SCOPE OF WORK

1 Hazardous Building Material Survey and Inventory

.1 General

.1 *'Housing Provider'* requests you to conduct a hazardous building material survey to collect samples for analysis of suspect hazardous materials for the purpose of identifying hazardous materials at the following properties in accordance with WorkSafeBC regulations and provide an inventory at the completion of the survey.

- ***(Insert Property Location)***
- ***(Insert Property Location)***

.2 This survey is being conducted to complete:

☐ **Representative sampling** of the entire building;

☐ **Destructive sampling** for **project specific locations**:

The representative sampling is to be conducted to ensure accurate extrapolation to other areas of the building is completed. Samples must include all common areas where multiple layers regularly occur (i.e. flooring, drywall, etc.).

.3 Samples to be collected from as discreet a location as possible, avoid cutting near areas of water (i.e. tub, toilets, sinks)

.4 This scope of the work is to coordinate, organize, schedule, conduct and report on the hazardous materials for the property listed above.

.2 Field Assessment

.1 Review the building to determine the date of construction, type of construction (wood, steel, concrete), heating & cooling system, roofing system, interior/exterior finishes, exterior building system, previous renovations, etc.

.2 For the purpose of assessment, the term "visible only" refers to the representative non-destructive visual assessment for the presence or absence and location(s) of the particular hazardous materials. This does not apply for the project specific destructive sampling where cavities will need to be opened and assessed.

.3 Conduct the survey by collecting representative samples of each building material to identify if hazardous materials are present. Enter all staff areas including: office, corridor, service area, mechanical rooms, etc. Enter an appropriate number of suites to conduct the survey in accordance with WorkSafeBC's regulations. Record all information on a room-by-room basis on appropriate data collection sheets.

.4 Coordinate the field assessment prior to arriving on site. Arrangements must be made in advance to provide proper notice for entering tenanted suites.

.5 The following selected hazardous materials must be included in the scope of work unless omitted in writing by *'Housing Provider'*. With the exception of inspecting and sampling for asbestos containing materials and lead-based paint, all other hazards are to be visually inspected.

☐ Animal Droppings and Carcasses**;**

☐ Asbestos Building Materials;

☐ Heavy Metals, Toxic, Flammable, Explosive or Controlled Products;

- ☐ Lead-Based paint (LBP) and other lead Products;
- ☐ Mercury;
- ☐ Mould Identification (significant quantities, i.e. greater than 1 ft^2, per growth area/location);
- ☐ Needles and Sharps;
- ☐ Ozone Depleting Substances (ODSs);
- ☐ Polychlorinated Biphenyls (PCBs) - Do not disassembled energized fluorescent light fixtures to examine ballasts during this assessment; and
- ☐ Radioactive Materials.

.3 Sample Collection and Analysis

.1 Samples requiring analysis in order to determine the presence or absence (including amounts, levels, concentrations, percentages etc.) of hazardous materials shall be conducted in accordance with valid and established methods. Submit samples to an accredited laboratory for analysis.

.2 Laboratories selected by the Consultant shall use appropriate and necessary methodologies to analyze all required samples for hazardous materials, as required by the survey. Ensure that Laboratories use appropriate published analytical methods as defined by NIOSH, EPA and OSHA, the method must be applicable for current WorkSafeBC exposure

.4 Assessment Reports

.1 Reporting of the hazardous materials survey to include the following:

.1 **Executive Summary:** The executive summary section should include the basic information regarding the site (i.e. site location, date of field work etc.) and briefly discuss all results, conclusions and recommendations.

.2 **Introduction:** The introduction section should give the location of the building, the name of the person(s) who performed the survey, the dates of the site work, as well as the purpose of the survey (i.e. pre-renovation or pre-demolition.

.3 **Scope of Work:** The scope of work must list all the hazardous materials that were included in the survey, the extent of the survey and any additional instructions or expectations included in the scope of work.

.4 **Survey Limitations:** The survey limitations must detail all the areas of the building that were not inspected and the reasons why the area(s) were not inspected. (Note: For pre-demolition and pre-renovation surveys all areas are expected to be accessed)

.5 **Facility Description:** The facility description should include the following details;

.1 Construction date

.2 Total building area in ft^2 , number of units and number of floors

.3 A brief description of the major building systems (i.e. structure, exterior cladding, heating and cooling, the roofing system and interior/exterior finishes).

.4 The description should be brief and use construction terminology.

.6 **Methodology:** The methodology section describes the approach used to collect samples and data.

.1 General Survey Methodology: Describe the overall methodology of the survey.

.2 Hazardous Material Specific Methodologies: Describe in detail the methodologies used to collect information and samples for each specific hazardous material included in the scope of work., should include;

.1 Sample collection strategy.
.2 Method of collection
.3 Frequency of sampling.
.4 Rational for observations and extrapolations.
.5 Basis of conclusions.

.3 Analytical Laboratories: Analytical methods must be of current industry standard or such methods that are endorsed or approved by WorkSafeBC. Provide the following information:

.1 The name and location of the laboratory.
.2 The analytical method used.
.3 The accreditation status of the laboratory.

.7 **Findings:** Summarize the principal locations and types of hazardous materials present in the building. List all of the finding from the laboratory analysis and site observations for each individual hazardous material within the scope of work.

.1 The following information must be included with each specific material;

.1 Sample and/or visual observation location(s)
.2 Extrapolation of sample results and observations to other areas of the building
.3 Approximate quantity of the material(s)
.4 Condition of the material(s)
.5 Risk assessment of material(s) for future abatement

.8 **Recommendations:** Include specific recommendations for each type of hazardous material.

.1 The recommendations must comply with regulatory bodies such as Work Safe BC or the Ministry of Environment.

.2 The recommendations should be divided into administrative recommendations. Provide detail based on the risk level and required work procedures or controls that must be followed during hazardous materials abatement or disturbance work.

.9 **Budgets for Abatement:** Include a budget estimates for all identified hazardous materials. A table that includes material type, quantity to be removed, unit cost, sub-total for material abatement and total budget estimate should be included in this section.

.10 **Report Review and Sign-Off:** In order to ensure accuracy and quality all reports must go through a review process and be signed by a Professional

Engineer (P.Eng), Certified Industrial Hygienist (CIH), Registered Occupational Hygienist (ROH), etc.

.11 **References:** Include all applicable references for legislation applying to all hazardous materials, as well as regulations and guidelines followed during the site work.

.12 **Photographs:** Include, but not limited to, photographs that show the property, exterior of the building(s), interior common areas, and location of sample as well as the sample itself. For photographs of samples ensure that it is clear by the photograph where in the room or suite the sample was collected.

.13 **Floor Plans:** Provide simple floor plans on 8½" x 11" sheets to visually identify the location of samples collected for materials containing asbestos and lead based paint.

.1 The floor plans should indicate direction, property information, identify building, identify room or suite, sample location, sample identification, samples considered containing (i.e. above min. regulatory requirements), and any summary &/or conclusion statements.

2 Hazardous Material Inventories

.1 Request from *'Housing Provider'* the previous asbestos inventory, if it exists the inventory will be provided in electronic format.

.2 Obtain, use and fill-in *'Housing Provider's'* inventory template. The template has been designed to allow for flexibility of the data to be input and provide consistency to staff and vendors. If *'Housing Provider'* provides a previous asbestos inventory, the template is to supersede the previous version.

.3 Consultants will collect all information required to complete the inventory in accordance with WorkSafeBC and per *'Housing Provider'* inventory template.

3 Deliverables

.1 Submit one (1) hard copies and one (1) digital copy of the completed hazardous building material survey report with photographs and floor plans and hazardous material inventory for each property.

.2 Submitted electronic documentation shall follow the naming convention below for the report and inventory.

.1 Survey Report: 'File Ref #' – 'Building Name' – 'Date of Report (yy-mm-dd)' – 'Company Initials' – HMS Report

.2 Inventory: 'File Ref #' – 'Building Name' – 'Date of Report (yy-mm-dd)' – 'Company Initials' – Inventory