

**Targeted Hazardous Materials Survey of:****Bloedel Conservatory - Lighting Retrofit Project****Building Code: 6477****Address: 4600 Cambie Street, Vancouver BC****Surveyor: Patrick Li****Work Notification Number: 10382829****Requested By: Richard Tse****Purpose: TARGETED HAZARDOUS MATERIAL SAMPLING****Executive Summary**

A City of Vancouver Hazardous Materials Technician has completed a Targeted Hazardous Material Sampling Survey and Review of the Interior Lighting Fixtures throughout the Bloedel Conservatory at 4600 Cambie Street in preparation for the upcoming Lighting Retrofit Project.

This targeted hazardous material sampling survey and review only identifies the hazardous building materials that could be encountered or disturbed during the lighting retrofit work. This was not a destructive survey and any hidden or inaccessible materials that were not addressed which may contain asbestos or lead should be assumed to be hazardous until sampling demonstrates otherwise.

**Scope of Work**

- A visual inspection of the Interior Lighting Fixtures throughout the Bloedel Conservatory at 4600 Cambie Street for the presence of building materials suspected to contain asbestos or lead. Surficial sampling was conducted.
- A review of existing hazmat data in the Hazardous Materials Inventory Program
- An assessment of potentially hazardous materials, denoting their condition, potential for disturbance/damage, accessibility to workers or public, estimated quantity, if suspect asbestos containing, their friability, potential for fiber release and worker exposure was assessed.
- A risk assessment for the current condition of any damaged asbestos/lead containing materials determined to be present within the buildings including the priorities for removal/repairs.
- Recommendations for the removal/repair of any damaged hazardous materials determined to require immediate action.

HAZARDOUS MATERIAL SURVEY	BLOEDEL CONSERVATORY - LIGHTING RETROFIT PROJECT	JULY-2018
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Asbestos-Containing Material: Methodology and Results

Materials sampled were selected based on our experience and guidelines provided by WorkSafeBC (Safe Work Practices for Handling Asbestos). Building materials were assessed for potential asbestos content and representative samples were analyzed for asbestos by COV-approved labs.

Previous lab analysis results of samples taken from areas identified as being impacted during the lighting retrofit project found NO asbestos fibres detected in any of building materials.

**NOTE:** Surrounding areas within the Bloedel Conservatory may have asbestos containing building materials. If the scope of work changes, the CoV Environmental Services Department must be contacted to determine if changes will impact any Asbestos Containing Materials.

Lead-Based Paints and Coatings: Methodology and Results

*Total Lead in Paint*

Representative samples of paint were collected during previous site visits to test for the presence of lead. The sample was analyzed at a COV-approved lab for total lead.

As per WorkSafeBC guidelines, a lead-containing surface material is defined as:

*“a paint or other similar material that dries to a solid film that contains over 90 mg/kg (0.009%) dry weight of lead”* (As defined by the Federal Ministry of Health, under the Hazardous Products Act)

**NOTE:** If any painted surfaces are to be disturbed during the lighting retrofit work, the CoV Environmental Services Department must be contacted to determine the level of lead content.

RISK ASSESSMENT AND RECOMMENDATIONS

If during the lighting retrofit work, suspected materials are uncovered that were previously concealed, the City of Vancouver’s Hazardous Materials Division must be notified immediately to determine if additional testing of the suspect materials is warranted.

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Report Prepared by City of Vancouver Hazardous Materials Team

Per:

**Patrick Li, Hazardous Materials Technician**

AHERA Certification No.: CABIR-17-083

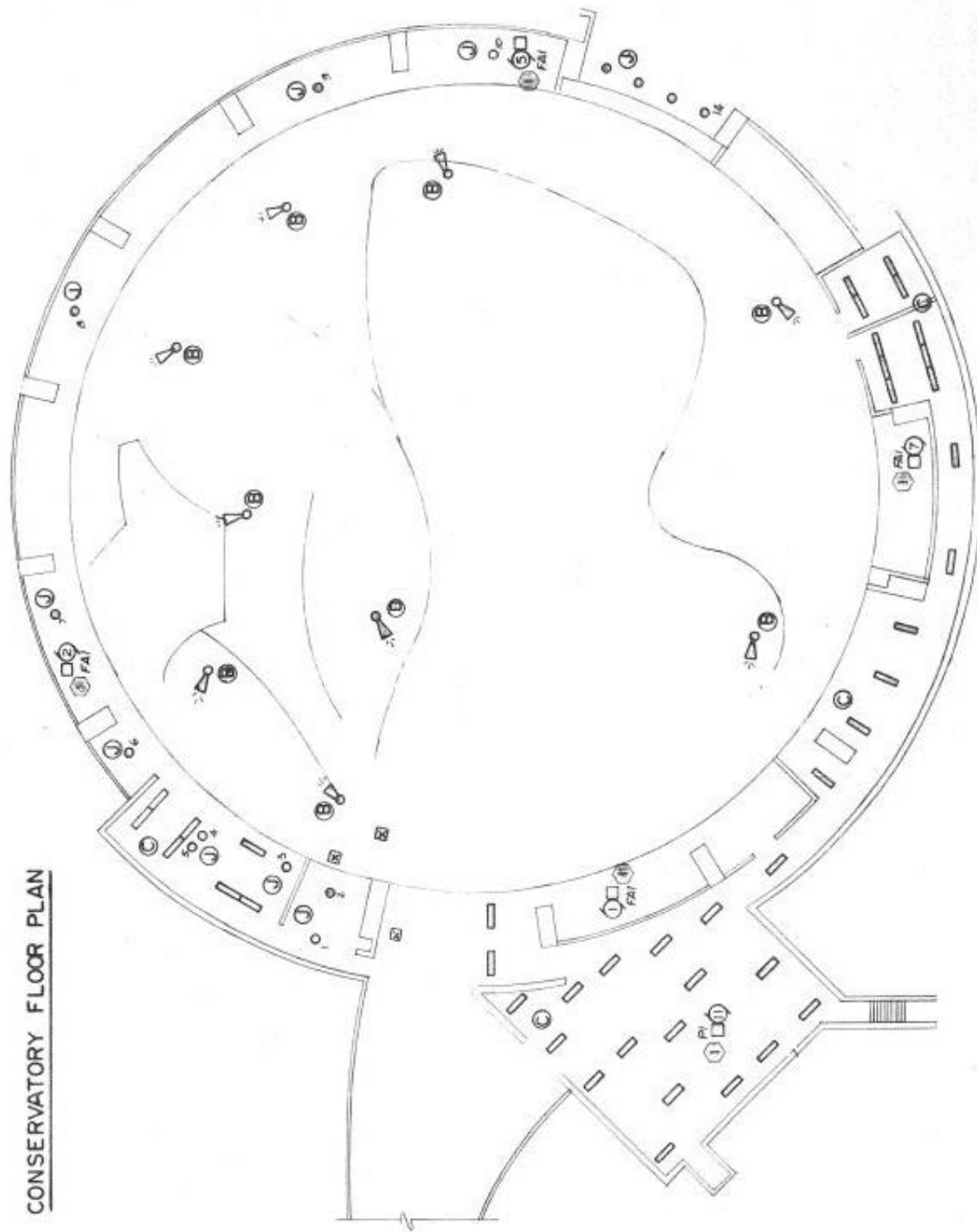
Reviewed by:

**Roger Johnson, Hazardous Materials Team Coordinator**

**DRAWINGS: ATTACHED**

**PHOTOS: ATTACHED**

DRAWINGS:



CONSERVATORY FLOOR PLAN

PHOTOS:



Photo1: Perimeter Lighting - Close up



Photo2: Perimeter Lighting



Photo3: Perimeter Lighting



Photo4: Lighting By Washrooms

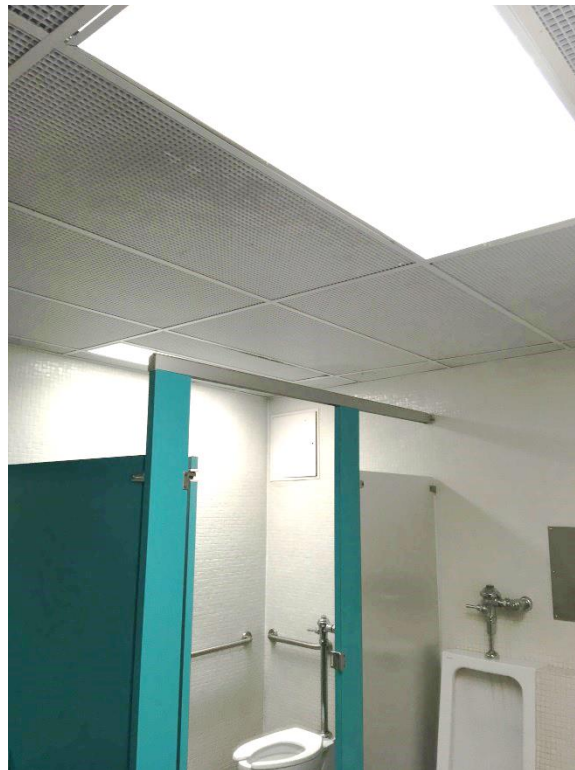


Photo5: Lighting Inside Washroom

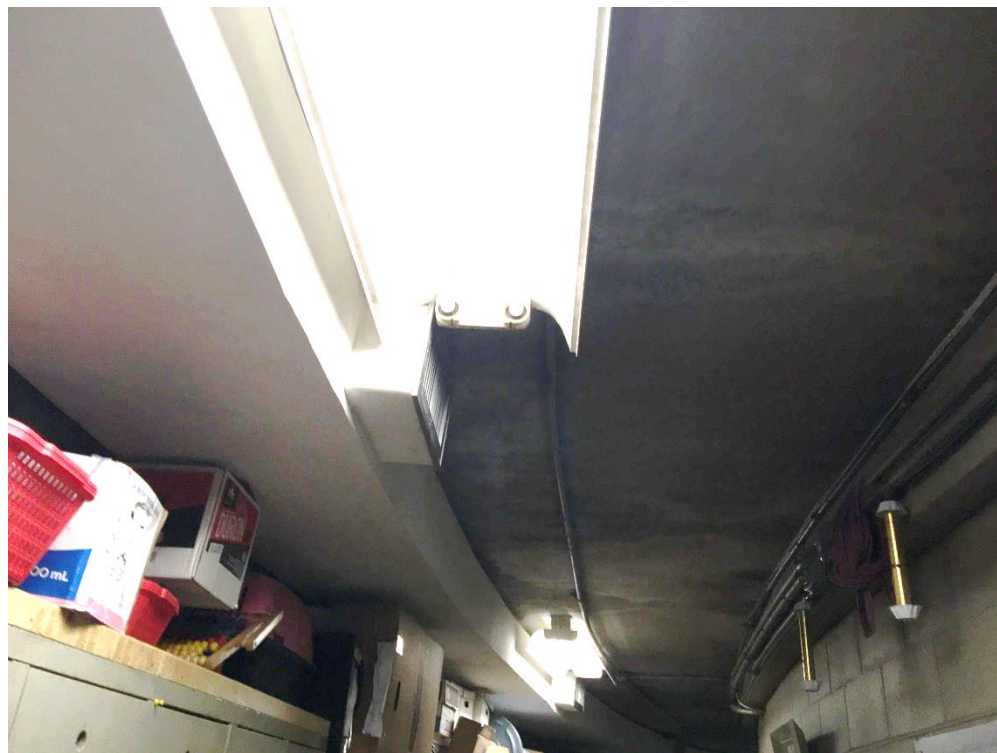


Photo6: Lighting in Tunnel