Water	Welding Machine	$47.86	7B	4W	9A	View
Whitman	Power Equipment Operators-	Whirleys & Hammerheads, All	$49.66	7B	4W	9A	View

	Underground Sewer & Water						
Whitman	Power Line Clearance Tree Trimmers	Journey Level In Charge	$55.03	5A	4A		View
Whitman	Power Line Clearance Tree Trimmers	Spray Person	$52.24	5A	4A		View
Whitman	Power Line Clearance Tree Trimmers	Tree Equipment Operator	$55.03	5A	4A		View
Whitman	Power Line Clearance Tree Trimmers	Tree Trimmer	$49.21	5A	4A		View
Whitman	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$37.47	5A	4A		View
Whitman	Refrigeration & Air Conditioning Mechanics	Journey Level	$85.00	6Z	1Q		View
Whitman	Residential Brick Mason	Journey Level	$51.84	5A	1M		View
Whitman	Residential Carpenters	Journey Level	$25.00		1		View
Whitman	Residential Cement Masons	Journey Level	$16.24		1		View
Whitman	Residential Drywall Applicators	Journey Level	$25.64		1		View
Whitman	Residential Drywall Tapers	Journey Level	$44.38	7E	1P		View
Whitman	Residential Electricians	Journey Level	$31.82		1		View
Whitman	Residential Glaziers	Journey Level	$20.72		1		View
Whitman	Residential Insulation Applicators	Journey Level	$14.86		1		View
Whitman	Residential Laborers	Journey Level	$22.44		1		View
Whitman	Residential Marble Setters	Journey Level	$51.84	5A	1M		View
Whitman	Residential Painters	Journey Level	$25.08		1		View
Whitman	Residential Plumbers & Pipefitters	Journey Level	$21.92		1		View
Whitman	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	$13.69		1		View
Whitman	Residential Sheet Metal Workers	Journey Level (Field or Shop)	$58.36	5I	1B		View
Whitman	Residential Soft Floor Layers	Journey Level	$17.62		1		View
Whitman	Residential Sprinkler Fitters (Fire Protection)	Journey Level	$13.69		1		View
Whitman	Residential Stone Masons	Journey Level	$51.84	5A	1M		View
Whitman	Residential Terrazzo Workers	Journey Level	$20.61		1		View
Whitman	Residential Terrazzo/Tile Finishers	Journey Level	$17.92		1		View
Whitman	Residential Tile Setters	Journey Level	$20.61		1		View
Whitman	Roofers	Journey Level	$41.94	5I	1R		View
Whitman	Roofers	Using Irritable Bituminous Materials	$43.94	5I	1R		View
Whitman	Sheet Metal Workers	Journey Level (Field or Shop)	$66.36	6Z	1B		View
Whitman	Sign Makers & Installers (Electrical)	Journey Level	$13.91		1		View
Whitman	Sign Makers & Installers (Non-Electrical)	Journey Level	$13.91		1		View
Whitman	Soft Floor Layers	Journey Level	$51.91	5A	3J		View
Whitman	Solar Controls For Windows	Journey Level	$13.69		1		View
Whitman	Sprinkler Fitters (Fire Protection)	Journey Level	$60.86	7J	1R		View

Whitman	Stage Rigging Mechanics (Non Structural)	Journey Level	$13.69		1		View
Whitman	Stone Masons	Journey Level	$51.84	5A	1M		View
Whitman	Street And Parking Lot Sweeper Workers	Journey Level	$14.00		1		View
Whitman	Surveyors	Chain Person	$13.69	0	1		View
Whitman	Surveyors	Instrument Person	$13.69	0	1		View
Whitman	Surveyors	Party Chief	$15.05	0	1		View
Whitman	Telecommunication Technicians	Journey Level	$46.21	5I	1B		View
Whitman	Telephone Line Construction - Outside	Cable Splicer	$37.40	5A	2B		View
Whitman	Telephone Line Construction - Outside	Hole Digger/Ground Person	$25.04	5A	2B		View
Whitman	Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$31.22	5A	2B		View
Whitman	Telephone Line Construction - Outside	Telephone Lineperson	$35.34	5A	2B		View
Whitman	Terrazzo Workers	Journey Level	$43.81	5A	1M		View
Whitman	Tile Setters	Journey Level	$43.81	5A	1M		View
Whitman	Tile, Marble & Terrazzo Finishers	Journey Level	$35.93	5A	1M		View
Whitman	Traffic Control Stripers	Journey Level	$49.13	7A	1K		View
Whitman	Truck Drivers	Asphalt Mix Over 20 Yards	$47.75	5D	1V	8M	View
Whitman	Truck Drivers	Asphalt Mix To 20 Yards	$47.38	5D	1V	8M	View
Whitman	Truck Drivers	Dump Truck	$47.38	5D	1V	8M	View
Whitman	Truck Drivers	Dump Truck & Trailer	$47.75	5D	1V	8M	View
Whitman	Truck Drivers	Other Trucks	$47.27	5D	1V	8M	View
Whitman	Truck Drivers - Ready Mix	Transit Mixers 20 yards and under	$47.75	5D	1V	8M	View
Whitman	Truck Drivers - Ready Mix	Transit Mixers over 20 yards	$48.08	5D	1V	8M	View
Whitman	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$13.92		1		View
Whitman	Well Drillers & Irrigation Pump Installers	Oiler	$13.69		1		View
Whitman	Well Drillers & Irrigation Pump Installers	Well Driller	$18.00		1		View

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Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.

J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.

K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

1. O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.

P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.

R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.

U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.

W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.

Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.

Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.

   M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.

   O. All hours worked on Sundays and holidays shall be paid at one and one-half times the hourly rate of wage.

   R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.

   U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

   H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.

   J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

   K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:
On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.

U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

V. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established or outside the normal shift (5 am to 6pm), and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

W. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

4. X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

   The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

   When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

   When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

   Y. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. All work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay.

   Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar ($1.00) per hour for all hours worked that shift.

   After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

   Z. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 20% over the hourly rate of wage. Work performed on Sundays may be paid at double time. All hours worked on holidays shall be paid at double the hourly rate of wage.

11. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   A. The first ten (10) hours worked on Saturday and all hours worked on holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).

   B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).

   C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

   D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).

   H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

   I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

   J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (7).

   K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).

   L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).

   N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).

   P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.

   Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

   R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).

   S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).

   Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).

   H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

Holiday Codes Continued

T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

V. Holidays: New Year's Day, President’s Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year’s Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

W. Holidays: New Year's Day, Day After New Year’s, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year’s Day, and a Floating Holiday.

X. Holidays: New Year's Day, Day before or after New Year’s Day, Presidents’ Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.

Y. Holidays: New Year's Day, Presidents’ Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.

Holiday Codes Continued

7. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

Holiday Codes Continued

7. W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.

X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.

Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.

15. F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (8). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

Note Codes

8. D. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: $1.00, Levels C & D: $0.50.

N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

Note Codes Continued

8. T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do “pioneer” work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, and Class D Suit: $0.50. Special Shift Premium: Basic hourly rate plus $2.00 per hour.

When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Note Codes Continued

8. Z. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

9. A. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid $0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130’ to 199’ – $0.50 per hour over their classification rate.
(B) – 200’ to 299’ – $0.80 per hour over their classification rate.
(C) – 300’ and over – $1.00 per hour over their classification rate.

B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

Note Codes Continued

9. D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

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 weekly.

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;
    j. Contract Drawing reference;
    k. Contract Specification section and paragraph reference;
    l. Descriptive text;
    m. Recommended solution(s); and

n. 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:

1. Johnson and Clark Halls are located in an area with significant pedestrian traffic. Clark Hall in particular has limited vehicular access and staging areas. The loading dock at Clark is accessible but small. Access by WSU vehicles to the loading dock will need to be maintained. The parking lot on the north side of Johnson will be available after the end of the spring semester in early May 2022. Parking permits for surrounding lots may be available through WSU Transportation Services; any parking permits will be the responsibility of the Design-Builder. Clark Hall and Johnson Annex will have existing occupants that will need building services maintained during construction. In addition, the occupants of Johnson Hall will continue to be moved out of the building potentially through the end of the Spring Semester 2022. Any new utility connections will need to be coordinated to maintain the function of Johnson, Clark, and other surrounding campus buildings. All occupants of Johnson Hall will be moved and the building cleared out no later than May 16, 2022.

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 require 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. This preliminary Progress Schedule shall consist of a narrative description of the Work, a time-scaled logic diagram, and a tabular report identifying planned construction activities for the entire Work. Activities should be sufficiently detailed and no activity should be longer than 14 Days. Together these documents constitute the preliminary Progress Schedule. In the preliminary Progress Schedule, Contractor must emphasize milestone dates, the date of Substantial Completion, and the Work of separate contractors.

B. The preliminary Progress Schedule shall be prepared using the approved software program required by Part 2 of this Section. The time-scaled logic diagram and tabular report will provide similar data, but in an abbreviated form to that specified for the Contractor's Progress Schedule.

C. Contractor shall submit a narrative description of the Work for the 120 Day period following NTP that identifies the critical path and factors that might jeopardize the critical path, achievement of any major milestones, and any unusual circumstances or events upon which the preliminary Progress Schedule relies.

1.04 CONTRACTOR'S PROGRESS SCHEDULE

A. Contractor shall submit a detailed Progress Schedule within 30 Days of receiving Owner’s comments on its preliminary Progress 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, and show how the Contractor plans to complete all remaining Work. The schedule must clearly identify the critical path.

B. The Contractor shall submit a Progress Schedule for the entire Project with all specified tabular reports and electronic copies for review and comment, with 14 Days submittal review per 01 33 00.

C. The Progress Schedule shall be prepared to show the order in which the Contractor proposes to carry out the Work and to indicate any access or Work area restrictions and planned availability and use of manpower, materials, and equipment. The Progress Schedule must incorporate any Contract-specified limitations and restrictions, contractually specified milestones, and completion date(s). Contractor shall prepare the Progress Schedule in sufficient detail and in compliance with the following factors:

1. The Progress Schedule shall be based upon calendar days;
2. The Progress Schedule shall be based upon retained logic;
3. The Progress Schedule shall be organized into logical subnetworks;
4. The type of Work to be performed and labor trades involved shall be identified;
5. All procurement, manufacture, and delivery activities for all major materials and equipment shall be identified. All long lead items identified by submittal shall be included.;

6. Date(s) when Owner-furnished equipment and material is required;
7. Assignment and coding of all activities by the performing entity such as Subcontractors, Vendors, Owner, etc. must be included;
8. Access to and availability of the Work area shall be considered;
9. Identification of interfaces and dependencies with preceding, concurrent, and succeeding activities shall be indicated;
10. Testing, submission and approval of test results shall be identified;
11. Planning for phased occupancy by Owner, if applicable, shall be included;
12. Dates when approvals are required by regulatory agencies or other third parties shall be indicated;
13. In calculating activity durations, normal inclement weather must be considered;
14. Incorporate the Submittal Schedule; and
15. Contract-stipulated milestones and completion date(s) shall be included.

D. The activities defined in the Progress Schedule shall represent the planned durations in anticipation of normal manpower and equipment utilization in durations of whole working days. No activity durations or nonconstruction activities such as procurement, delivery or submittal activities shall exceed 14 Days unless approved by Owner. Contractor shall schedule the Work to minimize the potential effects of adverse weather. Contractor shall also protect the Project site from the effects of weather and take other necessary measures such that the Work can be completed within the time established in the Contract.

E. Scheduled activities shall be identified by a unique identifier, which shall remain consistent throughout the Project.

1. Activity Description: Provide adequate information to readily identify each activity.
2. The critical path must be clearly identified on all schedules.
3. Furnish a written narrative to explain how durations for critical activities were determined. Such explanation must include the number of crews, crew composition, number of shifts per day, number of hours in a shift, and number of Work days per week, as well as construction equipment and material quantities.
4. Logic constraints are disallowed unless a compelling reason exists for their use.
5. Clearly identify and provide a written narrative for all activities that are planned to be conditioned by use of overtime, double shifts, or work on weekends or holidays, whether critical or not.
6. Each submittal involving graphical and/or tabular reports produced shall be accompanied by a report, which includes an open-end listing, a listing of any out-of-sequence progress, identification of any constrained dates,

the schedule calculation mode (retained or logic override), and any other statistics that are normally a part of such a report.

F. Contractor shall provide the following submittals with the initial schedule submission, as applicable, and for each monthly update thereafter:

1. Detail Progress Schedule (baseline schedule);
2. Monthly updated Progress Schedules; and
3. Short-Interval (look-ahead) Schedules.

The above submittals shall be transmitted electronically.

G. 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.

H. 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.

I. 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 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.

B. Design-Builder shall review all construction phase submittals for compliance with WSU's standards, the contract documents, and the ensuing construction documents prior to issuance to the Owner.

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. Design-Builder shall provide a comprehensive submittal register for all deliverables on the project, including design submittals, construction submittals, administrative submittals, and closeout submittals. The comprehensive submittal register will be jointly reviewed by WSU and the Contractor for the purpose of agreeing whether each submittal is to be treated as: "For WSU Action", "For Information Only", "For Concurrent Action" or "For Record".

1. Action submittals requiring review by the Owner:
    a. Submittals for products, systems and equipment that deviate from those indicated in the final, approved Design-Build documents.
    b. Administrative submittals as specified elsewhere in the contract documents (i.e. bonds, insurance, management plans, logistical / site management plans, etc.)
2. Information submittals include all construction phase submittals once they have been processed through to 'approved' by the architect or engineer of record and the Contractor.
3. Concurrent action submittals include those limited submittals identified jointly as needing concurrent 'for approval' review by the architect or engineer of record and the Owner. Examples of concurrent action submittals may include those portions of the Work where Owner Furnished activities must be coordinated simultaneously with the Work (e.g. building controls, access control and door hardware, alarms, etc.).
4. Record submittals may include items such as permits, O&M documents,

warranties, closeout documentation, etc.

C. 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).

D. 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.

E. 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.

F. Material and Color Submittal: Submit samples of actual colors and/or materials.

G. Number submittals by Specification section number and revision letter.

H. 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.

I. 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 14 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. SWPP (Storm Water Pollution Prevention Plan)
11. Demolition Plan
12. Asbestos Safety Plan
13. Traffic Control Plan
14. 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.

1.07 APPRENTICESHIP REQUIREMENTS

A. Pursuant to RCW 39.04.320, if the Contact Sum exceeds one million dollars no less than fifteen percent of the Labor Hours must be performed by apprentices, unless a different amount is permitted or otherwise required by law.

B. Apprentice hours shall be performed by participants in training programs approved by the Washington State Apprenticeship Council.

C. "Labor hours" means the total hours of workers receiving an hourly wage who are directly employed on the site of the public works project. "Labor hours" includes hours performed by workers employed by Contractor and all Subcontractors working on the Project. "Labor hours" does not include hours worked by foremen, superintendents, owners, and workers who are not subject to prevailing wage requirements of RCW 39.12.

D. During the term of this Contract, the Owner may adjust the apprentice labor hour requirement upon its finding or determination that includes:

1. A demonstration of lack of availability of apprentices in the geographic area of the Project;

2. A disproportionately high ratio of material costs to labor hours that does not make feasible the required minimum levels of apprentice participation;

3. Demonstration by participating contractors of a good faith effort to comply with the requirements of RCW 39.04.300, RCW 39.04.310, and RCW 39.04.320;

4. Small contractors or subcontractors (e.g., small or emerging businesses) would be forced to displace regularly employed members of their workforce;

5. The reasonable and necessary requirements of the Contract render apprentice utilization infeasible at the required level (e.g., the number of skilled workers required and/or limitations on the time available to perform the Work preclude utilization of apprentices); or

6. Other criteria the Owner deems appropriate, which are subject to review by the office of the Governor.

E. Contractor shall report apprentice participation to the Owner at least quarterly, on forms provided or approved by the Owner. In addition, copies of certified payroll records may be requested to document the goal. These reports shall include:

1. The name of the Project;

2. The dollar value of the Project;

3. The date of the Notice to Proceed;

4. The name of each apprentice and apprentice registration number;

5. The number of apprentices and labor hours worked by them, categorized by trade or craft;

6. The number of journey level workers and labor hours worked by them, categorized by trade or craft; and

7. The number, type, and rationale for the exceptions granted.

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 WATER AND STORMWATER POLLUTION PREVENTION:

A. Water Pollution:

1. Discharge of any pollutants (including sewage and chlorinated water from water line disinfection) into surface or ground waters of the Sate

(including storm drains, ditches and any other water conveyances) is prohibited.

2. Contractor removal of snow, ice, soil, and mud from roadways and sidewalks shall be accomplished without polluting storm drains or surface waters. Mud and soil removal shall be undertaken on a full-time basis, not just once or twice a day. Soil or mud that is dropped onto streets and sidewalks by vehicles at the Project site shall immediately be cleaned by Contractor. Contractor may not use water to clean streets and sidewalks. Under no circumstances may dust mitigation cause soil erosion or pollution of surface waters.

3. If a discharge to surface or ground waters does occur, Contractor shall immediately notify Owner.

B. Stormwater Pollution Prevention Plan (SWPPP):

1. For projects that disturb a soil surface area of one acre or greater:

   a. Contractor shall prepare a written SWPPP that meets DOE regulations and the requirements of Owner's Municipal Stormwater Permit.

   b. Owner shall apply for a DOE NPDES Construction Stormwater General Permit for stormwater discharge, and then transfer the permit to Contractor. Contractor shall comply with all provisions of the permit.

   c. Contractor shall maintain a copy of the NPDES permit and the SWPPP on-site at all times.

   d. Contractor shall maintain on-site or on call, at all times, a Certified Erosion and Sediment Control Lead (CESCL).

   e. Contractor's SWPPP shall identify all management practices used to prevent stormwater pollution and the location(s) at which each practice will be utilized on the Project site.

   f. Contractor shall obtain approval from Owner of the SWPPP prior to groundbreaking. Contractor shall construct approved BMP's and the site inspected and approved, per permit requirements, prior to groundbreaking.

   g. Contractor shall use best management practices (BMPs) and shall inspect BMPs at least once a week. In addition, Contractor shall inspect BMPs immediately following each rainfall event of 0.1 inches or greater.

   h. Contractor shall maintain a written log detailing the results of inspections beginning with the first day of construction. Contractor's written log shall describe all erosion control activities resulting from inspections. In addition, the following dates and events shall be included in the written log:

      1) The beginning and completion of major grading activities.

2) Rainfall events of 0.1 inches or greater.

3) When construction activities temporarily or permanently cease on-site, or on a portion of the site.

4) When stabilization measures are initiated for portions of the site.

5) Stormwater sampling results.

i. Contractor shall maintain and/or repair all BMPs as necessary to ensure continued performance of their intended function. Contractor's maintenance and repair activities shall include, but are not limited to:

1) Removal of sediment from silt fences before it reaches approximately one third the height of the fence, especially if heavy rains are expected; and

2) Cleaning or removal and replacement of drain inlet protection devices at least once every 7 Days, and once daily during storm events or before 6 inches of sediment can accumulate.

j. Contractor shall remove all temporary erosion and sedimentation control measure from the Project site within 30 Days after final site stabilization is achieved, or after the temporary BMPs are no longer necessary. Contractor shall remove any trapped sediment from the Project site. Contractor shall permanently stabilize any areas of soil disturbed by sediment removal.

k. In addition to sediment control, Contractor shall prevent other pollutant discharges from contaminating stormwater, groundwater, or soils.

1) Any maintenance or repair of heavy equipment and vehicles involving oil changes, hydraulic system draining and removal, solvent and degreasing cleaning operations, fuel tank draining and removal, and other activities that may result in discharge or spillage of pollutants to the ground or into stormwater runoff must be conducted using spill prevention measures, such as drip pans. Contractor shall immediately clean any contaminated surfaces following any discharge or spill incident. Emergency repairs may be performed on-site using temporary plastic placed beneath and, if raining, over the vehicle.

2) Wheel wash or tire bath wastewater shall be discharged to a separate on-site treatment system.

3) Application of agricultural chemicals including fertilizers and pesticides shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' recommendations for application rates and procedures shall be followed.

4) Use of lime, flyash, or other soil amendments that could alter the pH of discharge waters is prohibited.

5) Highly turbid or contaminated dewatering water from construction equipment operation shall be handled separately from stormwater. Management options include infiltration, transportation off-site for legal disposal, or use of a sedimentation bag with outfall to a ditch or swale for small volumes of localized dewatering.

l. Contractor shall provide to Owner all notifications/reports required by permit to DOE.

1) If stormwater sampling results show turbidity greater than or equal to 250 NTU, Contractor shall immediately report to DOE and shall notify Owner of the report.

2) Contractor shall file monthly Discharge Monitoring Reports (DMR's) with DOE as required. Contractor shall provide copies of all DMR's to Owner.

2. For projects that disturb a soil surface area of 5,000 square feet or greater, but less than one acre, provisions shall be made to meet applicable local regulations, as necessary.

a. Contractor shall make provisions for inspection and approval by the local authority prior to groundbreaking.

3. For projects that create additional impervious surfaces, provisions shall be made to meet stormwater flow control and treatment requirements, as applicable.

C. Wetlands:

1. Contractor must follow all Federal, State and local regulations including but not limited to WAC 173-201 regarding protection of wetlands.

1.06 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.

1.07 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”.

E. Vector Control:

1. Buildings shall be constructed so as to minimize the attraction and/or harborage of pests and vectors such as birds and rodents. Minimize bird roosting areas by not constructing exposed pipes, beams, or flat ledges on openings, especially underneath covered areas directly accessible to the outside. Openings 1/4-inch or larger shall be sealed. Leave a minimum of a 3-foot swath around the building that is bare. Do not plant trees, shrubs and grass immediately adjacent to building.

2. The presence of standing water shall be minimized or eliminated to prevent mosquito breeding.

F. On-Site Sewage Disposal:

1. Contractor is responsible for fully complying with WAC 246-272. A construction permit application shall be submitted to the appropriate jurisdictional authority for approval. The jurisdictional authority shall issue a construction permit prior to the commencement of construction and shall perform pre-opening inspections. Contractor shall ensure that the appropriate authority inspects and approves the site prior to construction and when the project is substantially complete.

G. Water Recreation Facilities:

1. Contractor is responsible for fully complying with WAC 246-260. A construction permit application shall be submitted to the appropriate jurisdictional authority for approval prior to the commencement of construction. WSU EH&S shall be consulted prior to the development of a construction permit application. Contractor shall ensure that the appropriate regulatory authority inspects and approves the site prior to operation.

H. Food Service Facilities:

1. Contractor is responsible for fully complying with WAC 246-215. A construction permit application shall be submitted to the appropriate jurisdictional authority for approval prior to the commencement of construction. WSU EH&S shall be consulted prior to the development of a construction permit application. Contractor shall ensure that the appropriate regulatory authority inspects and approves the food service prior to operation.

1.08 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), who may not be Contractor's Superintendent or Project Manager. Resume shall demonstrate a minimum of 5 year experience as a QC Manager, certificate of Certified Quality Manager may be substituted for experience.
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.).

8. Contractor will submit a daily report within 3-business days for any day work is performed. The daily report should include the following information; the list may be adjusted or relaxed with Owners Representative approval depending on size and scope of the project requirements:
   a. progress photo's,
   b. list of contractor's and work-force #'s for each contractor,
   c. RFI's or questions,
   d. equipment quantities in use or idle,
   e. weather (if work is being performed outside),
   f. construction delays or likely delays,
   g. 3rd part inspections or city visits,
   h. safety issues,
   i. meetings conducted,
   j. substantive material deliveries, and
   k. any other relevant facts occurring on the site.

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. Architect/Engineer;
2. Structural Engineer;
3. Owner; and
4. Contractor.

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. Contractor shall provide temporary restroom facilities. Facilities shall not directly or indirectly drain or discharge onto Owner property or any waters of the State. Place where directed at the time Work begins; maintain in sanitary condition. Remove upon completion of the Work and disinfect the premises.

B. Use of permanent and/or existing Owner’s facilities is not allowed.

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 SECTION INCLUDES

A. Contractor shall furnish, install, and maintain one (1) temporary on-site Project identification sign, and appropriate informational signs to identify Project, Project entrance, Project address, and direct traffic.

B. No other signs may be displayed at the Project site, including:

1. Separate contractor, Subcontractor, or supplier signs or advertisements;
2. Signs that flash, blink, rotate or otherwise draw unusual attention, except where required by safety regulations;
3. Company or agency logos; and
4. Any sign or graphic on equipment that is objectionable to Owner.

1.02 SUBMITTALS

A. Design Data: Contractor shall submit sign construction details. Where text may not be detailed, show layout of required information. Indicate margins, borders, spacing, and similar information.

PART 2 PRODUCTS

2.01 PROJECT IDENTIFICATION SIGN

A. One sign of the size, design, lettering, and construction selected by Owner. Size to be 8'-0" x 4'-0".

B. Graphic design, style of lettering, and colors: As selected and provided by Owner.

2.02 SIGN MATERIALS

A. Sign Surfaces: Exterior MDO plywood, 3/4" thickness, with plastic sealed and sanded edges.

B. Sign Posts: 4x4 pressure treated and painted white.

C. Rough Hardware: Galvanized.

D. Graphics: Owner will supply electronic information for sign graphics and lettering.

2.03 FABRICATION

A. Paint all exposed surfaces of supports, framing, and surface materials. Apply

one coat of primer and one coat of exterior grade white paint.

PART 3 EXECUTION

3.01 INSTALLATION

A. Within one month of pre-construction meeting, erect sign at the site at a location of high public visibility as directed and as approved by Owner. Locate in lighted location, if possible.

3.02 MAINTENANCE

A. Maintain signs and supports in neat, clean condition for the entire construction duration until Substantial Completion. Repair damages.

B. Relocate information signs as required by Work progress.

3.03 REMOVAL

A. Remove signs, framing, and supports following Substantial Completion of the Project.

END OF SECTION 01 58 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 specifies administrative and procedural requirements for field engineering services, including but not limited to the following:

1. Land survey Work; and
2. Establishment of coordinated reference points for general building layout and location.

1.02 SUBMITTALS

A. Project Record: Contractor shall submit a record of Work performed and record survey data as required by the Contract Documents.

1.03 QUALITY ASSURANCE

A. Surveyor: Contractor shall engage a registered Professional Land Surveyor registered in the State of Washington to perform the required land-surveying services.

B. Owner may furnish surveys describing physical characteristics, legal limitations, utility locations, and a legal description for the Project site. Contractor may rely on the information furnished by Owner but must exercise proper precautions to ensure the safe performance of the Work. Contractor shall assume that the locations of any underground or hidden utilities, underground tanks, plumbing, or electrical runs indicated in the surveys or Contract Documents are shown in approximate locations, but Contractor is responsible for verifying the location of all utilities impacted by the Work. Additionally, Owner may make available to Contractor the results of investigations of hidden or subsurface conditions for the convenience of Contractor. While Contractor may rely upon such investigation results, there is no guarantee, express or implied, that the conditions indicated are representative of those existing throughout the Project site, or that unforeseen developments may not occur. Contractor is solely responsible for interpreting the information and extrapolating beyond the location, including each individual boring, test pit, or other locations.

1.04 EXAMINATION

A. Identification: Contractor shall verify the location of benchmarks and control points provided by Owner.

B. Contractor shall verify layout information on Drawings in relation to the property survey and existing benchmarks before proceeding to layout the Work.

Contractor shall also locate and protect existing benchmarks and control points and preserve permanent reference points during construction.

1. Do not change or relocate benchmarks or control points without prior written approval of Owner. Promptly report lost or destroyed reference points and requests to relocate reference points because of changes in grades or locations.
2. Promptly replace lost or destroyed Project control points. Base replacements on the original survey control points.

C. Contractor shall establish and maintain a minimum of two permanent benchmarks at the Project site.

1. Record benchmark locations, with horizontal and vertical data, on Project Record.

D. Existing utilities and equipment: The existence and location of underground and other utilities are not guaranteed. Before beginning the Work, Contractor shall investigate and verify the existence and location of underground and other utilities (including irrigation and snow melt systems).

1. Prior to construction, verify the locations and invert elevation at points of connection sanitary sewer, storm sewer, and water service piping.

1.05 PERFORMANCE

A. Contractor shall work from lines and levels established by the property survey; establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to locate each element of the Project; and calculate and measure required dimensions within indicated or recognized tolerances. Do not scale Drawings to determine dimensions.

1. Advise entities engaged in Work activities of marked lines and levels provided for their use.
2. As construction proceeds, check every major element for line, level, and plumb.

B. Surveyor’s Log: Contractor shall maintain a surveyor’s log of control points and other survey Work. Make this log available to Owner for reference.

1. Record deviations from required lines and levels and advise Owner when deviations that exceed indicated or recognized tolerances are detected. On Project Record, record deviations that are accepted and not corrected.
2. Following completion of foundation walls, major site improvements, and other Work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and site Work.

C. Site Improvements: Contractor shall locate and lay out site improvements, including pavement, stakes for grading, fill and topsoil placement, utility slopes, and invert elevations.

D. Existing Utilities: Contractor shall furnish information necessary to adjust, move, or relocate existing structures, utility poles, lines, services, or other appurtenances affected by construction. Contractor shall coordinate with local authorities having jurisdiction.

E. Contractor shall record accurately on the Project Record the principal metes, bounds, lines, and levels of the Project.

END OF SECTION 01 71 23

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. 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 in reusable condition shall be salvaged and sorted. Contractor shall remove and deliver to the Owner at designated location on the Pullman campus.
        1) Kitchen equipment;
        2) Cabinets;
        3) Lighting fixtures, without asbestos or PCBs;
        4) Shelving;
        5) Sinks; and

6) Surplus building materials (new, leftover, unwanted). Review with Owner for clarification.

b. 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.

c. 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. Contractor will provide and service containers for all wastes.

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. 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. O&M Manuals shall be bound into 3-ring binders (three sets) with the cover and spine to be composed and laid out per the cover page template on the last page of this Section.

B. 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 (Laboratory Equipment, Special Equipment, etc.).

C. 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.

D. 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 0076, Johnson Hall
Facility 0099, Clark Hall

Johnson Hall Demolition / Clark Hall Research Lab Renovation

2022

General
O&M Manual

Vol. X of Y

(Spine and Cover)

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.
6. At time of building flush-out, IAQ Manager shall be the contact person and shall be responsible for overseeing the entire flush-out process.

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 and at time of building flush-out; and
6. Cleanup of contaminated components after construction, but before scheduled flush-out of building ventilation system.

B. Include with the "Draft IAQ Management Plan" written procedures that describe building flush-out process that will be followed upon completion of construction.

C. 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.

D. 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 as well as building flush-out. This final plan and written flush-out procedures shall address all review comments noted on the draft submittal and be submitted prior to the commencement of construction.

1.04 BUILDING FLUSH-OUT SCHEDULE

A. Contractor shall include a separate activity on the Progress Schedule, which indicates the targeted start date and duration of the building flush-out process.

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 immediately prior to building flush-out and 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 BUILDING FLUSH-OUT

A. Contractor shall conduct a building flush-out with new filtration media at 100% outside air after construction ends and prior to testing, adjusting and balancing of systems. Filtration media shall have a MERV of 13 as determined by current ASHRAE 52.2. This flush-out is different from and additional to the 72-hour flush-outs described in 3.01.A above.

B. Relocate information signs as required by Work progress.

3.04 COMPLETION PROCEDURES

A. Remove all IAQ measures as well as signs, framing, and supports at completion of Project.

B. All testing, adjusting and balancing of systems, including training of Owner personnel, shall be completed after flush-out. All flush-out filtration media must be replaced with required filtration media prior to testing and adjusting of systems.

C. Actual procedures employed during building flush-out must receive prior approval from Owner.

D. Punch list items that do not affect the mechanical systems may be conducted during flush-out upon approval of the Owner.

E. Upon completion of building flush-out, replace all filtration media. Filtration media shall be the same as used for occupancy.

F. Submit a report upon completion of building flush-out stating that all procedures stated in the approved IAQ Management Plan have been complied with. This report shall contain all weekly reports and photographs, as well as any IAQ management plan activities that occurred during the Project.

END OF SECTION 01 81 19

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. Commissioning is a systematic process of ensuring that all building systems perform interactively according to the design intent and Owner's operational needs. This begins in the design phase and continues through construction. The commissioning process incorporates the traditionally separate functions of system documentation, equipment startup, control system calibrations, testing and balancing, performance testing, and training. Commissioning during the construction phase is intended to achieve the following specific objectives:

1. Verify that applicable equipment and systems are installed according to the Contract, manufacturer's recommendations, and industry accepted standards and that they receive adequate operational checkout by installing contractors.
2. Verify and document proper functional performance of equipment and systems.
3. Document all non-performing equipment and systems and track corrective actions through to final resolution.
4. Ensure compliance with State Energy Code Requirements (WA NREC Latest Revision).

B. Work includes the completion of formal commissioning procedures on selected equipment and systems. Commissioning procedures will be designed and coordinated under the direction of a Commissioning Agent (CA). Contractor is not responsible for hiring the CA. The CA will work directly for Owner. Contractor is responsible for coordinating and cooperating with the CA as necessary to complete the training and commissioning processes.

1.02 DEFINITION OF TERMS

A. Commissioning Agent (CA): Is an independent third-party consultant under contract with Owner. CA responsibilities are listed in Subsection 1.03 for information, reference, and clarification.

B. Installation Verification Audit: Includes the on-site inspection and review of related system components for conformance to the Contract. The CA will check for proper systems installation and verify systems readiness for function testing. Noted deficiencies will be documented and must be satisfactorily resolved prior to continuing with commissioning on the affected component or system.

C. Commissioning Plan: Outlines the commissioning process. Provides a brief overview of each start-up and functional test to be performed and identifies the responsible Contractor and/or supplier. It also outlines the responsibilities of all personnel to the commissioning process, estimates the commissioning schedule and provides sample Installation Verification, Start-Up, and Functional Performance Test Procedures and related documentation for information.

D. Start-Up Testing: Initial test checkout of component or systems completed prior to functional performance testing. The start-up tests verify that the equipment is installed and operating properly per the Contact.

E. Testing, Adjusting and Balancing (TAB): Testing, adjusting and balancing is a process where heating and air conditioning systems are tested against design standards, adjusted for maximum efficiency, and balanced to provide optimum performance. The Work typically covers balancing and adjusting air and water distribution in areas of the building served by an HVAC system, and verification and adjustment of heating and cooling loads to insure proper indoor environmental conditions. Areas that do not meet the design standards are referred to the appropriate party for correction. Reports are prepared documenting performance and compliance with design standards.

F. Function Performance Testing: Includes the documented testing of individual components and equipment under actual operating conditions. Final performance commissioning of systems will begin only after Contractor certifies that system components are 100% complete, start-up test results have been accepted, and the CA agrees that systems are ready for functional testing.

G. Commissioning Issues Log: Generated by the CA, includes deficiencies discovered during the commissioning process. The log identifies the responsible contractor, current disposition of issues, and the date of final resolution as confirmed by the CA. Deficiencies are defined as those issues where products, execution or performance do not satisfy the Contract, the design intent or Owner's need.

H. Final Commissioning Report: Includes the overall final commissioning document, prepared by the CA, which details the actual commissioning procedures performed, inspection and testing results, and the final version of the Commissioning Issues Log indicating that all issues discovered through the commissioning process have been verified as resolved.

1.03 COMMISSIONING AGENT'S DUTIES AND RESPONSIBILITIES

A. Meet and communicate with the Owner's Designated Representative, Contractor, equipment representatives, and others as necessary to facilitate the commissioning process.

B. Write the commissioning plan.

C. Review commissioning-related Specifications, submittals, and Contract Documents. Communicate noted deficiencies and concerns to Owner.

D. Review the Owner Project requirements and Basis of Design documents to insure Owner's intent and design requirements are met.

E. Chair controls integration meetings to ensure acceptance of control strategies and determine methods to achieve the required sequence of operation.

F. Develop installation and start-up checklists from:

1. Information in the Contract Documents; and
2. Information from equipment manufacturers as provided by Contractor.

G. Coordinate functional testing procedures with Contractor and integrate into Progress Schedule.

H. Develop detailed and specific inspection and functional testing procedures for equipment and systems to be commissioned.

I. Confirm completion of all static piping and duct tests and flushing and cleaning as performed by Contractor.

J. Complete a detailed physical inspection and visual checkout of commissioning related equipment and components. Document specific deficiencies for resolution.

K. Confirm completion of equipment and systems start-up procedures as performed by Contractor and equipment representatives. Verify appropriate documentation is completed and provided for inclusion in the final commissioning report. Record noted deficiencies.

L. Schedule and coordinate the final on-site functional testing process. Complete a documented checkout of every specified operating parameter and mode. Document deficiencies and resolutions.

M. Review Contractor-provided O&Ms. Ensure the manuals provide in-depth, Project-specific information. Provide formal comment.

N. Work with Owner, Architect/Engineer, if any, and Contractor to satisfactorily resolve outstanding issues.

O. Provide Owner with final, complete, and documented verification to ensure commissioned systems are 100% operational per Contract, prior to Owner's acceptance. Exceptions may be made for seasonal commissioning.

P. Perform seasonal commissioning as required to verify proper system operation during peak heating and cooling seasons.

Q. Complete all other items noted in Contract as Commissioning Agent responsibilities.

R. Provide a final Commissioning Report to Owner.

1.04 DUTIES AND RESPONSIBILITIES FOR COMMISSIONING

A. The commissioning process will require the active participation of persons qualified to represent the following interests:

1. Owner,
2. Contractor,
3. Equipment manufacturer's representatives,
4. Mechanical Subcontractor,
5. HVAC Subcontractor,
6. Controls Subcontractor,
7. TAB Subcontractor,
8. Electrical Subcontractor, and
9. Others as appropriate.

B. The CA will coordinate, schedule, and oversee the final functional performance commissioning process. Participants shall include in their contracts all costs necessary to participate in and complete the commissioning process.

C. Contractor will assure the participation and cooperation of Subcontractors and coordinate with Owner and Architect/Engineer, as required for the commissioning process.

Owner will assure the participation of its chosen representatives.

PART 2 PRODUCTS − NOT USED

PART 3 EXECUTION

3.01 CONTRACTOR RESPONSIBILITIES FOR COMMISSIONING

A. Contractor shall provide material, equipment, and tools to facilitate completing the functional performance testing process. The CA will provide specialized and calibrated test equipment to perform the calibration and functional performance testing.

B. Contractor shall budget and provide sufficient time and qualified personnel to participate on-site in this process until the process is successfully completed and all deficiencies have been corrected or otherwise revolved.

C. Contractor shall provide training to Owner. Specified training on related systems and equipment operation and maintenance shall only commence after final performance commissioning is successfully completed, and systems are verified by the CA to be 100% complete and functional.

D. Contractor shall reimburse the CA for repeated test failures. After a second failed start-up or functional performance test, the CA and Owner shall be entitled to additional compensation for time and expenses involved with re-testing. The compensation shall be at published company billing rates.

E. Owner will not accept equipment and systems, and Owner will generally not make final payment, until all equipment and systems have been successfully

commissioned and all specified requirements have been satisfied.

F. Include a line item for commissioning in the Schedule of Values. Ensure sufficient costs are included for Contractor's expenses related to all commissioning tasks.

END OF SECTION 01 91 00