

**Request for Proposal**  
M – Street Renovation  
Muckleshoot Indian Tribe  
39015 72<sup>nd</sup> Ave SE, Auburn, WA  
June 28, 2010

**BIDS DUE 11AM JULY 12, 2010**

**Introduction:**

The following is to serve as a Request for Proposal and outline of special requirements to secure competitive bids for the described work generally called **M – Street Renovation** for the Muckleshoot Indian Tribe (MIT), 39015 172<sup>nd</sup> Avenue SE, Auburn, Washington. The intent is to enter into a contract with a single prime contractor, for the work described below.

The M – Street Project is located at 1004 M Street, Auburn Washington

**Pre-Bid Walk-Through & Communications:**

It is mandatory that the site be reviewed prior to submitting a proposal. The one pre-bid site review is scheduled for Thursday, July 1<sup>st</sup> 2010 at 10:00am. Since there will not be multiply site reviews, contractors are encouraged to bring the appropriate subcontractors to the walk through on the 1st. Any questions regarding the project should be directed to Steve Webber, Hainline & Associates 206-715-6276.

**Scope of Work**

This project will comprise of miscellaneous repairs as noted below. The home is located in the City of Auburn. If permits are required for re-roofing or alternate pricing tasks, the Contractor will obtain permits and pay permit fees. All applicable sections of the Muckleshoot Housing specification will be used on this project.

**Exterior:**

1. Remove existing roofing materials at home & garage; install ½ inch plywood and new composition roofing per MIT Housing specifications. Dispose of all debris off site.
2. Replace gutters, downspouts and flashings.
3. Repair (or replace) fascia and or barge boards, repaint with exterior of home.
4. Re-point brick chimney.
5. Re-roof front entry porch cover; repair plaster soffit.
6. Prep siding, trim and windows for paint. Paint entire exterior of home and garage; color to match existing.

**Interior:**

1. Employ asbestos abatement contractor to remove “popcorn” ceiling materials as outlined in the attached NVL Labs report. Finish drywall ceiling, primer & paint.
2. Remove bathroom vanity & toilet; repair subfloor; install new sheet vinyl flooring, vanity, sink, faucet and toilet. Install new, matching medicine cabinet, towel bars, vanity and toilet; install new shower curtain & rod; clean tub / shower unit, replace facet.
3. Remove and replace kitchen cabinetry, counter tops, sink, faucet, and appliances; match existing layout. Install tile backsplash above counter top. Replace sheet vinyl flooring.

4. Remove all carpet and install sheet vinyl product by Mannington, Aurora series, Oak Plank, Color #41017 Golden Plank. Do not remove base, doors or door jambs. Install base shoe (finished to match existing base) at perimeter of rooms to cover edge of flooring.
5. Do not replace windows; repair all windows, prep & paint exterior, stain interior to match existing trim. Provide alternate price to replace windows.
6. Leave existing doors, base, shelving window & door trim etc. in place.
7. Provide minor patching at drywall, prime and paint the entire interior of home.
8. Service HVAC system; make sure all registers are in place and functioning properly.
9. Install new electrical system through out house; including new receptacles, switches and light fixtures. Confirm existing telephone jack are operational; repair as required. Obtain permit and pay permit fees.
10. All plumbing, mechanical, fire sprinkler and electrical work is to be bidder design build.
11. Obtain and pay for building permit for re-roof, if required by the City of Auburn.

#### **Alternate Pricing:**

1. Provide alternate add to install new fire sprinkler system per NFPA 13D requirements. The fire sprinkler riser will be surface mounted in the utility closet or laundry room. If required, install new water main to service the new fire sprinkler system. See MIT Housing specifications for additional information. The garage will not require fire sprinklers. Obtain permit and pay permit fees.
2. Provide alternate add to remove the existing hot water tank and install a Rinnai RC80HPi condensing tank less water heater. Obtain permit and pay permit fees.
3. Provide alternate price to replace domestic water pipe in home and new main to meter.
4. Provide an alternate add to remove the existing windows and install retrofit dual pane windows.

#### **Schedule**

The milestone schedule dates include:

- Thursday July 1, 2010 10:00am pre-bid site review
- Monday July 12, 2010 11am proposals due at MIT Construction office

#### **Bid Documents**

1. Project Specifications dated June 1, 2010
2. NVL Labs report dated June 7, 2010

#### **Proposal Due Date, Delivery and Content Requirements**

1. Proposals are to be delivered to Muckleshoot Indian Tribe Construction Office by 11:00am on Monday July 12<sup>th</sup>. Bids are to be delivered in a sealed envelope; faxed, emailed or bids not in a sealed envelope will not be considered.
2. The format of the Bidder's proposal shall include:
  - Inclusions
  - Exclusions
  - Clarifications

- The bid pricing breakdown will be as following;

General Conditions	\$ _____	
Exterior	\$ _____	
Interior	\$ _____	
Plumbing	\$ _____	
Mechanical	\$ _____	
Electrical	\$ _____	
Contractors Fee	\$ _____	% _____ of building cost
Total	\$ _____	
Alternate #1 Fire Sprinklers	\$ _____	
Alternate #2 Hot water system	\$ _____	
Alternate #3 Domestic Water	\$ _____	
Alternate #4 Windows	\$ _____	

Addenda Acknowledged #1 \_\_\_\_\_  
#2 \_\_\_\_\_  
#3 \_\_\_\_\_

**Additional Clarifications**

1. The contract agreement will be a standard Muckleshoot contract agreement or AIA 101 and AIA 201.
2. The Contractor shall be licensed and bonded within the State of Washington, as shall all subcontractors.
3. The owner reserves the right to interview, approve or reject any subcontractors proposed by the contractor.
4. Prior to commencing work, the Contractor shall procure and maintain, at its own expense, until completion of the work, general liability and property damage of insurance (\$2,000,000). A certificate from the insurance company showing that the insurance is in force shall be submitted to the owner prior to commencing work. The Muckleshoot Indian Tribe shall be noted as the certificate holder; The Muckleshoot Indian Tribe and Hainline and Associates will be named as additionally insured.
5. No sales tax is to be included with the bid amount.
6. No payment and performance bond will be required for this project.
7. The owner reserves the right to refuse any and all bids that are not responsive.

**CONSTRUCTION COMPONENT – SPECIFICATIONS**

**DIVISION 1 GENERAL CONDITIONS**

1. Description of work:

- Provide all Work required completing the project as shown in the Contract Documents.
- All site conditions and contract documents shall have been examined by the Contractor prior to submitting proposal. The Contractor understands the contract documents and quality and quantities of materials to be provided.

2. Contract Description:

- Construct home under a standard Muckleshoot contract.
- The Contractor will coordinate all trades involved in the project.
- The Contractor will coordinate inspections of all work, including utilities companies and special inspectors.
- All specifications shall meet or exceed the standards set forth by the 2009 International Residential Code (IRC), International Building Code (IBC), International Plumbing Code (IPC), International Mechanical Code (IMC), NFPA 13 D, and the International Electrical Code (IEC). In addition, the provisions of the Washington State Energy Code, Washington State Ventilation Code, and the Americans with Disabilities Act (ADA) shall apply.
- All electrical work requires Washington State Department of Labor & Industries (L&I) permits and inspections. The Contractor will be responsible for all costs associated with electrical permit(s) and or inspections.
- All Natural Gas work requires Enumclaw Gas permits and inspections. These are the responsibilities of the builder or his designated subcontractor.

3. Contractors Use of Site:

- The Contractor and subcontractors will limit the use of site for storage
- Contractor will be responsible for security of their own materials, tools and equipment.
- Contractor will be responsible for receiving all deliveries to the project site.
- Contractor will install and maintain perimeter silt fence for the duration of the project. Silt protection will be installed, and maintained, on catch basins adjacent to the project site.

**TEMPORARY POWER**

1. The Contractor is responsible for all work associated with temporary power; including obtaining permit, permit fees, installation and removal of poles. The Contractor will pay all power consumption fees, until final acceptance of the project.

## MIT Housing Specifications

### SAFETY

1. All on-site personnel will comply with OSHA, WISHA and MIT safety requirements.
2. A board is to be set up in the garage that will have posted on it the following:
  - A. Building permit
  - B. L&I Electrical permit
  - C. Permit copy of the plans in a plastic sleeve (marked "permit copy")
  - D. A line drawing that show driving directions to the nearest emergency medical facility
3. The Contractor is to have all required PERSONAL SAFETY EQUIPMENT (PSE's) for his personnel on site. The Contractor will require all subcontractors to provide and use their own PSE's.
4. The Contractor is to provide a SITE SPECIFIC SAFETY PLAN before any work is performed by their personnel. Contractor is to have a SAFETY MANUAL readily available for field personnel.
5. All subcontractors are to furnish a SITE SPECIFIC SAFETY PLAN for their portion of the work for the Contractor.
6. Contractor is to provide portable water for all workers on site.
7. Bi-weekly safety meetings are to be conducted by the General Contractor with a copy of the sign up page sent to the Owner.

### SITE DUST CONTROL

1. Contractor will control dust generated on-site with water where available.
2. Contractor will have the streets swept as required by the City of Auburn or King County or MIT requirements.

### PORTABLE SANITATION

1. Contractor is to provide portable sanitation and hand wash stations at each jobsite.

### FIRE EXTINGUISHERS

1. The Contractor is responsible for providing at least one 10 pound ABC extinguisher, per building, for use at the site during construction.

### DEBRIS AND WASTE

1. All construction debris and waste will be disposed of off tribal land and in accordance with Washington State laws and ordinances. Owner will not be held liable for any illegal dumping.
2. Building is to be kept clean at all times with no accumulation of waste. Building is to be **broom clean on a weekly basis**.

### INSPECTIONS

1. Scheduling inspections with the appropriate agency is the responsibility of the Contractor. A 48-hour notice is required for all inspections.

### SUBMITTALS

1. Contractor is to provide submittals per specifications within 10 working days of "Notice to Proceed".

## MIT Housing Specifications

2. Provide neatly marked-up AS-BUILT DRAWINGS and Noteworthy modifications to the project specifications upon closeout.

### WARRANTY

1. General Contractor to furnish a (1) year warranty on all products and workmanship.
2. Provide ORIGINAL COPIES of ALL MANUFACTURER'S WARRANTIES

### O&M MANUALS

1. General Contractor to provide **two (2) copies of OPERATIONS AND MAINTENANCE MANUALS** assembled in 3 ring binders neatly labeled. This manual will include all supplier brochures that describe the installed products including:
  - A. Floor coverings
  - B. Plastic laminate specifications
  - C. Appliances
  - D. Hot water tank
  - E. Doors & hardware
  - F. Windows & screens
  - G. Paint finishes
  - H. Plumbing fixtures
  - I. Light fixtures
  - J. Etc., anything that will be helpful for the house owner

## DIVISION 2 SITEWORK

### 02000 Survey

1. The Owner will provide interior and roadside lot corner pins.
2. The Contractor will locate and stake the building corners and establish finish floor elevation.

### 02200 Earthworks

1. The Contractor will have reviewed the existing project site conditions prior to submitting their proposal for work. All trenching, backfill, compaction, import or export of materials, rough grading and fine grading, etc. is included in the project scope of work.
2. Testing: If the project conditions require the services of a soils engineer, the Owner will employ them and pay all testing costs. The Contractor will be responsible for contacting and scheduling all required site inspections.
3. The contractor will be responsible for furnishing, setting, and marking all line, grade and locations stakes, including offsets and general construction staking. A re-staking and maintenance of staking is the Contractors responsibility.

## MIT Housing Specifications

4. Imported soils: if the site requires fill material to be imported, the Contractor will make arrangements with the soils engineer to test and confirm the suitability of the soil, seven days prior to importing the material.
5. Compaction: if native soils under foundation are disturbed, then material will be compacted to 95%. If the 95% compaction is unattainable, then loose soils will be removed and replaced with structural fill material approved by the soils engineer. This work will be done at the Contractors expense.
6. General grading notes may be noted on the project plans. In all cases, the finish grade of the lot will slope away from foundation @ 2% grade or greater for a minimum of 10 feet.

### **02450 Site Concrete**

1. All exterior concrete placed at sidewalks, stoops and garage driveway to have a minimum compressive strength of 2,500 psi. five-sac concrete mix will be used for all concrete. Contractor to provide batch slips.
2. Water – cement ration per IRC Table 402.2.
3. See 03300 for reinforcing requirements.
4. All exterior concrete is to receive a broom finish.
5. Driveways are to have 6” thickened edges.
6. Provide rear stoop at base of stairway landing.
7. Refer to site plan for sidewalk requirements.
8. All decks shall have 16-inch wide x 8-inch deep footings. Posts are to be attached with Simpson AB66R Post Base (or equal).
9. All exterior ramps are to be concrete and must conform to ADA standards. Handrails are to be attached to ramps.

### **02500 Site Water**

1. Water meter and meter setter will be furnished and installed by Muckleshoot Public Works. MIT Public Works to make connection to water meter.
2. Trenching for water pipe, pipe-bedding material, pipe materials, connections at meter and house, and backfill is included in this scope of work.
3. A 1-inch, full port ball valve, with threaded connections, is to be installed on the incoming water main; the valve is to be located in the garage.
4. Contractor will directly coordinate the service connections and inspections directly with Muckleshoot Public Works Department 253-939-9311.
5. Domestic water pipe material to be 1” (IPS) PE P200 psi. A separate fire sprinkler service line to be 1 1/4” ISP.
6. No back flow preventer or PRV is required on domestic water.

## MIT Housing Specifications

### **02550 Gas Service**

1. The contractor will be responsible for the supply and installation of all gas pipes from the meter to the fixtures.
2. Trenching for gas pipe, pipe-bedding material, pipe sleeve materials, and backfill (approved by Enumclaw Gas) is included in this scope of work. From street to meter.
3. Contractor will directly coordinate the service connections and inspections directly with the gas utility, City of Enumclaw 360-825-5541.
4. The owner will pay the cost of the gas meter.

### **02550 Electrical Service**

1. Trenching for electrical service, conduit pipe-bedding material, conduit pipe materials, meter base, and backfill (approved by PSE) is included in this scope of work. Provide a "pull-in-bell" at each end of power conduit.
2. Contractor will directly coordinate the review & approval of materials, layout of conduit route and inspections directly with Puget Sound Energy 888-321-7779.
3. The owner will pay PSE for cost associated with the meter and wire installation.

### **02600 Foundation and Down Spout Drains**

1. Foundation Drains: perforated pipe will be installed at the outside bottom of the footing. Drainpipe will be covered with 4" layer of 1 1/4" washed rock with an approved filter fabric over the rock. Backfill the foundation after pipe installation has been inspected.
2. Down spout drains will sit on footing ledge with downspout risers located according to plan. All footing drainpipe and downspout tight line pipe will be 4" schedule 10 PVC with all joints glued. These two drains will be connected to the storm system. Provide connection fitting between downspout and tight line. Contractor will be responsible for correcting any standing water under the house.

### **02650 Sanitary Sewer**

1. Trenching for sewer pipe, pipe-bedding material, pipe materials, connections at house, and backfill is included in this scope of work. Expose side sewer at property line, leave trench open for MIT Public Works to make connection. Backfill sewer after connection is made.
2. Contractor shall coordinate sewer connection and inspections with Muckleshoot Public Works Department 253-876-3030.
3. Buried pipe material will be PVC, schedule 35.



## MIT Housing Specifications

4. Provide double sweep clean-out, 3'-0" from face of exterior siding. Clean-out cap is to be made of brass.
5. At exterior cleanout, install clean-out in 12"x12"x4" concrete casing with light broom finish.

### **02900 Landscaping / Irrigation**

1. General Contractor to provide a sub-base surface that is true and level with required slope away from the foundation; bury all large rocks so ground is ready to accept topsoil.
2. Remove all weeds prior to placement of topsoil material.
3. The Contractor will provide topsoil material to the project site. The contractor is to determine the required quantity to cover all landscape areas with four to six inches of topsoil material.
4. Sod material will be installed at the front yards. It will be installed per the manufactures recommendations. Top dress and seed all sod joints.
5. Sod will be fertilized and watered per manufactures recommendations for a period of two months after installation.
6. The side and rear yards will have hydro seed material installed. The contractor will water and fertilized, per manufactures recommendations, for a period of two months after installation. Provide a 2 foot wide gravel path at perimeter of foundation wall.

### **DIVISION 3 CONCRETE**

#### **03200 Reinforcing Steel**

1. ASTM A615 grade 60, reinforcing steel details shall be prepared by an experienced, approved detailer and conform to standard practice outlined in ACI report 315.
2. Weather indicated on plans or not, all vertical rebar will be installed 18-inches on center; triple vertical bars will be placed at the corners; double vertical at Simpson hold-downs.
3. Weather or not indicated on the plans, all chairs are to have a four-inch (min) horizontal leg and to be spaced 18" on center, each way.

#### Concrete Cover of Reinforcing

3"	Concrete cast against and permanently exposed to earth
1 ½"	Concrete exposed to earth or weather
1 ½"	Beams and columns not exposed to earth or weather
¾"	Slabs and walls not exposed and to earth or weather

## MIT Housing Specifications

### **03300 Concrete**

1. Contractor will install footings and foundations as per individual house plans. Whether or not indicated on the plans, all interior footings will be continuous strip footings with three (3) #4 grade 60 bars.
2. See class and use as noted on plan; all concrete mix designs to include a five- sac minimum.
3. Water – cement ratio per IRC.
4. Prior to placement of concrete, obtain approval of existing subgrade material, structural fill or utility trench backfill.
5. At perimeter of exterior concrete stem wall, at side of house, provide an exterior poured in place 30” concrete crawl space access. Provide a CDX plywood covered lid with 28 ga. sheet metal.
6. Typical sill bolts to be 5/8”x10” at 4’-0” o.c. or per shear wall schedule; minimum 7” embedment. Install 3” x 3” x 1/4” plate washers on anchor bolts.
7. Install crawl space ventilation will be placed into the perimeter concrete wall; ventilation area per IRC.
8. Install 6-inch sleeve through footing, as required, for installation of sewer pipe.
9. See section 02450 for concrete ramp requirements.

### **DIVISION 5 METALS**

#### **05500 Miscellaneous Metals**

- 1.

### **DIVISION 6 WOOD AND PLASTICS**

#### **06100 Rough Carpentry**

##### **General Notes**

1. All framing to comply with IRC chapter 6. Nail spacing to conform to IRC R6002.3 (1) & Table R602.3 (2). All wood in contact with concrete to be pressure treated. Provide composition shingle between wood and concrete with granular side down. All framing lumber will be Douglas Fir No.2 and better, except pre-engineered manufactured roof trusses; maximum moisture content 19%.
2. Place framing member’s full length, without splices, or finger joint material.
3. Place horizontal members, crown side up.
4. Install insect screen at all vents.
5. Bolt heads and nuts bearing against wood to be provided with flat cut 3”x3”x1/4” square washers.

## MIT Housing Specifications

6. All metal framing anchors and hangers shown on drawings shall be "Strong Tie Connectors" as manufactured by Simpson Company or approved equal.
7. Coordinate and provide solid blocking for wall and ceiling mounted items. Provide blocking or 3/4" CDX Plywood at shower, all ADA grab bars and tub handrails. Provide framing for attic access point. Use 2 x 6 (min) #2 Douglas fir. Align blocking to face of framing; attach with four #16p nails (min), 2 at each end. Replace any blocking split during installation.
8. Coordinate and install miscellaneous blocking and framing as required for Mechanical Division 15, Electrical Division 16 and appliances.
9. Tolerances: A. Faces of abutting framing members: flush alignment. B. Framing Members: 1/8-in maximum from true position. C. Misalignment of Framing Members: 1/8-in maximum between adjacent members at center of span/length.
10. Clearances: 6" min between wood and earth 18" min between floor joist and earth 12" between floor beams and earth.
11. Shop Drawings; A. submit truss manufacture shop drawings and calculations prior to ordering materials. B. Submit AITC Certificate listing species and combination for all glue laminated structural members. If home designs include structurally designed elements, then the designs supersede truss manufacturers requirements.

### Sub Floor

1. All mud sills will be pressure treated 2x6 with 5/8" x 10" anchor bolts installed with 7" embedment, according to the plans.
2. Posts anchored to continuous footings with brackets according to plans. Floor beam support will be 4"x4" pressure treated at the mid-spans and 4"x6" pressure treated posts at beam breaks with 4"x10".
3. D.F. #2 sub-framing installed to the top of the post with 3/4" plywood gusset plates on each side.
4. Floor joists are to be 2"x10" minimum or as required per plan, D.F. #2 and better @ 16" on center.
5. Decking will be 3/4" T&G plywood, glued and screwed to the floor joists. Decking is to be screwed down as each sheet is installed.
6. UNDERLAYMENT to consist of 1/2" plywood grade, plugged, cross-banded with clear side up. Under layment is to be installed with staples.

### Wall Framing

1. Special attention is to be given to the wall and window framing in the kitchen areas to allow for alignment of the vinyl to hardwood floor transition strip.
2. Interior walls will be 2x4 D.F. #2 @ 16 O.C. All Stud heights will be 92-5/8".
3. Exterior walls 1/2" CDX five ply exterior grade plywood sheathing.
4. Plywood edges at walls shall be supported by framing members or blocking.

## MIT Housing Specifications

5. Exterior walls will be wrapped with an air infiltration barrier ("Tyvek" or equal) building wrap.
6. **Garage warm walls and interior wall framing will be 2x6 D.F. #2 @ 16" o.c.**
7. **Garage exterior walls are to be 2x6 D.F. #2 @ 16" o.c.**
8. All plumbing walls are to be constructed with 2x6 D.F. #2 studs.

### Roof Framing

1. As per plans, gable ends and/or hip roofs will be 2x4 @ 24" o.c. manufactured trusses.
2. Lookout rafters at gable ends will have a 24" roof overhang 32" on center.
3. ½" ACX plywood will be installed at all overhangs with finished side exposed, joints centered over trusses and lookouts. The remainder of the roof will be covered with ½" CDX five ply plywood or 5/8" four ply plywood using Simpson PSCL clip in the middle of the span between the trusses.
4. Number 2 and better 2x6 square (no Wayne) fir boards will be anchored on eaves and up gable ends to support a 5/4 x 8" cedar fascia board and 1"x4" rake molding.
5. ***Submit truss manufacturer's shop drawings for approval prior to placing material orders.***

### Structural Glue-Laminated Lumber

1. Laminated members to be AITC certified.
2. Use waterproof glue.
3. Do not chisel, chip, drill holes, reshape or otherwise modify glue laminated members without prior approval from structural engineer.

### Decks

1. The structure of all exterior decks will consist of framing members with "ground contact" rated pressure treated materials.
2. All decking material for exterior decks will have TREX high composite material.
3. All composite material to be attached with manufacture's specified screw system. Screws to be installed having a consistent pattern.
4. Where decks are attached to the home with a ledger board, the ledger board will be attached using 1/2"(min) galvanized lag screws, spacing Per IRC Table 502.2.1, with 2 – 4 galvanized washers for spacers to insure drying of the 2x ledger.
5. A performed drip cap is required to direct water away from decks.
6. Perimeter edges to have a cedar skirting.
7. Guardrails to be constructed per IRC code with handrails constructed of 2x6 Cedar #2, sanded and exposed edges routered, two coats of sealer. **Guardrail is required on all decks.**
8. See section 02450 for deck foundation requirements.

**06200 Finish Carpentry**

**Exterior Trim**

1. Use 5/4"x4" cedar trim around all windows. See flashing detail.
2. Corner boards, 1x2 cedar under eaves at wall line, 1x4 cedar rake molding with roofing shingles overhanging molding 3/4".
3. All exposed beams and columns are to be wrapped with 1x cedar, caulked and ready for paint.
4. See section 07900 for caulking and sealant requirements.

**Siding**

1. Siding material "HardiPlank" lap siding (CEDARMILL style) smooth, factory primed for paint, will be installed over the house wrap.
2. Hardy products shall be used for batt and Board as well as shingle siding.

**Interior Trim**

1. Wall base: 2 1/4" Hemlock; installed at all locations that do not receive rubber base.
2. Window and door openings to be fully wrapped with hemlock trim casing. All hemlock trims to have matching stain.
3. Sliding glass door is to be fully wrapped with 2 1/4" hemlock.
4. Kitchen Sink window sill shall be tiled (see detail).

**DIVISION 7 THERMAL & MOISTURE PROTECTION**

**07220 Building Insulation**

1. Insulation shall be provided as following:  
Fiberglass batts with the following "R" – values:  
Ceiling: R-38 blown-in insulation  
Walls: R-21 fiberglass batt insulation  
Floor: R-30 fiberglass, batt insulation, support batts with twine or nylon strapping stapled to joists.  
Garage Walls: R-21 fiberglass batt insulation
2. Install 6 mil black plastic vapor barrier at the below floor crawl space with 12" overlap and joints taped at 6 foot centers.
3. All voids around windows and doors to be filled in place with foamed insulation as well as all penetrations for plumbing pipes and electrical wires from attic, crawl space or exterior walls.
4. Insulation at all DWV piping in the walls and ceiling of the ground floor level.

**07300 Shingle Roofing**

1. Roofing shingles: 30 year laminate Architectural roof shingles with moss inhibitor, over 1 layer 30# felt. Provide color selection for Owner. **Submittal Required.**

**07600 Flashing & Sheet metal**

1. Provide 4" seamless gutters, 4" K type and 2"x3" down spouts. Down spouts to be tied into drainage system. Provide connection fitting between downspout and tight line.

**07700 Roof Accessories**

1. Provide adequate attic/crawlspace with sufficient roof vents per IRC.

**07900 Caulking & Sealants**

All exterior trim boards must be caulked.  
Caulking at window frame to trim.

**DIVISION 8 DOORS & WINDOWS**

**08100 Doors**

**Exterior Doors:** Fiberglass insulated doors 3'-0" wide with wood frames (no finger jointed jams). Front door to be six panel door. **See hardware schedule. Submittal required**

**08200 Wood Doors**

**Interior:** 1 3/8" solid core wood doors, 3'-0" wide, (oak veneer) and frames (double rabbit hemlock jams, no nail on stop). **See hardware schedule. Submittal required.**

**Floor mounted door stops: See hardware schedule.**

**08300 Special Doors**

1. **Sliding patio door:** White vinyl frames with insulated tempered clear glass (low E argon) with lock, sliding screen, 6'-0" in width with 3'0 x 6' 10" sliding door, wrap door opening with wood casing same as the window treatment, (Milgard Manufacturing, Inc." or equal). **Submittal required.**
2. **Garage Door:** Provide insulated metal overhead garage door.
3. **Garage Door Opener:** Provide ½ hp garage door opener with two remote openers.

**08700 Finish Hardware**

1. All door handles to be Schlage commercial grade solid lever (ADA compliant) Provide backing where door comes in contact with walls. Provide floor mounted doorstops where required. Provide pair and a half hinges on all doors. Sprinkler room door to be Schlage deadbolt and separate handle. **See hardware schedule. Submittal required.**

## MIT Housing Specifications

### 08500 Windows

1. White vinyl frame windows, horizontal or vertical sliders, insulated clear glass (low E argon) screens and locks. Product to be "Milgard Manufacturing, Inc." or equal.  
**Submittal required.**
2. Provide obscured glass in all bathroom windows.

### DIVISION 9 FINISHES

#### 09200 Gypsum Board Systems

1. Gypsum wallboard: ½" throughout, screwed to studs, light stipple texture finish.
2. Ceiling board to be 5/8" gypsum board screwed to trusses, light stipple texture finish.
3. Bathrooms: ½" water resistant gypsum wallboard, screwed to studs with light stipple texture finish and 5/8" water resistant gypsum ceiling board with light stipple finish.
4. See detail sheet for tub shower surround.
5. Garage is to be completely finished: insulated, GWB, textured and painted.
6. Provide full GWD sheets over all headers with no joints at header to stud connections.

#### 09650 Resilient Flooring / Base

1. Floor underlay is to be prepared so that no seams, screw holes or other blemishes will transpose through sheet vinyl material.
2. The moisture content of the subfloor material is to be tested prior to resilient floor material is installed. See glue and resilient floor manufactures recommendation for subfloor moisture content.
3. Resilient floor material is to be stored onsite, at ambient interior temperature for three days prior to installation. Interior temperature at time of installation is to be maintained for three days after finish floor installation.
4. Interior stair treads & risers are to be covered with rubber stair tread / riser covers by Armstrong, Flexco or equal.
5. Sheet vinyl is to be installed per plan; No seams are to be installed in any wet area. Grade to match is "Armstrong Initiator" or equal.
6. The location of the sheet vinyl to hardwood floor material will be done in such a manner that the transition line aligns with a corner, edge of casework, window etc. If the seam location is not apparent, MIT will assist in locating seam.
7. One-piece sheet vinyl is to be installed in bathrooms.
8. 4" rubber base is to be Roppe; base to be installed at kitchens, bathrooms & laundry rooms.
9. Manufactured base corners are to be installed at all inside and outside corners.

## MIT Housing Specifications

10. Base material is to be installed such that there are no seams between corners.
11. Provide hardwood floors throughout living spaces and all bedrooms. Red or white oak select #1 with three coats of finish.

### 09900 Paint

#### **Interior:**

1. All walls - one coat of primer should be applied to the drywall after the joints have been taped, finished and sanded, a second coat of primer applied after the texture has been applied to the walls.
2. Recommended Primers:
  - a. Kelly Moore 95-500 Vapor-Shield,
  - b. Sherwin Williams B72W1 Moisture Vapor Barrier
  - c. Miller Paint 1545 Vapor-Lok Moisture Vapor Barrier Primer
3. Apply 2 coats satin latex enamel, sprayed and back rolled throughout.
4. Paint to be semi-gloss latex enamel at bathrooms, kitchen, and utility room. Color as selected by owner.
5. Base contract provides one color (white linen, Rainier white or equal) on the ceilings and one other color on the interior walls throughout the home. If Owner desires additional wall colors, a change order is required.
6. Stain all wall base and door/window trim to match cabinetwork. Putty all nail holes.
7. Garage is to be completely finished: textured and painted

#### **Exterior:**

1. Soffits must be primed with oil bases primer to avoid bleed through on plywood.
2. All cedar trims to have oil based primer applied.
3. There will be one field color and one trim color painted on the exterior
4. All hardi products to be factory primed or 1 coat of field applied primer
5. Two (2) coats of latex paint sprayed and back brushed solid body paint.
6. All exterior boards and widows must be caulked.
7. **Submittal required.**

### DIVISION 10 SPECIALTIES

#### 10800 Toilet Accessories

1. Provide commercial grade chrome towel bars, towel ring at sink are and toilet paper holders w/ solid wood backing in wall, casework medicine cabinet located at side of sink, and a plate glass mirror centered over the sink (sized per the plan). **See hardware schedule.**



## MIT Housing Specifications

2. In all housing, one bath must meet ADA code standards that include both horizontal and vertical grab bars at the roll in shower and at the water closet.
3. Provide ADA grab bars in all bathrooms with proper 2x blocking or ¾" CDX Plywood sheathing.

### 10900 Misc. Specialties

1. All homes are to have door bells installed. Verify location of button & ringer prior to installation. **See hardware schedule.**
2. All homes are to have addresses numbers installed which are easily readable from the street.
3. Provide shower curtain and rod.
4. Provide wire closet shelving.
5. Install solar tube light in bathrooms that do not have an exterior window. See detail sheet.
6. Wood stove is to accommodate 20" log with no grate. Wood stove to include a fan.

## DIVISION 11 SPECIALTIES

### 11310 Residential Appliances

1. All appliances will be supplied by the contractor.
2. Range: GE, white 30" electric, self cleaning, model #JBP23DNWW
3. Refrigerator: GE, white 21.9 CF, top freezer, model #GTS22KBPWW
4. Dishwasher: GE, white on white, built-in, model #PDW780PWW
5. Microwave Oven: GE, white, 1.8CG Spacemaker, model #JEB1860DMWW
6. Washer: GE, white on white, 3.5 Cu.Ft. capacity, model #WJRE5500GWW
7. Dryer: GE, white on white, 7.0 Cu.Ft., electric, model #DLSR483EGWW
8. Range Hood – under cabinet: GE Profile, 30" high performance, model #PVM1870DMWW
9. Range Hood – island range: GE Profile PV977NSS
10. **Submittals required.**

## DIVISION 12 FURNISHINGS

### 12400 Furnishings

1. **Blinds:** Provide 1" wide, vinyl mini-blinds at all windows: grade based on Champion Plus with metal top and bottom rails
2. Provide vertical, full-length blinds at the sliding door opening.

### 12600 Cabinets / Countertops

## MIT Housing Specifications

**Pre-manufactured wood cabinets:** shall have oak doors and face frames. Provide breadboard. Concealed hinges (Euro style) and metal ball bearing drawer guides. Provide for 36" wide refrigerator opening. Cabinets are to be "KRAFT MAID, Milton Oak, Honey Spice, door style 2BN1, APC Plywood (all plywood construction) or equal. Cabinets are to be all wood, no manufactured materials. All shelves shall have metal shelf supports, no plastic. Drawers are to be made of plywood or solid wood with strong corners. All lower cabinets shall have slide-out shelving. See hardware specification for drawer and door handles for all cabinetry. **Submittal required.**

**Counter Tops:** High-pressure performed plastic laminate with laminate self-edge and 4" white tile back splash (and window sill), to be installed typically at kitchen, utility and bath cabinets. **Submittal required.**

### DIVISION 15 MECHANICAL

#### 15700 Heating

1. Provide variable speed forced air gas furnace, 90% efficiency, with thermostat control. If gas is not available, use forced variable speed air electric furnaces or propane dependant on owner preference. Elder housing projects to have heat pumps with air conditioning ("Trane" or "Carrier"). **Submittal required.**
2. All ductwork located in a cold air crawl space to be insulated. All ducting is to be hard-piped with no duct board or flexible ducting. All ductwork is to be **GALVANIZED SHEETMETAL, made of the proper gauge for the application.** Ceiling fans may use flexible ductwork to exhaust the air in a sidewall. Ductwork joints are to be finished with MASTIC DUCT SEALANT or FOIL TAPE. Return air grill must be a minimum of 15' (feet) horizontally from the HVAC unit. Return air duct located in attic spaces may be flex duct. (See mechanical drawing)
3. A Regency or Country wood burning stove, with circulating fan shall be installed. Stove must accept 20" logs.
4. Bath & utility: Ceiling light/fan (100-cfm minimum) 2.0 or less scone rating vented to exterior. Switch ceiling and vanity light in series with the exhaust fan. Exhaust ductwork may be flexible ducting. Exhaust fans will not exit the house under a window. A clearance of five feet to any wall opening is required.
5. Dryer vent: round metal duct, through wall with wall cap. Coordinate routing with structure, other duct, light fixtures etc.
6. If a gas fired tank less water heater is installed, provide vent piping and terminations.
7. Insulate all ducts within crawl spaces, garage or attic spaces.
8. Provide dampers in duct work and provide fixed louvered floor registers.
9. Provide whole house ventilation motorized damper through furnace with timer mounted in garage near furnace. Manual damper shall be set at 33%.

## MIT Housing Specifications


10. Provide second Honeywell Cooling thermostat wired to the furnace on the R and G terminals in the same room as the wood stove. The second thermostat shall be wired to control furnace fan only when room temperature reaches 80 degrees. Return air grill shall be located 10 to 15 feet from wood stove.

### **15300 RESIDENTIAL FIRE SPRINKLERS**

1. Provide an independent underground 1 ¼" min water line from the meter to the sprinkler riser room. Connection to public water service provided by MIT Public Works.
2. Provide a full stand alone sprinkler system installed by a licensed sprinkler contractor per NFPA 13 D, including coverage in closets, storage rooms and bathrooms.
3. All piping material to be CPVC fire sprinkler rated.
4. Provide coverage in garage by a sidewall pendant with white domed cover.
5. All interior sprinkler heads to be recessed with white flush mount cover.
6. Sprinkler riser room to be located in garage accessible from the exterior. Door shall have a deadbolt and separate door handle. Locks shall be keyed with template supplied from MIT Planning Department.
7. Provide single pole electric heat with thermostat in riser room.
8. Provide non battery powered thermometer in riser room.
9. Extend system drain to exterior.
10. Insulation in attic space shall be installed with the "tenting" method. All insulation shall be fastened to the truss to prevent blown insulation from entering the "tenting" and covering the piping.
11. One horn/strobe shall be mounted on the exterior of the garage closest to the street and approximately 2 feet below the overhang.
12. One sign stating "if alarm sounds call 911" shall be mounted below the horn/strobe. One sign stating "sprinkler riser room" shall be mounted on the riser room door. Sign shall be red with 2" white letters.

### **15400 PLUMBING**

1. Water lines: Copper supply lines per industry standard.

Initial 

## MIT Housing Specifications

2. Sewer lines: Waste and vent w/ ABS plastic.
3. Hose bibs: minimum of 2, frost free, one at front yard, one at back yard.
4. Provide interior water main shut-off, installed in garage at a readily accessible location. Provide supply system low point drain on the house side of the shutoff valve with a hose threaded fitting for draining.
5. The water main shut-off valve is to be a 1-inch full port ball valve with threaded connections.
6. Insulate all water lines in crawl space, garage, or attic space.
7. Kitchen sinks to be stainless steel double bowl, 7" depth minimum 22 gauge Grade: "American Standard" or equal.
8. Bathroom countertop lavatory sinks to be oval, cast iron, with overflow.
9. Bathtub to be one-piece fiberglass surround with shower manufactured by Lasco or equal.
10. Roll in shower (ADA) required in Master Bath with a Moen Posi-Temp mixing valve. Shower material is to be fiberglass.
11. Installation of roll n shower will be as indicated on the plans. Ensure wall backing is installed at grab bar locations.
  
12. Where Natural Gas is available, provide Rinnai RC80HPi condensing tank less hot water heater. Where Natural Gas is not available, provide Electric 50 gallon hot water tank, quick recovery with overflow piped to the exterior of foundation, and include drip pan and strapping. Hot water tank to have a 6-year warranty and Energy Star rating.
13. All faucets to be two lever type (Moen) in bathrooms & utility room; kitchen is to have sprayer in faucet configuration with one lever operation (Moen). **See hardware schedule.**
14. Provide washer/dryer hook-up (both gas, if available, and electric) with proper drainage and venting.
15. Water closets to be American Standard 1.6 gallon Cadet II elongated bowl. **See hardware schedule.**
16. Provide water line to refrigerator.
17. Provide gas pipe to Range, Furnace, Hot water tank and Dryer, even if natural gas is not available to the site.
18. **Submittals required.**

MIT Housing Specifications

**DIVISION 16 ELECTRICAL**

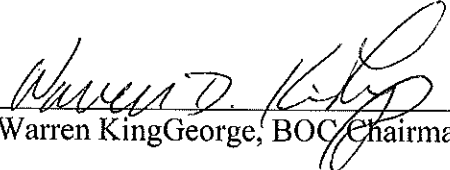
**16200 Electric Power**

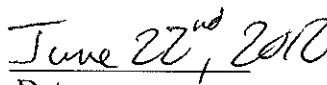
1. Service Panel: 200 amp with main disconnect. Provide two extra slots for future circuit.
2. Provide meter base ready for power company primary installation.
3. Distribution: All copper wire.
4. Ground fault interrupt (GFI) in kitchen, bath, and exterior outlets.
5. Provide separate circuits for microwave.
6. Pre-wired TV jacks, located in the living room and all bedrooms.
7. Pre-wired telephone jacks, located in kitchen, living room, and all bedrooms.
8. Smoke detectors installed in locations dictated by code. All smoke detectors are to be wired together, on a dedicated power circuit and have battery backup. One smoke detector shall be a combination smoke / CO detector unit mounted outside each sleeping area.
9. Provide power and breakers to washer, dryers, range, hot water tank, and furnace; even if gas is available.
10. Provide arc fault circuitry to bedrooms, per current code requirements.
11. Provide power outlet for garage door opener.
12. All outlets are to be rear seated receptacles, no plug in wires permitted.
13. No wiring permitted in or above headers.
14. When more than one wire enters receptacle junction box, use pigtail method to splice together, then attach one pigtail to its receptive terminal on receptacle. See attached diagram.

**16500 Lighting**

1. Ceiling fixtures to be provided in all rooms as follows: Allowance of \$1,000.00 See hardware schedule.
2. Submittals required. Fixtures to be selected by the Home Owner.

**APPROVED: Muckleshoot Housing Authority**

  
Warren King George, BOC Chairman

  
Date



**NVL LABORATORIES, Inc.**  
 4708 Aurora Ave. North  
 Seattle, WA 98103  
 (206) 547-0100 FEIN 91-1689450

# Invoice

Date	Invoice #
6/9/2010	H-2010-0263

Bill To
<b>Hainline &amp; Associates, Inc.</b> 1215 4th Avenue, Suite 1200 Seattle, WA 98154

PROJECT NAME
Asbestos Survey at : 1004 M Street SE Auburn, WA 98002

Client Rep.	Terms	Due Date	NVL Rep.
Steve Webber	Net 10	6/19/2010	

Date	Description	Qty	Rate	Amount
6/3/2010	Survey/sampling for Asbestos	3	65.00	195.00
6/4/2010	Bulk Asb. analysis, Field Batch # 3006833	10	12.00	120.00
6/7/2010	Report preparation	3	65.00	195.00
6/9/2010	Project Management/QC/Review	2	85.00	170.00

<b>Total</b>			\$680.00
<b>Balance Due</b>			\$680.00

1.5% per month which is an ANNUAL PERCENTAGE RATE of 18% will be charged on any balance not paid by the due date.(Calculated from the due date.)



COPY

**Limited Hazardous  
Materials Survey  
For Asbestos**  
1004 M Street SE.  
Auburn, WA 98002



Prepared For  
**Mr. Steve Webber**  
**Hainline and Associates**  
1215 4<sup>th</sup> Ave., Suite 1200  
Seattle, WA 98154

Project Number           **2010-263**  
Inspection Date       **June 3, 2010**  
Report Date           **June 7, 2010**

Inspected By           **Sam House**  
AHERA Certification   **#1004**  
Expiration Date       **January 13, 2011**

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## **APPENDICIES**

<b>A</b>	<b>Sample Locations (Floor Plan)</b>	
<b>B</b>	<b>Laboratory Results</b>	
<b>C</b>	<b>AHERA Certifications and Laboratory Qualifications</b>	



## 1.0 SCOPE OF WORK

A limited investigative survey for asbestos-containing materials was conducted on the single family residence located at 1004 M Street SE., Auburn, WA 98002 on June 3, 2010. There is one detached garage associated with this property.

The building is set for interior renovation. All areas expected to be impacted by this renovation were attempted to be sampled. Because the scope of renovation was not clear, destructive means were not used to try and identify any hidden asbestos-containing materials. All materials located that have not been identified in this report must be treated as asbestos-containing until testing proves otherwise.

Sam House, an AHERA certified building inspector conducted this survey at the request of Mr. Steve Webber of Hainline and Associates.

The asbestos survey section is written to comply with the AHERA asbestos sampling procedure as stated in 40 CFR 763.86. This protocol is required under the Puget Sound Clean Air Agency (PSCAA Regulation III, Article IV, rev. July 13, 2000) for all asbestos surveys prior to a building demolition or renovation.

The asbestos survey also satisfies the "good faith" asbestos inspection requirements as stated in Washington Administrative Code (WAC 296-62-07221(2), "identification"). As stated in this regulation, the owner of a structure scheduled to be renovated/demolished must provide a contractor with a written report of the Asbestos-Containing Materials to be disturbed during renovation/demolition.

The National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 requires a survey by an accredited asbestos inspector prior to demolition of a structure.

A floor plan indicating locations of samples collected by NVL personnel has been included in **Appendix A**.

## 2.0 SURVEY METHOD

### Asbestos Survey Method

The NVL Labs field inspector is an Asbestos Building Inspector, certified under the requirements of the United States Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA) regulation 40 CFR 763, Subpart E. A copy of his certificate is provided in Appendix C.

The number of bulk samples collected and their locations are based on the AHERA regulation and the guidelines provided by the EPA Document 560/5-85-030a, October 1985, *Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials*. The EPA guidelines require a minimum of three negative analyses of surfacing materials and thermal system insulations in order to prove a negative result.

NVL Labs collected samples and obtained analytical data for suspect asbestos-containing materials identified in the building. Once collected, each bulk sample was sealed in an unadulterated plastic bag to eliminate the possibility of cross-contamination. "Chain-of-Custody" tracking was followed to maintain sample integrity during handling and data reporting at NVL Labs.

### Homogeneous Materials

Homogeneous materials are an area of asbestos-containing material or presumed asbestos-containing material which appears similar throughout in terms of color, texture, and date of material application.

The following is an example of how homogeneous materials are reported in this document:

Sample Number	Material Description by Layer	Location	Asbestos	Quantity	Friable
#	Layer 1 is not asbestos-containing Layer 2 is asbestos-containing	Location description	1. % 2. %	"X" LF/ft <sup>2</sup>	Yes/No

### **3.0 LABORATORY INFORMATION**

#### **Laboratory Analysis: Asbestos**

Samples are analyzed in our laboratory using polarized light microscopy (PLM) with dispersion staining. If samples are not homogeneous, then sub-samples of the components are analyzed separately. All bulk samples are analyzed using EPA Method 600/R-93/116 with the following measurement uncertainties for reported % asbestos (1%=0-3%, 5%≥1-9%, 10%=5-15%, 20%=10-30%, 50%=40-60%).

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

#### **Laboratory Accreditation**

Professional accreditations for NVL Laboratories, Inc. include the following:

NVL Laboratories, Inc. is currently accredited by the National Institute of Standards and Technology (NIST) under the National Volunteer Laboratory Accreditation Program (NVLAP) program for bulk asbestos fiber analysis.

*NVLAP Lab Code 102063-0*

NVL Laboratories, Inc. is approved by the American Industrial Hygiene Association (AIHA) Asbestos Analysts Registry (AAR) program for airborne asbestos fiber analysis.

*AAR Counter ID 7412*

NVL Laboratories, Inc. is currently accredited by the American Industrial Hygiene Association (AIHA) under the Industrial Hygiene Laboratory Accreditation Program (IHLAP). The IHLAP program is designed specifically for laboratories involved in analyzing samples to evaluate workplace exposure.

*IHLAP Certification Number 563*

## 4.0 BUILDING DESCRIPTION

<b>General Building Type</b>	This is a wood-frame single family home with detached garage.
<b>Primary External Components</b>	The building has horizontal wood siding.
<b>Foundation Type</b>	The structure has a concrete block foundation on-grade.
<b>Roofing Material(s)</b>	The roof of the building is wood shingles.
<b>Window Type(s)</b>	The windows are aluminum and vinyl framed windows on the exterior over wood framed windows.
<b>Flooring</b>	The flooring of the house is hardwood floors, sheet vinyl, and carpet.
<b>Thermal Systems With Insulation</b>	The building is heated through oil forced air with no visible thermal system insulation.
<b>Finishing</b>	The building is finished with lath and plaster.

## 5.0 FINDINGS

### Inventory of Suspect Asbestos-Containing Materials

Sample Number	Material Description by Layer	Location	Asbestos	Quantity***	Friable*
2010-263-1-1	Plaster with paint	Utility room	ND		
2010-263-1-2	Plaster with paint	Kitchen	ND		
2010-263-1-3	1: Skim coat 2: Plaster	Bathroom	1: ND 2: ND		
2010-263-2-1	Popcorn ceiling	Bedroom 1	5%	800 ft <sup>2</sup>	Yes
2010-263-2-2	Popcorn ceiling	Living room	6%		
2010-263-2-3	Popcorn ceiling	Dining room	6%		
2010-263-3-1	1: Light gray sheet vinyl 2: Light gray fibrous backing 3: Light gray vinyl til 4: Clear soft adhesive 5: Off-white vinyl tile 6: Green and gray backing	Kitchen	1: ND 2: ND 3: ND 4: ND 5: ND 6: ND		
2010-263-3-2	1: Light gray sheet vinyl 2: Light gray fibrous backing 3: Concrete	Bathroom	1: ND 2: ND 3: ND		
2010-263-4-1	1: Yellow laminate 2: Tan mastic	Kitchen	1: ND 2: ND		
2010-263-5-1	1: Brown vinyl cove base 2: Tan mastic	Bathroom	1: ND 2: ND		

ND None Detected

\* The friability of this material was determined at the time of this inspection. Subsequent activities such as demolition, renovation, or abatement may affect the friability of this material.

\*\*\* These quantities are only an estimate of the asbestos containing material discovered on site. Accuracy of these estimates must be verified by the asbestos abatement contractor on site.

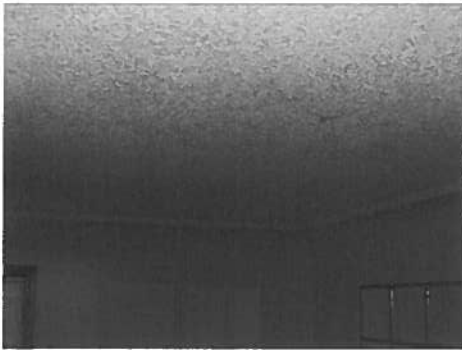
Any suspect material(s) not identified above should not be disturbed and should be tested immediately. The suspect material must be treated as asbestos-containing until testing proves otherwise.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

### Asbestos

Below is an inventory of suspected or presumed asbestos containing materials identified in the survey of the single family home located at 1004 M Street SE., Auburn, WA 98002 on June 3, 2010 by NVL personnel.

1. **Popcorn ceiling (Friable)**  
Sample number: 2010-263-2-1,2-2,2-3



*There is approximately 800 square feet of asbestos containing popcorn ceiling associated with the ceiling of this structure. This material runs throughout the house except for the bathroom, kitchen, and utility room.*

Contractors should be aware that concealed suspect asbestos-containing building materials may be uncovered during the course of demolition or renovation work. Contractors should have contingency plans that include stopping work, evacuation of the immediate area and sampling by a certified AHERA Building Inspector whenever these materials are found. Concealed suspect materials may include, but are not limited to: non-fiberglass pipe or roof drain insulation; spray-applied coatings; cement board; asphalt or paper vapor barriers; floorings and adhesives.

If discovered, all asbestos-containing materials that will be disturbed as a natural part of renovation and/or demolition are required to be removed and disposed of in accordance with Washington State regulations. Washington State Department of Labor and Industries and PSCAA require that the abatement be performed using Certified Asbestos Workers under the direct on site supervision by a Certified Asbestos Supervisor. Further, NVL suggests that an AHERA inspector review this property after abatement to ensure all asbestos-containing materials have been removed by the contractor.

Hidden wall and ceiling cavities that are not accessible during the time of surveying can sometimes conceal asbestos-containing materials. Thus, NVL recommends that an AHERA inspector/project manager be on site at the time of renovation/demolition to ensure that any potentially asbestos-containing materials uncovered during the process of renovation/demolition be dealt with properly.

## 7.0 LIMITATIONS OF SURVEY

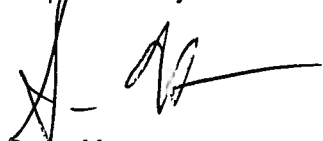
The sole purpose of this survey report is to document asbestos-containing materials discovered by NVL Laboratories personnel in the June 3, 2010 limited survey of suspect materials in the single family home located at 1004 M Street SE., Auburn, WA 98002 by NVL personnel.

The building is set for interior renovation. All areas expected to be impacted by this renovation were attempted to be sampled. Because the scope of renovation was not clear, destructive means were not used to try and identify any hidden asbestos-containing materials. All materials located that have not been identified in this report must be treated as asbestos-containing until testing proves otherwise.

This site visit consisted of a thorough visual walk-through of the building for the purpose of viewing and sampling potential asbestos-containing materials. As hazardous material surveys are non-comprehensive by nature, NVL Laboratories, Inc. cannot be held liable for materials which require destructive means to access, materials which are hidden from sight (e.g. materials hidden behind walls), materials which cannot be found due to their obscure nature, or which otherwise cannot be discovered with reasonable diligence.

This document is the sole property of NVL Laboratories and the property owner, or his agent, authorizing this survey.

Inspected By



**Sam House**

**AHERA Building Inspector**

AHERA Certification **#1004**

Expiration Date **January 13, 2011**

Reviewed By



**Syed Hasan**

**Manager Field Services**

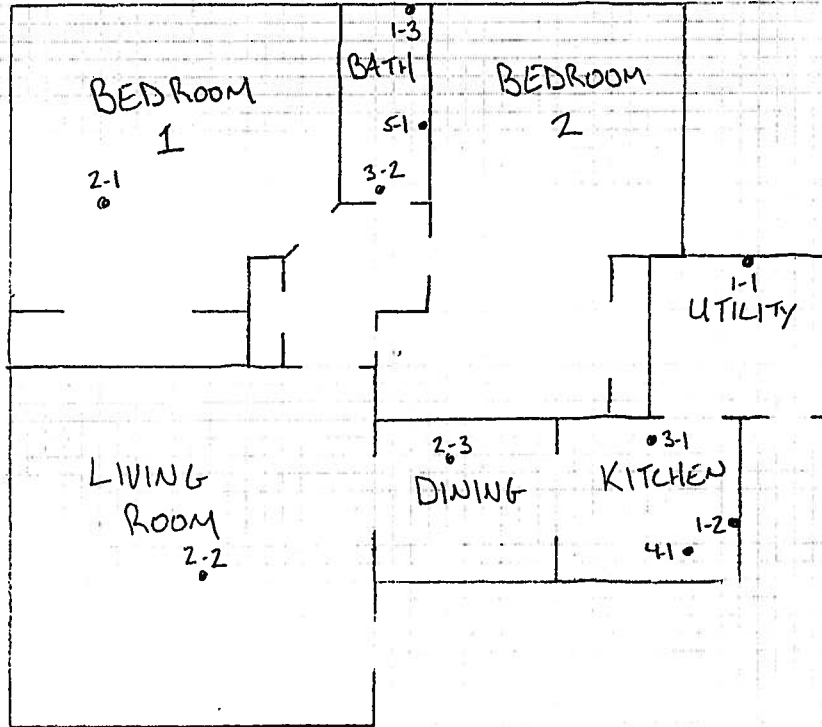


## Appendix A

### Sample Locations (Floor Plan)



MAIN  
FLOOR



NOT  
TO  
SCALE



## **Appendix B**

### Laboratory Results

**Bulk Asbestos Fibers Analysis**

By Polarized Light Microscopy

Client: NVL Field Services Division  
 Address: 4708 Aurora Ave. N.  
 Seattle, WA 98103

**Batch #: 3006833.00**  
 Client Project #: 2010-263  
 Date Received: 06/03/2010  
 Samples Received: 10  
 Samples Analyzed: 10  
 Method: EPA/600R-93/116

**Attention: Mr. Syed Hasan**  
 Project Location: 1004 M Street SE.  
 Auburn, WA 98002

**Lab ID: 30037439 Client Sample #: 2010-263-1-1**

Location: 1004 M Street SE.

Layer 1 of 1 Description: Light gray sandy material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
Binder/Filler, Granules	Cellulose 2%	<b>None Detected ND</b>
	Spider silk 2%	

**Lab ID: 30037440 Client Sample #: 2010-263-1-2**

Location: 1004 M Street SE.

Layer 1 of 1 Description: Light gray sandy material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
Binder/Filler, Granules	Cellulose 2%	<b>None Detected ND</b>

**Lab ID: 30037441 Client Sample #: 2010-263-1-3**

Location: 1004 M Street SE.

Layer 1 of 2 Description: White material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
Binder/Filler	None Detected ND	<b>None Detected ND</b>

Layer 2 of 2 Description: Light gray sandy material

Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
Binder/Filler, Granules	None Detected ND	<b>None Detected ND</b>

**Lab ID: 30037442 Client Sample #: 2010-263-2-1**

Location: 1004 M Street SE.

Layer 1 of 1 Description: White lumpy foamy material with paint

Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>
Calcareous binder, Synthetic foam	None Detected ND	<b>Chrysotile 5%</b>

**Lab ID: 30037443 Client Sample #: 2010-263-2-2**

Location: 1004 M Street SE.

**Sampled by:** Client

**Analyzed by:** Jason Stuhr

**Date:** 06/04/2010

**Reviewed by:** Nick Ly

**Date:** 06/04/2010



Nick Ly, Technical Director

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

**Bulk Asbestos Fibers Analysis**

By Polarized Light Microscopy

Client: NVL Field Services Division  
 Address: 4708 Aurora Ave. N.  
 Seattle, WA 98103

**Batch #: 3006833.00**  
 Client Project #: 2010-263  
 Date Received: 06/03/2010  
 Samples Received: 10  
 Samples Analyzed: 10  
 Method: EPA/600R-93/116

**Attention: Mr. Syed Hasan**  
 Project Location: 1004 M Street SE.  
 Auburn, WA 98002

<b>Layer 1 of 1</b>	<b>Description:</b> White lumpy foamy material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>	
	Calcareous binder, Synthetic foam	None Detected ND	<b>Chrysotile</b>	<b>6%</b>

**Lab ID: 30037444**      **Client Sample #: 2010-263-2-3**  
 Location: 1004 M Street SE.

<b>Layer 1 of 1</b>	<b>Description:</b> White lumpy foamy material with paint			
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>	
	Calcareous binder, Synthetic foam	None Detected ND	<b>Chrysotile</b>	<b>6%</b>

**Lab ID: 30037445**      **Client Sample #: 2010-263-3-1**  
 Location: 1004 M Street SE.

<b>Layer 1 of 6</b>	<b>Description:</b> Light gray sheet vinyl			
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>	
	Vinyl/Binder, Synthetic foam	None Detected ND	<b>None Detected</b>	<b>ND</b>

<b>Layer 2 of 6</b>	<b>Description:</b> Light gray fibrous backing with mastic			
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>	
	Mastic/Binder	Cellulose 47%	<b>None Detected ND</b>	
		Glass fibers 40%		

<b>Layer 3 of 6</b>	<b>Description:</b> Light gray vinyl tile			
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>	
	Vinyl/Binder	None Detected ND	<b>None Detected ND</b>	

<b>Layer 4 of 6</b>	<b>Description:</b> Clear soft adhesive			
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>	
	Adhesive/Binder	Cellulose 2%	<b>None Detected ND</b>	

<b>Layer 5 of 6</b>	<b>Description:</b> Off-white thin vinyl tile			
	Non-Fibrous Materials:	Other Fibrous Materials:%	<b>Asbestos Type: %</b>	
	Vinyl/Binder	None Detected ND	<b>None Detected ND</b>	

**Sampled by:** Client

**Analyzed by:** Jason Stuhr

**Date:** 06/04/2010

**Reviewed by:** Nick Ly

**Date:** 06/04/2010

  
 Nick Ly, Technical Director

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

**Bulk Asbestos Fibers Analysis**

By Polarized Light Microscopy

Client: NVL Field Services Division  
 Address: 4708 Aurora Ave. N.  
 Seattle, WA 98103

**Batch #: 3006833.00**  
 Client Project #: 2010-263  
 Date Received: 06/03/2010  
 Samples Received: 10  
 Samples Analyzed: 10  
 Method: EPA/600R-93/116

**Attention: Mr. Syed Hasan**  
 Project Location: 1004 M Street SE.  
 Auburn, WA 98002

<b>Layer 6 of 6</b>	Description: Green/gray fibrous backing with brown mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Mastic/Binder	Cellulose 88%	<b>None Detected ND</b>

**Lab ID: 30037446 Client Sample #: 2010-263-3-2**  
 Location: 1004 M Street SE.

<b>Layer 1 of 3</b>	Description: Light gray sheet vinyl		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Vinyl/Binder, Synthetic foam	None Detected ND	<b>None Detected ND</b>

<b>Layer 2 of 3</b>	Description: Light gray fibrous backing with mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Mastic/Binder	Cellulose 65%	<b>None Detected ND</b>
		Glass fibers 18%	


<b>Layer 3 of 3</b>	Description: Gray sandy material		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Binder/Filler	None Detected ND	<b>None Detected ND</b>

**Lab ID: 30037447 Client Sample #: 2010-263-4-1**  
 Location: 1004 M Street SE.

<b>Layer 1 of 2</b>	Description: Brown flat hard compressed fibrous material with surface		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Binder/Filler	Cellulose 28%	<b>None Detected ND</b>

<b>Layer 2 of 2</b>	Description: Tan soft mastic		
	Non-Fibrous Materials:	Other Fibrous Materials: %	<b>Asbestos Type: %</b>
	Mastic/Binder	Cellulose 5%	<b>None Detected ND</b>

**Lab ID: 30037448 Client Sample #: 2010-263-5-1**  
 Location: 1004 M Street SE.

<b>Sampled by:</b> Client		
<b>Analyzed by:</b> Jason Stuhr	<b>Date:</b> 06/04/2010	 Nick Ly, Technical Director
<b>Reviewed by:</b> Nick Ly	<b>Date:</b> 06/04/2010	

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

### Bulk Asbestos Fibers Analysis

By Polarized Light Microscopy

Client: NVL Field Services Division  
Address: 4708 Aurora Ave. N.  
Seattle, WA 98103

**Batch #: 3006833.00**  
Client Project #: 2010-263  
Date Received: 06/03/2010  
Samples Received: 10  
Samples Analyzed: 10  
Method: EPA/600R-93/116

**Attention: Mr. Syed Hasan**  
Project Location: 1004 M Street SE.  
Auburn, WA 98002

<b>Layer 1 of 2</b>	<b>Description:</b> Tan rubbery material	<b>Non-Fibrous Materials:</b>	<b>Other Fibrous Materials: %</b>	<b>Asbestos Type: %</b>
		Rubber/Binder	None Detected ND	None Detected ND
<b>Layer 2 of 2</b>	<b>Description:</b> Tan soft mastic	<b>Non-Fibrous Materials:</b>	<b>Other Fibrous Materials: %</b>	<b>Asbestos Type: %</b>
		Mastic/Binder	Cellulose 2%	None Detected ND

**Sampled by:** Client

**Analyzed by:** Jason Stuhr

**Date:** 06/04/2010

**Reviewed by:** Nick Ly

**Date:** 06/04/2010

  
Nick Ly, Technical Director

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

### NVL Laboratories, Inc.

## CHAIN of CUSTODY SAMPLE LOG

BATCH ID  
**3006833.00**

4708 Aurora Ave N, Seattle, WA 98103  
Tel: 206.547.0100 Emerg. Cell: 206.914.4846  
1.888.NVL.LABS (685.5227) www.nvllabs.com

Client NVL Laboratories Inc  
Street 4708 Aurora Ave N  
Seattle, WA 98103

NVL Batch Number \_\_\_\_\_  
Client Job Number 2010-263

Project Manager Syed Hasan  
Project Location 1004 M Street SE  
Auburn, WA 98002

Total Samples \_\_\_\_\_  
Turn Around Time  1-Hr  8-Hrs  2 Days  5 Days  
 2-Hrs  12-Hrs  3 Days  6-10 Day  
 4-Hrs  24-Hrs  4 Days

Please call for TAT less than 24 Hrs

Email address swebber@hainline.net

Phone: (206) 382-9263 Fax: (206) 382-3554

Cell: (206) 715-6276

<input type="checkbox"/> Asbestos Air	<input type="checkbox"/> PCM (NIOSH 7400)	<input type="checkbox"/> TEM (NIOSH 7402)	<input type="checkbox"/> TEM (AHERA)	<input type="checkbox"/> TEM (EPA Level II)	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Asbestos Bulk	<input checked="" type="checkbox"/> PLM (EPA/600/R-93/116)	<input type="checkbox"/> PLM (EPA Point Count)	<input type="checkbox"/> PLM (EPA Gravimetry)	<input type="checkbox"/> TEM BULK	
<input type="checkbox"/> Mold/Fungus	<input type="checkbox"/> Mold Air	<input type="checkbox"/> Mold Bulk	<input type="checkbox"/> Rotometer Calibration		
<b>METALS</b>	<b>Det. Limit</b>	<b>Matrix</b>	<b>RCRA Metals</b>	<input type="checkbox"/> All 8	<b>Other Metals</b>
<input type="checkbox"/> Total Metals	<input type="checkbox"/> FAA (ppm)	<input type="checkbox"/> Air Filter	<input type="checkbox"/> Arsenic (As)	<input type="checkbox"/> Chromium (Cr)	<input type="checkbox"/> All 3
<input type="checkbox"/> TCLP	<input type="checkbox"/> ICP (ppm)	<input type="checkbox"/> Drinking water	<input type="checkbox"/> Barium (Ba)	<input type="checkbox"/> Lead (Pb)	<input type="checkbox"/> Copper (Cu)
<input type="checkbox"/> Cr 6	<input type="checkbox"/> GFAA (ppb)	<input type="checkbox"/> Dust/wipe (Area)	<input type="checkbox"/> Cadmium (Cd)	<input type="checkbox"/> Mercury (Hg)	<input type="checkbox"/> Nickel (Ni)
		<input type="checkbox"/> Soil			<input type="checkbox"/> Zinc (Zn)
		<input type="checkbox"/> Paint Chips in %			
		<input type="checkbox"/> Paint Chips in cr			
<input type="checkbox"/> Other Types of Analysis	<input type="checkbox"/> Fiberglass	<input type="checkbox"/> Silica	<input type="checkbox"/> Nuisance Dust	<input type="checkbox"/> Respirable Dust	<input type="checkbox"/> Other (Specify) _____

Condition of Package:  Good  Damaged (no spillage)  Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		2010-263-1-1		
2		-1-2		
3		-1-3		
4		-2-1		
5		-2-2		
6		-2-3		
7		-3-1		
8		-3-2		
9		-4-1		
10		-5-1		
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	<u>Sam House</u>	<u>[Signature]</u>	<u>NVL</u>	<u>6/3/10</u>	<u>9:30AM</u>
Relinquished by	<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>6/3/10</u>	<u>6:00PM</u>
Received by	<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>6/3/10</u>	<u>1655</u>
Analyzed by	<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>6-4-10</u>	<u>12:20pm</u>
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

Results report to SAM

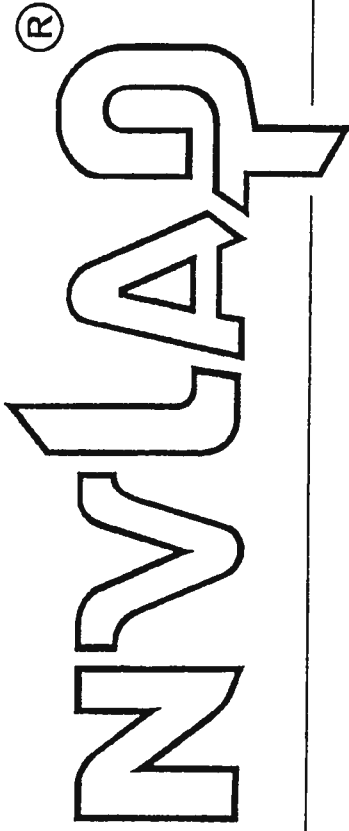


## **Appendix C**

### **AHERA Certifications & Laboratory Qualifications**



United States Department of Commerce  
National Institute of Standards and Technology



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## Certificate of Accreditation to ISO/IEC 17025:2005

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NVLAP LAB CODE: 102063-0

**NVL Laboratories, Inc.**  
Seattle, WA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:

### **BULK ASBESTOS FIBER ANALYSIS**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-IAC-IAF Communique dated January 2009).*

2009-10-01 through 2010-09-30

Effective dates



*Jolly A. Bruce*  
For the National Institute of Standards and Technology



**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  
E-Mail: [nick.l@nvlabs.com](mailto:nick.l@nvlabs.com)  
URL: <http://www.nvlabs.com>

**BULK ASBESTOS FIBER ANALYSIS (PLM)**

**NVLAP LAB CODE 102063-0**

<i>NVLAP Code</i>	<i>Designation / Description</i>
18/A01	EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

2009-10-01 through 2010-09-30

*Effective dates*

*Sally S. Bruce*

For the National Institute of Standards and Technology

11810 North Creek Pkwy N  
Bothell, WA 98011  
425.368.1000



*Sam House*

has completed the course

**And Passed the Examination for Initial Asbestos Inspector  
TSCA Title II, 40 CFR Part 763, (e)© & Trg Req 326 IAC 18**

conducted by

**AMEC Earth & Environmental, Inc.**

A handwritten signature in black ink, appearing to read "J. P. Plank", written over a horizontal line.

Course Instructors

Date: 13-Jan-10

Hours: 24 Hours

Location: Bothell, WA