



## **DESIGNATED SUBSTANCES SURVEY**

**The Centre Block Building  
111 Wellington Street, Parliament Hill  
Ottawa, Ontario**

**PWGSC SOA No: EN438-090265/001/FK**



*Prepared for:*  
**Public Works and Government Services Canada**  
El Houcine Faouzi, Environmental Analyst  
380 Hunt Club Road  
Ottawa, Ontario K1A 0S5

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**DST Consulting Engineers Inc.**  
2150 Thurston Drive, Suite 203, Ottawa, Ontario K1G 5T9  
Tel.: (613) 748-1415 Fax: (613) 748-1356 E-mail: [ottawa@dstgroup.com](mailto:ottawa@dstgroup.com)

## EXECUTIVE SUMMARY

DST Consulting Engineers Inc. (DST) was retained by Public Works and Government Services Canada (PWGSC) to conduct a Designated Substance Survey (DSS) of the Centre Block building, located at 111 Wellington Street, Parliament Hill in Ottawa, Ontario.

The DSS scope of work included an assessment for the presence of the 11 Designated Substances, as identified in the Occupational Health and Safety Act, as well as Polychlorinated Biphenyls (PCBs), Halocarbons, Fecal Matter/Droppings, Urea-Formaldehyde Insulation (UFFI), Radioactive Materials and other miscellaneous hazardous materials or chemicals.

DST conducted the site visit for the Centre Block building between July 23 and August 23, 2012. During the site visits, DST performed an exterior assessment of the building (e.g., windows, chimneys, dormers) using a mechanical lift as well as an assessment of select flat roofing materials of the building.

The following table provides an overview of Designated Substances and Hazardous Materials observed at Centre Block.

**Table I: Overview of Designated Substances and Hazardous Materials**

<b>Designated Substances and Hazardous Materials Observed</b>	<b>Designated Substances and Hazardous Materials not Observed</b>
<ul style="list-style-type: none"><li>• Asbestos;</li><li>• Lead;</li><li>• Mercury;</li><li>• Silica;</li><li>• PCBs;</li><li>• Halocarbons; and</li><li>• Other Hazardous Materials.</li></ul>	<ul style="list-style-type: none"><li>• Acrylonitrile;</li><li>• Arsenic;</li><li>• Benzene;</li><li>• Coke Oven Emissions;</li><li>• Ethylene Oxide;</li><li>• Fecal Matter/Droppings;</li><li>• Isocyanates;</li><li>• Radioactive materials;</li><li>• Vinyl Chloride; and</li><li>• Urea-Formaldehyde Insulation</li></ul>

The subsequent table summarizes the findings and recommendations for the Designated Substances and Hazardous Materials observed as part of the Centre Block survey.

**Table II: Summary of findings and recommendations for Designated Substances and Hazardous Materials observed at Centre Block.**

Designated/ Hazardous Substance	Findings	Recommendations
Asbestos	<p>Friable and non-friable asbestos-containing materials (ACMs) were identified in the Centre Block building. Refer to Section 6.3 for further information and details regarding confirmed ACMs.</p> <p>In addition to confirmed ACMs, the following materials are suspected to contain asbestos:</p> <ul style="list-style-type: none"> <li>• Cast iron drain pipe joint caulking;</li> <li>• Heating, Ventilation, and Air Conditioning Canvas damper material;</li> <li>• Light heat shields;</li> <li>• Fire door lining material;</li> <li>• Spray applied fireproofing on structural steel beams observed in the hatch in room 322NA; and</li> <li>• Roofing materials associated with areas of copper roofing.</li> </ul>	<p>The disturbance of ACMs in the province of Ontario is governed by <i>O.Reg. 278/05, Asbestos on Construction Projects and in Buildings and Repair Operations, as amended</i>, enabled under the <i>Occupational Health and Safety Act (R.S.O. 1990, Chapter 0.1)</i> and by PWGSC Departmental Policy 057 – Asbestos Management.</p> <p>Refer to Section 8.1 for additional recommendations on identified ACMs.</p> <p>Worker exposure to airborne asbestos is regulated under Ontario Regulation 490/09 – Designated Substances, as amended.</p> <p>The transport and disposal of asbestos waste is governed by <i>O.Reg 347/90 – General – Waste Management</i>, as amended. This regulation requires that asbestos waste be sealed in appropriately labelled, double containers resistant to puncture and tears. The waste must be disposed at a licensed waste disposal site.</p>

Designated/ Hazardous Substance	Findings	Recommendations
Lead	<p>All seven (7) representative interior paints sampled by DST were identified as containing detectable concentrations of lead. Refer to Section 6.8 for further information regarding lead-containing paints.</p> <p>Lead is also suspected to be present in the following materials:</p> <ul style="list-style-type: none"> <li>• Solder on the joints of copper piping;</li> <li>• Ceramic tile glazing;</li> <li>• Emergency light batteries;</li> <li>• Cast iron drain pipe joint caulking;</li> <li>• Exterior solder associated with roofing materials;</li> <li>• Lead sheeting associated with ceiling space of Room 354A;</li> <li>• Lead sheeting associated with the facade of the Peace Tower;</li> <li>• The joints of stained glass windows; and,</li> <li>• Small pieces (&lt;0.1 m<sup>2</sup>) of lead sheeting beneath footings of exterior iron roof barriers</li> </ul>	<p>The Occupational Health and Safety Branch of the Ontario Ministry of Labour publication <i>Guideline: Lead on Construction Projects</i> should be followed during the disturbance of materials containing lead.</p> <p>Although the Hazardous Products Act's <i>Surface Coating Materials Regulations SOR/2005-109</i>, as amended, has set a limit of 90 parts per million (ppm) for surface coating materials, there may be a potential for exposure to high levels of lead depending on the activities performed that disturb the lead-containing materials even at low lead concentrations. Conducting a risk assessment to assess the potential for exposure to lead should be performed to determine the need to follow procedures such as those in the MOL guideline referenced above.</p> <p>Worker exposure to lead is regulated under <i>Ontario Regulation 490/09 – Designated Substances</i>, as amended. The disposal of lead waste is regulated under <i>Ontario Regulation 347 – General – Waste Management</i>, as amended.</p> <p>Refer to Section 8.2 for additional recommendations on materials suspected of containing lead.</p>
Mercury	<p>Mercury is suspected to be present within the following materials:</p> <ul style="list-style-type: none"> <li>• Fluorescent light tubes;</li> <li>• Thermostats, and</li> <li>• Mechanical room thermometers and equipment switches.</li> </ul>	<p>The Occupational Health and Safety Division of the Ontario Ministry of Labour publication <i>The Safe Handling of Mercury: A Guide for the Construction Industry</i>, should be followed during the disturbance of materials containing mercury.</p> <p>Worker exposure to mercury is regulated under <i>Ontario Regulation 490/09 – Designated Substances</i>, as amended. The disposal of mercury waste is regulated under <i>Ontario Regulation 347 – General – Waste Management</i>, as amended.</p>

Designated/ Hazardous Substance	Findings	Recommendations
Silica	<p>Silica is suspected to be present within the following materials:</p> <ul style="list-style-type: none"> <li>• Concrete, masonry building materials and associated mortars of the building;</li> <li>• Plaster building elements;</li> <li>• Ceramic tiles;</li> <li>• Drywall building elements; and</li> <li>• Suspended ceiling tiles.</li> </ul>	<p>Dust control measures should be adopted during the disturbance of silica, including those outlined within the Occupational Health and Safety Branch of the Ontario Ministry of Labour <i>Guideline: Silica on Construction Projects</i>.</p> <p>Worker exposure to silica is regulated under <i>Ontario Regulation 490/09 – Designated Substances</i>, as amended.</p>
PCBs	<p>PCBs may be present in fluorescent light ballasts associated with T12 light fixtures observed in select locations of the building.</p>	<p>In Canada, the revised federal PCB Regulations came into force in September 2008. The Regulations impose <i>deadlines</i> on the elimination of all PCBs and PCB-containing material currently in storage, and requires all other PCBs to be phased out.</p> <p>Fluorescent light ballasts should be treated as PCB-containing unless visually confirmed otherwise during removal operations. The ballasts can be examined to determine whether they contain PCBs. This can be done by comparing the manufacturer date codes stamped on the ballasts to information contained in the document titled <i>Identification of Lamp Ballasts Containing PCBs</i>, published by Environment Canada.</p> <p>O. Reg. 362/90 – <i>Waste Management, PCBs</i> and O. Reg. 347, <i>General – Waste Management</i>, as amended, are regulated under the Environmental Protection Act to regulate the handling, storage and transportation of hazardous substances and waste dangerous goods.</p>

Designated/ Hazardous Substance	Findings	Recommendations
Halocarbons	<p>Halocarbons are suspected to be present in the following pieces of equipment:</p> <ul style="list-style-type: none"> <li>• Various types and sizes of refrigerators throughout the building;</li> <li>• Water coolers throughout building;</li> <li>• Vending machines observed in various public areas; and</li> <li>• Window-mounted and free standing air-conditioning units observed in many offices.</li> </ul> <p>Much of the equipment outlined above may be tenant owned but could not be readily confirmed by DST at the time of the site visit.</p>	<p>The handling, transport and disposal of halocarbon-containing equipment are governed by the Ozone-Depleting Substances Regulations under the Canadian Environmental Protection Act (CEPA), 1998, as amended.</p> <p>The use of halocarbons is governed by the Federal Halocarbon Regulations (FHR) for federal facilities. The FHR is enforced under CEPA by Environment Canada (EC). CEPA permits for the routine inspection of halocarbon-containing equipment by EC enforcement officers. Compliance with the FHR is mandatory and violations of the regulation are subject to fines, imprisonment or other court orders, as per CEPA.</p>
Other Hazardous Materials	<p>Miscellaneous maintenance oils and chemicals were observed in maintenance areas of the building.</p> <p>Hydraulic oil stored in Basement room B-69.</p> <p>Miscellaneous cleaning supplies were observed in select janitor closets throughout the building.</p>	<p>The handling and use of these materials should be undertaken by those with proper training (e.g. Workplace Hazardous Materials Information System, etc.) and adhere to any applicable guidelines and/or regulations.</p> <p>The transport and disposal of chemical waste is governed by O. Reg. 347/90 – General – Waste Management, as amended.</p>

The Executive Summary should be read in conjunction with, and is subject to the limitations outlined in Section 9.0 of this report.

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**Ottawa, Ontario**

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## 1.0 INTRODUCTION

DST Consulting Engineers Inc. (DST) was retained by Public Works and Government Services Canada (PWGSC) to conduct a Designated Substance Survey (DSS) of the Centre Block building (Centre Block), located 111 Wellington Street, Parliament Hill, in Ottawa, Ontario.

The DSS scope of work included the assessment of all site structures for the presence of the 11 Designated Substances as identified in the Occupational Health and Safety Act.

Designated Substances, as identified under the Ontario Occupational Health & Safety Act are:

- Acrylonitrile;
- Arsenic;
- Asbestos (both friable and non-friable);
- Benzene;
- Coke Oven Emissions;
- Ethylene Oxide;
- Isocyanates;
- Lead;
- Mercury;
- Silica; and
- Vinyl Chloride.

Other Hazardous Materials, which are not classified as Designated Substances, but were included as part of the DSS scope of work include the following:

- Polychlorinated Biphenyls (PCBs);
- Halocarbons;
- Fecal Matter/Droppings;
- Urea Formaldehyde Insulation;
- Radioactive Materials; and
- Other Hazardous Materials

## 2.0 BACKGROUND SITE INFORMATION

As indicated by information provided by PWGSC, Centre Block was constructed between 1916 and 1927 to replace the original Centre Block that was destroyed in 1916.<sup>1</sup> Based on discussions with on-site building personnel, it was reported to DST that exterior facing windows underwent extensive repair, re-caulking and selective replacement. This renovation was completed in the late 1990's and early 2000's. The building is currently intact, and occupied by members of the Canadian House of Commons and Senate.

## 3.0 BACKGROUND REPORT REVIEW

Prior to the commencement of field work, DST project personnel reviewed past designated substance survey documents provided by PWGSC, as they pertained to designated substances and hazardous materials at Centre Block. Based on information gaps and uncertainties due to

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<sup>1</sup> Request for Proposal. Designated Substance Survey For Centre Block Building, Parliament Hill, Ottawa, Ontario. Public Works and Government Services Canada (PWGSC). November 21, 2011.

the lack of laboratory data and reliable sample locations identified by DST during the review of these past designated substance reports, DST was retained by PWGSC to re-survey the Centre Block building for designated substances and hazardous materials. DST reviewed the following reports for use during this survey:

1. Assessment of designated substances, polychlorinated biphenyls, and ozone depleting substances, Parliament Hill, Centre Block, Ottawa Ontario, Aqua Terre, 1998;
2. CB Various Short Term Repairs DSR (2011), PWGSC, August 26, 2011; and
3. Asbestos Tracker for Centre Block (2010), PWGSC, updated September 9, 2010.

#### **4.0 SCOPE OF WORK**

The major tasks of the survey program were to:

- Conduct a non-destructive survey for asbestos-containing materials and other designated substances and hazardous materials, as they pertain to the Centre Block building;
- Collect and analyze the required number of suspect ACM samples to satisfy the requirements of O.Reg. 278/05, as amended;
- Collect representative bulk paint and other applicable material samples and analyze them for lead; and
- Provide a summary of the findings and provide recommendations, where applicable.

As outlined in the Request for Proposal (RFP) document provided by PWGSC for this project, the Designated Substance Survey does *not* include the Library of Parliament or the Centre Block Underground Services (CBUS). As a result, DST did not include any entry or assessment of the utility tunnels associated with these areas.

#### **5.0 METHODOLOGY**

##### **5.1 Quality Control**

A quality assurance and quality control (QA/QC) program was implemented for the project to help manage the office and fieldwork program. All project documentation was maintained and controlled under each specific project QA file with unique project file identifiers.

A QA/QC coordinator was assigned to the project to ensure that all samples sent for analysis were properly numbered and labelled. The QA/QC coordinator also completed the chain of custody forms to ensure proper transmittal of samples to the laboratory. All building documentation was reviewed to ensure that the survey forms for the building surveyed were complete.

All samples were labelled on-site with unique sample identification numbers for ease of future identification of materials.

##### **5.2 Site Assessment**

DST conducted the site visits for the Centre Block building between July 23 and August 23<sup>rd</sup>, 2012.

Materials suspected of containing designated substances and other hazardous materials were visually identified, based on the surveyor's knowledge of the historic composition of building products. Equipment that may contain halocarbons (e.g., air conditioning and refrigeration equipment) or PCBs (e.g., electrical transformers and fluorescent light ballasts) can often be identified by examining manufacturer's labels. For safety reasons, DST personnel did not remove the ballast shields from fluorescent light fixtures to examine the ballast codes unless the electrical circuit for the lighting had been tagged and locked out by a qualified electrician. Visual identification of materials suspected to contain asbestos or lead (in paint, mortar) was supported by the collection and analysis of a limited number of representative samples. Materials suspected of containing designated substances other than asbestos or lead (in paint and mortar) were identified by appearance, age, and knowledge of historic applications.

In Ontario, a material is defined as an Asbestos-Containing Material (ACM) if the material has a minimum asbestos content of 0.5% by dry weight. ACMs can be divided into two categories: friable and non-friable material. A friable ACM is a material that can be crumbled, powdered, or pulverized by hand pressure and can readily release fibres when disturbed. Common applications of friable ACMs are sprayed or trowelled surfacing materials (e.g., sprayed fireproofing and textured coatings) as well as mechanical and thermal insulation. Non-friable materials are materials that will generally release fibres only when cut or shaped. Common non-friable ACMs include vinyl floor products, drywall joint compound, plaster, asbestos textile products and asbestos cement products (transite). Some of these products may become friable with time or when disturbed (e.g., pulverized plaster).

Bulk samples of suspected ACMs collected by DST during the site investigation were analyzed for their asbestos content at Paracel Laboratories Ltd. (Paracel) in Ottawa, Ontario. The bulk asbestos samples were analyzed using Polarised Light Microscopy (PLM). This analytical method complies with the United States Environmental Protection Agency (U.S. EPA) Method 600/R-93/116 dated July, 1993. Paracel is certified under the National Institute of Science and Technology's National Voluntary Laboratory Accreditation Program (NVLAP) to perform asbestos bulk sample analysis (NVLAP No. 200812-0). The laboratory followed a "positive-stop" analysis methodology and stopped analyzing a sample set if any one of the series of samples proved to be positive for the presence of asbestos. Therefore, additional samples collected in order to satisfy the requirements of O. Reg. 278/05, as amended, were not analyzed if the initial sample was identified as asbestos-containing. Non-friable samples that were identified as non-detect via the PLM method were submitted for Transmission Electron Microscopy (TEM) analysis at the request of PWGSC.

With regards to lead in paint, although the Ontario Ministry of Labour (MoL) has published a guideline for control of lead exposures on construction projects in Ontario, it does not include criteria for the classification of lead-paint. Instead, it uses presumed airborne lead concentrations for specific tasks as criteria for classifying work. However, in regulations set by the United States (U.S.) Department of Housing and Urban Development, Lead-Based Paint is classified as any paint application containing at least 1.0 milligrams of lead per square centimetre of surface area ( $1.0 \text{ mg/cm}^2$ ), or at least 0.5% lead content by weight [(5,000 parts per million (ppm))]. This criterion was widely, although not universally, used in Canada. In Canada, the Federal Hazardous Product Act has lowered the allowable concentration of lead in paints for new consumer products to 0.009% lead content by weight (90 ppm). For the purposes of this survey and report, paints having detectable concentrations of lead are considered to be lead-containing.

Bulk samples of suspected lead-containing materials collected by DST during the site investigation were analyzed at Paracel Laboratories Inc (Paracel). Paracel is certified by the Canadian Association for Laboratory Accreditation Inc. to perform this analysis (CALA membership number 1262). The samples were analyzed at Paracel using Inductively Coupled Plasma – Mass Spectrometry (ICP-MS) in accordance with U.S. EPA Method 6020.

Floor plans outlining sampling locations are included in Appendix A. The analytical results for asbestos in bulk materials and lead (in paint and mortar) are included in Appendix B. Laboratory certificates of analysis are included in Appendix C. A database of asbestos-containing materials is included in Appendix D. Select photographs are included in Appendix E.

## **6.0 FINDINGS**

The following sections outline the findings of designated substances and hazardous materials assessed at the Centre Block building. Results appearing in bold in the results tables, attached as Appendix B, represent hazardous materials of potential concern.

### **6.1 Acrylonitrile**

Acrylonitrile was neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

### **6.2 Arsenic**

Arsenic was neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

### **6.3 Asbestos**

One hundred and forty three (143) sample layers of suspected ACMs were collected by DST during the site investigation and analyzed by the laboratory for asbestos content. It should be noted that sample locations were limited to areas where physical removal of building materials were permitted (e.g., mechanical areas, janitor's closets). Sample descriptions and analytical results are included in Appendix B, Table 1. Analytical results were also relied upon from the PWGSC "Asbestos Tracker" document dated September 9, 2010.

A database containing detailed information on asbestos-containing materials, including material description, location, condition and quantity is included in Appendix D.

### **6.3.1 Asbestos-Containing Materials**

Based on visual observations and laboratory analysis, the following friable and non-friable asbestos-containing materials were identified:

#### Plaster Materials (Non-Friable)

- Ceiling plaster (Previously sampled (1998), 14755-05 and 04A) throughout the first floor of the building contains 0.5-5% Chrysotile.

It should be noted that DST conducted extensive plaster sampling throughout the building as part of the site survey. Based on the number of positive instances of asbestos-containing ceiling plaster on the first floor, the entire first floor ceiling plaster is considered as asbestos containing unless extensive future sampling of this material confirms otherwise.

#### Ceiling Stipple (Non-friable)

- Ceiling stipple, on plaster (Sample 14755-24A) observed throughout the sixth floor contains 1% Tremolite; and
- Ceiling stipple, on plaster (Sample 14755-37) observed throughout the first, second, third, fourth and fifth floors contains 1% Chrysotile.

#### Drywall Joint Compound (Non-Friable)

- Drywall Joint Compound (Sample 14755-45 and 46) observed in rooms 119NA, 119NB, 119NC, and 119ND contains 1% Chrysotile; and
- Drywall Joint Compound (Sample 14755-48) observed in rooms 229N contains 1% Chrysotile.

#### Vinyl Floor Tiles (Non-Friable)

- 12"x12" (30 cm x 30 cm) vinyl floor tiles, grey with red streak, located in room 156D (Sample 14755-44A) contains 0.81% Chrysotile.

At the time of the site investigation, carpeting was present throughout the majority of office spaces. Although attempts were made by DST to look beneath carpeting, access was severely limited as damage to the carpeting was not permitted. Vinyl floor tiles may be concealed beneath carpeted areas and thus not observed at the time of the site investigation.

#### Cement Board (Non-Friable)

- Cement board in the third floor mezzanine (area 3M-1) (Sample 14755-55A) contains 1% Chrysotile asbestos.

#### Window Caulking and Mastic (Non-Friable)

- Black window caulking associated with windows on the fourth floor skylights 4-24 and 4-18 (Sample 14755-58A) contains 5.89% Chrysotile;

- Black window caulking associated with windows on the Fifth Floor, Room 513S (Sample 14755-60A) contains 0.88% Chrysotile; and
- Black/Brown window caulking associated with windows in Room 420N (sample 14755-59A) contains 5.64% Chrysotile;
- Grey caulking associated with House of Commons stain-glass windows accessible from the second floor as well as the third and fourth floor galleries (previously sampled, 2011) contains 4% Chrysotile asbestos; and,
- Ceiling Mastic remnants (Sample 14755-53A) observed in Room 340S contains 0.53% Chrysotile.

#### Parging and Fireproofing (Non-friable)

- Parging (previously sampled) observed in the Attic above kitchen accessible from the sixth floor contains 20% Chrysotile; and
- Fireproofing (previously sampled) observed on beams in the Attic above kitchen accessible from the sixth floor contains 4% Chrysotile.

#### Ceiling and Acoustic Tiles (Friable)

- 1' x 1' Acoustic Wall Tiles, (previously sampled, 1998) observed in select areas on the first and third floor contains 0.5-5% Amosite and 5-25% Chrysotile;
- 2' x 4' Ceiling Tiles, Pinhole (previously sampled, 1998) observed in select offices on various floors contains 0.5-5% Amosite and 5-25% Chrysotile;
- 2' x 4' Ceiling Tiles, Pinhole (Sample 14755-14A and 14755-42A) observed in select offices on various floors contains 1% Chrysotile; and
- 2' x 2' Ceiling Tiles, pinhole, red back (Sample 14755-18A) observed in select rooms on various floors contains 0.8% Amosite.

#### Ductwork, Pipe and Pipe Fitting Insulations (Friable)

- Magblock insulation, located throughout the basement and in select pipe chases and ceiling spaces throughout the building (previously sampled, 1998) contains 25-50% Chrysotile;
- Pipe fitting – grey cement compound located throughout the basement and in select pipe chases and ceiling spaces throughout the building (previously sampled, 1998) contains 50-75% Chrysotile asbestos;
- Anti-sweat pipe insulation located throughout the basement and ceiling spaces throughout the building (previously sampled, 1998) contains 25-50% Chrysotile;
- Aircell pipe insulation, located throughout the basement and ceiling spaces throughout the building (previously sampled, 1998); and
- Aircell duct insulation, located throughout the basement (previously sampled, 1998) contains 50-75% Chrysotile.

### **6.3.2 Suspected Asbestos-Containing Materials**

The following materials are suspected to contain asbestos:

- Heritage plaster elements are assumed to contain asbestos and were not sampled in order to avoid damage;
- Light heat shields. Samples were not collected in order to avoid damaging historical / heritage light fixtures;
- Cast iron drain pipe joint caulking. Samples were not collected in order to avoid compromising the integrity of the caulking seal;
- Fire doors observed at several locations in the basement and on the sixth floor of the building. The doors were not disassembled during the investigation to avoid damaging them;
- HVAC canvas dampers, observed in several mechanical areas of the building. Samples were not collected in order to avoid compromising the integrity of the canvas dampers;
- Additional quantities of pipe insulation that were not verified due to limited visual/physical access (i.e. pipe chase, confined space, etc.);
- Spray applied fireproofing on structural steel beams observed in the hatch in room 322NA. Samples were not collected due to physical space limitations; and
- Roofing materials associated with layers below copper roofing materials. These materials were not collected/sampled in order to avoid damage to the copper roofing material.

### **6.3.3 Non-Asbestos Containing Materials**

Based on limited visual observations and analytical results, the following materials were confirmed to not contain regulated concentrations of asbestos based on sampling performed by DST:

- Basement foundation whitewash material, observed in Basement Room 069 (Sample 14755-01A-E);
- Wall plaster (Sample 14755-02A-C), sampled in Basement, Area B-27, near the stairwell;
- Vinyl sheet flooring, beige brick pattern (Sample 14755-03A-C) observed in Room 187SC;
- Wall plaster (Sample 14755-06) sampled from Room 182F;
- Ceiling plaster (Sample 14755-07) sampled from Room 182F;
- Ceiling plaster (Sample 14755-08) sampled from Room 179F;
- Vinyl sheet flooring, white with green diamond pattern (Sample 09A-C) observed in Room 168N-C;
- Wall plaster (Sample 14755-10) sampled from Room 159N;
- Drywall joint compound (Sample 14755-11) sampled from Room 159N;
- 12" x 12" (30cm x 30cm) Vinyl floor tile, green (Sample 12A-C) observed in Room 152N;
- Ceiling plaster (Sample 14755-13) sampled from Room 165S;
- Ceiling plaster (Sample 14755-15) sampled from First Floor D Corridor;
- Thermal Patch (Sample 14755-16) sampled from Floor Protrusion, Second Floor, Corridor N Drywall joint compound (Sample 14755-17A-C) sampled from Room 367S;
- Plaster (Sample 14755-19) sampled from North East Tower, Room 366N;

- Grey Window Caulking (Sample 14755-20A-C), sampled from Fifth Floor;
- Cork and Tar on Piping (Sample 14755-21A-C) observed in Room 567S, pipe chase;
- Fireproofing, vertical structural column (Sample 14755-22A-C) observed in Room 589S;
- Plaster (Sample 14755-23) sampled in Room 558N;
- Wall Plaster (Sample 14755-25) sampled in Room 667A;
- Cementitious Spray Applied Finish, Interior of Dormers on Sixth Floor (Sample 14755-26A-G);
- Thermal Patch, White (Sample 14755-27A-C) observed in Room 671SG;
- Drywall joint compound (Sample 14755-28) sampled in Peace Tower, 8<sup>th</sup> Level;
- Stipple wall and ceiling finish (Sample 29A-E) observed throughout levels of Peace Tower;
- Drywall joint compound (Sample 14755-30) sampled in Peace Tower, Medium Bells Level;
- Roofing material – Peace Tower, Large Bells Level (Sample 14755-31A-C)
- Drywall joint compound (Sample 14755-32) sampled in Peace Tower, Large Bells Level;
- Fireproofing, Structural (Sample 14755-33A-C) observed in Peace Tower, Level 6;
- Exterior wall plaster (Sample 14755-34) observed in Peace Tower, Level 2;
- Plaster (Sample 14755-35) sampled in Room 612N;
- Plaster (Sample 14755-36) sampled in Room 123S;
- Plaster (Sample 14755-38) sampled in Room 125B;
- Trowelled on Material, above ceiling (Sample 14755-39A-C) observed in the First Floor Mechanical Room of the Peace Tower;
- Drywall joint compound (Sample 14755-40) sampled in Room 188N;
- Plaster (Sample 14755-41) sampled in Room 134N;
- Plaster (Sample 14755-43) sampled in Room 156D;
- Vinyl Sheet Flooring, beige (Sample 14755-47A-C) observed in Room 141C;
- Drywall joint compound (Sample 14755-50) sampled in Room 301A;
- Plaster (Sample 14755-51) sampled in Room 301A;
- Plaster (Sample 14755-52) sampled in Room 342N;
- Plaster (base layer only) (Sample 14755-54A-C) sampled in Room 340S, mechanical room;
- Blow-in insulation (Sample 56A-C) sampled in Third Floor Mezzanine (3M-1);
- Drywall joint compound (Sample 14755-57) sampled in Room 427SA;
- Tar wrap on piping (Sample 14755-61A-C) sampled in Room 607A;
- Brown, Window caulking (Sample 62A-C) sampled in Room 601A;
- Window caulking (Sample 63A-C) observed on exterior facing windows;
- Black Tar, Kitchen Exhaust (Sample 14755-64A-C) observed on sixth floor roof, above kitchen;
- Roofing material, inverted roofing system (Sample 14755-65A-C) sampled from sixth floor roof; and
- Roofing material, inverted roofing system (Sample 14755-66A-C) sampled from the second floor courtyard.

Based on our sampling program, and previous sampling performed in the building, all wall plasters do not contain asbestos, unless additional sampling proves otherwise. Additionally all smooth plaster ceilings, except for the first floor, do not contain asbestos.

#### **6.4 Benzene**

Benzene was neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

#### **6.5 Coke Oven Emissions**

Coke Oven Emissions were neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

#### **6.6 Ethylene Oxide**

Ethylene Oxide was neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

#### **6.7 Isocyanates**

Isocyanates were neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

#### **6.8 Lead**

Seven (7) interior representative paint finishes were sampled from the building and submitted for lead content analysis by DST. The sample descriptions and analytical results are summarized in Appendix B, Table 2.

The following paint samples collected and analyzed contained detectable concentrations of lead, as well as paints with lead concentrations that are above the 90 ppm limit established by the Hazardous Products Act's *Surface Coating Materials Regulations SOR/2005-109*, as amended:

- White column/wall paint (Sample 14755-LP01) sampled from Basement, Room CB036. The paint contains 95,400 ppm lead content. Minor peeling paint was observed throughout the basement;
- Grey floor paint (Sample 14755-LP02) sampled from Basement, Area B-44. The paint contains 302 ppm lead content. Minor areas of peeling paint were observed.
- White wall paint (Sample 14755-LP03) sampled from Basement, Area B-31. The paint contains 1,590 ppm lead content. Minor areas of peeling paint were observed.
- White wall paint (Sample 14755-LP04) sampled from Basement, Area B-11. The paint contains 101,000 ppm. Minor areas of peeling paint were observed.
- Beige wall paint (Sample 14755-LP05) sampled from Second Floor, Room 258N. The paint contains 59,300 ppm. Paint was observed in good condition.
- Beige wall paint (Sample 14755-LP06) sampled from the Third Floor, Room 367S. The paint contains 91,400 ppm lead content. Paint was observed in good condition.
- Wall Paint (Sample 14755-LP07) sampled from the Sixth Floor, Room 667SA). The paint contains 1,770 ppm lead content. Paint was observed in good condition.

All other observed interior paint finishes were intact and in good condition. Samples of paints not listed above were not collected as sampling without matrix interference (i.e., removing paint without also removing non-paint substrate) would likely prove difficult. Older interior wall and ceiling paint finishes are suspected to contain lead.

Lead is also suspected to be present in the following materials:

- Solder on the joints of copper piping;
- Ceramic tile glazing;
- Emergency light batteries;
- Cast iron drain pipe joint caulking;
- Exterior solder associated with roofing materials;
- Lead sheeting associated with ceiling space of Room 354A;
- Lead sheeting associated with the exterior facade of the Peace Tower;
- The joints of stained glass windows; and
- Small pieces (<0.1 m<sup>2</sup>) of lead sheeting beneath footings of exterior iron roof barriers.

### **6.9 Mercury**

Mercury is suspected to be present in the following:

- Fluorescent lights tubes throughout the building;
- Thermostats throughout the building; and
- Mechanical room thermometers and equipment switches.

### **6.10 Silica**

Based on the historic composition of building materials, silica is expected to be present in:

- Concrete and masonry building materials and associated mortars;
- Plaster building elements;
- Ceramic tiles;
- Drywall building elements; and
- Suspended ceiling tiles.

### **6.11 Vinyl Chloride**

Vinyl Chloride was neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

### **6.12 Polychlorinated Biphenyls (PCBs)**

Polychlorinated Biphenyls (PCBs), also known as Chlorobiphenyls, are hazardous chemicals which were used in the manufacturing of a variety of equipment, such as electrical equipment, heat exchangers, hydraulic systems, and for several other specialized applications. PCBs are commonly found within electrical ballasts manufactured prior to 1981, found within fluorescent light fixtures and high intensity discharge (HID) lamps.

Light fixtures with T12 lamps are more likely to contain ballasts that were manufactured prior to 1981. T8 lamps are associated with light fixtures that were manufactured after the phase-out of PCB-containing ballasts. The letter "T" denotes the shape of the light fixture (e.g. tubular) and the number which follows indicates the diameter in eighths of an inch.

Fluorescent light ballasts associated with the T12 light fixtures are suspected to contain PCBs.

No other materials suspected of containing PCBs were identified within the building. Dry-type transformers identified in the building are not suspected to contain PCBs.

### **6.13 Halocarbons**

Halocarbons are a family of synthetic organic compounds that are composed of carbon and the following elements: hydrogen, chlorine, fluorine, and/or bromine. They are inert, heat-absorbing molecules which are very attractive as refrigerants and fire suppression agents because they are inexpensive, non-flammable and very stable.

Halocarbons are used specifically as refrigerants in air-conditioning and refrigeration systems, fire extinguishing agents in fire extinguishing systems, blowing agents in the manufacture of foams, and as solvents. Halocarbons are regulated because many of them contribute to the depletion of the stratospheric ozone layer.

Halocarbons are suspected to be present in the following:

- Various types and sizes of refrigerators throughout the building;
- Water coolers throughout building;
- Vending machines observed in various public areas; and
- Window-mounted and free standing air-conditioning units observed in many offices.

Much of the equipment outlined above may be tenant owned, but this could not be readily confirmed by DST at the time of the site visit.

### **6.14 Other Hazardous Materials**

The following hazardous materials were observed to be present in the building:

- Miscellaneous maintenance oils and chemicals were observed in maintenance areas of the building.
- Hydraulic oil stored in Basement room B-69.
- Miscellaneous cleaning supplies were observed in select janitor closets throughout the building.

### **6.15 Urea Formaldehyde Insulation (UFFI)**

UFFI was neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

### **6.16 Fecal Matter/Droppings**

Fecal Matter Droppings were neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

### **6.17 Radioactive Materials**

Radioactive materials were neither observed in the building, nor suspected of being present, in forms or quantities that would either impact future work or pose risks to human health or the environment.

## **7.0 INACCESSIBLE AREAS**

This survey program was completed at a time of full building occupancy. Although every attempt was made to look above false ceilings and into wall cavity hatches, some designated substances and/or hazardous materials may be concealed and thus not observed at the time of the survey. Similarly, the site survey did not include a destructive, intrusive investigation for concealed materials.

Although every attempt was made to look beneath existing floor finishes, old floor finishes may exist under current finishes that may not have been accessible or visible at the time of the site visit.

## **8.0 CONCLUSIONS AND RECOMMENDATIONS**

DST was retained by PWGSC to conduct a Designated Substance Survey (DSS) of the Centre Block building, located at 111 Wellington Street, Parliament Hill in Ottawa, Ontario.

The DSS scope of work included an assessment for the presence of the 11 Designated Substances, as identified in the Occupational Health and Safety Act, as well as Polychlorinated Biphenyls (PCBs), Halocarbons, Fecal Matter Droppings, Urea-Formaldehyde Insulation (UFFI), Radioactive Materials, and other miscellaneous hazardous materials or chemicals.

The following table provides an overview of Designated Substances and Hazardous Materials observed at the Centre Block building.

**Table III: Overview of Designated Substances and Hazardous Materials**

Designated Substances and Hazardous Materials observed	Designated Substances and Hazardous Materials not observed
<ul style="list-style-type: none"> <li>• Asbestos;</li> <li>• Lead;</li> <li>• Mercury;</li> <li>• Silica;</li> <li>• PCBs;</li> <li>• Halocarbons;</li> <li>• Other Hazardous Materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Acrylonitrile;</li> <li>• Arsenic;</li> <li>• Benzene;</li> <li>• Coke Oven Emissions;</li> <li>• Ethylene Oxide;</li> <li>• Fecal Matter Droppings</li> <li>• Isocyanates;</li> <li>• Radioactive materials;</li> <li>• Vinyl Chloride; and</li> <li>• Urea-Formaldehyde Insulation</li> </ul>

The following recommendations apply to only designated substances and hazardous materials observed in the building.

### 8.1 Asbestos

The disturbance of ACMs on construction and demolition projects in the province of Ontario is governed by Ontario Regulation (*O.Reg*) 278/05, *Asbestos on Construction Projects and in Buildings and Repair Operations* enabled under the *Occupational Health and Safety Act (R.S.O. 1990, Chapter 0.1)*. This regulation classifies all asbestos disturbances as Low Risk (Type 1), Moderate Risk (Type 2), or High Risk (Type 3), each of which has defined precautionary measures. All asbestos materials are subject to specific handling and disposal precautions, and must be removed prior to demolition. The Ontario Ministry of Labour (MoL) must be notified of any project involving removal of more than a minor amount (e.g. typically 1 square metre) of friable asbestos material.

The transport and disposal of asbestos waste is governed by *O.Reg 347/90 – General – Waste Management*, as amended. This regulation requires that asbestos waste be sealed in appropriately labelled, double containers resistant to puncture and tears. The waste must be disposed at a licensed waste disposal site.

Identified friable ductwork, pipe insulation, and pipe fitting insulation ACMs require a minimum of Type 2 abatement procedures under Ontario Regulation 278/05, as amended, when disturbing/removing/repairing one (1) square metre or less of the material, provided that it is wetted and non-powered hand tools are used. Should renovation or disturbance be required of more than one (1) square metre of friable ACM, Type 3 abatement procedures are required. It should be noted that asbestos-containing pipe insulation and pipe fitting insulation can be removed using Type 2 glovebag procedures, provided the materials is in good condition, and the glovebag seal can be maintained throughout the removal process.

The breaking, cutting, drilling, abrading, grinding, sanding or vibrating of non-friable ACMs such as 12"x12" vinyl floor tiles, caulking, mastic, cement board, and/or roofing materials, can be conducted using Type 1 asbestos precautionary measures, provided the material is wetted to control the spread of dust or fibres, and the work is done only by means of non-powered hand-

held tools. If these conditions cannot be met, than more stringent (Type 2 or Type 3) work procedures are required.

Asbestos-containing drywall joint compound, associated with drywall materials is considered to be a non-friable material. The removal of less than one square metre of drywall in which joint-filling compounds are asbestos-containing can be performed following Type 1 asbestos precautionary measures, as applicable as per O.Reg 278/05, as amended. The removal of one square metre or more of drywall in which joint-filling compounds are asbestos-containing must be performed following Type 2 asbestos removal procedures, as a minimum.

Identified asbestos-containing lay-in ceiling tiles (2'x4' pinhole, various types) in the building are friable materials. This material was in good condition at the time of the survey and does not require remedial action at this time. The removal/disturbance of these tiles requires Type 1 or 2 precautions depending on the amounts and methodologies associated with the activity.

Intact asbestos-containing plaster and ceiling stipple can be considered non-friable in its current condition. However, destructive removal of these materials can cause them to become friable. Disturbance of this material should be performed using Type 2 precautions as a minimum. It is recommended that disturbance of large amounts of these materials be performed following Type 3 precautions.

The time weighted average exposure limit (TWAEEL) for airborne asbestos is prescribed by Ontario Regulation 490/09 *Designated Substances*, as amended. Work procedures and personal protective equipment must be used to ensure that workers are not exposed to airborne asbestos levels that exceed this TWAEEL.

The following recommendations apply to all observed ACMs and suspected ACMs:

- Since the building is federally owned, Public Works & Government Services Canada Departmental Policy 057: Asbestos Management (PWGSC DP 057) is applicable and must be adhered to during management and abatement;
- The condition of materials identified in this report must be inspected at least annually and this record must be updated accordingly, as per O.Reg 278/05;
- Appropriate work procedures and precautionary measures must be used, as outlined in O.Reg. 278/05, as amended, when performing work that may disturb ACMs or suspected ACMs;
- If ACMs or suspected ACMs become damaged and worker exposure to the material is likely to occur, the damaged material must be repaired or removed following work procedures outlined in O.Reg. 278/05, as amended.
- The disposal of asbestos waste is controlled by the Ontario Environmental Protection Act, R.R.O., 1990, Regulation 347, General – Waste Management, as amended. This regulation requires that asbestos waste be sealed in double containers resistant to puncture and tears, and appropriately labelled. The waste must be disposed at a licensed waste disposal site. Proper notification must be issued to the site representative prior to transportation of waste. The transport of the waste to the disposal site is controlled by the federal Transportation of Dangerous Goods Act, 1992 (TDGA).

This survey program was completed at a time of full building occupancy. Although every attempt was made to look above false ceilings and into wall cavity hatches, some ACMs may be

concealed and thus not observed at the time of the survey. Similarly, the site survey did not include a destructive, intrusive investigation for concealed materials. As a result, DST cannot confirm materials that may be concealed beneath or above existing interior or exterior solid building material finishes that may not have been visible or apparent at the time of the site investigation. It is recommended that a destructive investigation be performed prior to any major renovation or demolition project. Should any previously unidentified suspect ACMs be encountered as part of future work, these materials are to be treated as ACMs and handled accordingly, unless sampling proves otherwise.

Although every attempt was made to look beneath existing floor finishes, old floor finishes may exist under current finishes that may not have been accessible or visible at the time of the site visit. If additional old floor finishes are encountered during future work, these materials should be assumed to contain asbestos, unless laboratory sampling proves otherwise.

Materials that have not been analyzed, but are visibly similar to other materials identified as asbestos-containing, must be considered asbestos-containing unless proven otherwise by laboratory analysis.

## **8.2 Lead**

The Occupational Health and Safety Branch of the Ontario Ministry of Labour have published *Guideline: Lead on Construction Projects*. This document classifies all lead disturbances as Type 1, Type 2a, Type 2b, Type 3a or Type 3b work, and assigns different levels of respiratory protection and work procedures for each classification.

DST currently recommends the removal, following the above-noted guideline, of only the loose delaminating, peeling/flaking areas of paint (leaving the remaining areas of paint intact and undisturbed) as part of the existing facility management.

Paint containing elevated concentrations of lead can pose a health risk to humans if ingested or inhaled. Such lead paints are also a risk to the environment with the potential to contaminate soil and groundwater. Paints with elevated lead content can also pose a health risk to workers while completing renovations within the building.

The disturbance of paints with lead levels below 90 ppm should not result in significant airborne lead concentrations and should not require special work procedures. However, it should be noted that although the Hazardous Products Act's *Surface Coating Materials Regulations SOR/2005-109*, as amended, has set a limit of 90 parts per million (ppm) for surface coating materials, there may be a potential for exposure to very high levels of lead depending on the activities performed that disturb the lead-containing materials, even at low lead concentrations. Conducting a risk assessment to assess the potential for exposure to lead should be performed to determine the need to follow work procedures such as those in the MOL guideline referenced above.

The TWael for airborne lead is prescribed by Ontario Regulation 490/09 Designated Substances, as amended. Work procedures and personal protective equipment must be used to ensure that workers are not exposed to airborne lead levels that exceed this TWael.

DST recommends that any future disturbance of lead-containing materials should avoid operations that generate high levels of dust (e.g. sanding, grinding) and that should these

operations be required, appropriate precautionary measures be implemented for worker exposure.

The disposal of construction waste containing lead is dependent on leachate testing, as governed by O. Reg. 347- General – Waste Management, as amended. The transport of the waste to the disposal site is controlled by the federal Transportation of Dangerous Goods Act (TDGA), 1992. Prior to or during renovation work, the following procedures should be performed:

- Copper piping solder, roofing solder, and/or stained glass joints can be cut a small distance (e.g. 50 mm) from the joints to avoid direct disturbance of the lead material;
- Cast iron drain pipes can be cut away from the joints to avoid direct disturbance of the lead caulking in the joints;
- Ceramic tiles can be removed using Type 1 work procedures and respiratory protection provided that only non-powered hand tools are used;
- Emergency light batteries should be removed when decommissioned and disposed of as lead-containing waste; and
- Pieces of lead-containing sheeting under roof barriers can be removed using Type 1 work procedures and respiratory protection and disposed of as lead-containing waste.

### 8.3 Mercury

There are no regulations that specifically govern the disturbance of mercury on construction projects. However, the Occupational Health and Safety Division of the Ontario MoL have published *The Safe Handling of Mercury: A Guide for the Construction Industry*. This document provides advice on how to reduce the risk of mercury exposure, and outlines clean-up methods for spills. In the absence of specific legislation for mercury on construction projects, this guideline would serve as a reasonable, peer reviewed standard for work procedures.

When removal of the fluorescent light tubes is required, the tubes should be removed intact from the fixtures. This prevents worker exposure to mercury vapour, particularly if the tubes were energized shortly before removal. Other sources of liquid mercury should be removed in a similar fashion (intact) to prevent worker exposure.

The TWael for airborne mercury is prescribed by Ontario Regulation 490/09 *Designated Substances*, as amended. Work procedures and personal protective equipment must be used to ensure that workers are not exposed to airborne mercury levels that exceed this TWael.

Liquid mercury is classified as a hazardous waste under O. Reg. 347, as amended. The transport of the waste to a disposal site is controlled by O. Reg. 347 and by the federal TDGA. It is now common practice to recycle fluorescent light tubes, and other items containing mercury, recovering the component materials, and avoiding the generation of hazardous waste.

### 8.4 Silica

The Occupational Health and Safety Branch of the Ontario MoL have published *Guideline: Silica on Construction Projects*. This document classifies all silica disturbances as Type 1, Type 2 or Type 3 work, and assigns different levels of respiratory protection and work procedures for each classification. In the absence of specific legislation for silica on construction projects, this guideline would serve as a reasonable, peer reviewed standard for work procedures.

The TWael for airborne silica is prescribed by Ontario Regulation 490/09 *Designated Substances*, as amended. Work procedures and personal protective equipment must be used to ensure that workers are not exposed to airborne silica levels that exceed this TWael.

Dust control procedures, which are typical of any well executed renovation project, are usually sufficient to control airborne silica levels. As a general rule, it is preferable to use more stringent dust suppression techniques and engineering controls as opposed to relying on respiratory protection to control worker exposure. Respiratory protection should only be relied on as a last resort when dust suppression techniques and engineering controls fail to control worker exposure to silica.

### **8.5 Polychlorinated Biphenyls (PCBs)**

Prior to removal or disposal, the PCB content of equipment should be confirmed to determine proper procedures to be followed, unless conservatively assumed to contain PCBs. When the fluorescent light fixtures are taken out of service, the ballasts should be examined to determine whether they contain PCBs. This can be done by comparing the manufacturer date codes stamped on the ballasts to information contained in the document titled *Identification of Lamp Ballasts Containing PCBs*, published by Environment Canada. Ballasts that contain PCBs must be packaged, transported and disposed of in accordance with all appropriate provincial and federal regulations.

In Canada revised federal PCB Regulations came into force in September 2008. The Regulations impose deadlines on the elimination of all PCBs and PCB-containing material currently in storage, and requires all other PCBs to be phased out. In general, the end-of-use deadlines imposed by this new regulation are as follows:

- December 31, 2009, all equipment containing PCBs in a concentration of 500 parts per million (ppm) or more (excluding pole-mounted equipment and light ballasts).
- December 31, 2025, all equipment containing PCBs in a concentration of 50 ppm or more (including pole-mounted equipment and light ballasts).

This regulation and end-use deadlines apply to anyone that owns, stores, manages, or disposes of PCB-containing equipment and waste. The PCBs must be destroyed at an authorised facility, and the owner of the PCBs must submit an annual report to Environment Canada, indicating the quantity of PCBs sent off-site to a transfer or destruction facility. This regulation also includes reporting requirements.

O. Reg. 362/90 – Waste Management, PCBs and O. Reg. 347, General – Waste Management, as amended, are regulated under the Environmental Protection Act to regulate the handling, storage and transportation of hazardous substances and waste dangerous goods. The transport of PCB waste to the disposal site is controlled by the federal Transportation of Dangerous Goods Act, 1992.

### **8.6 Halocarbons**

The handling, transport and disposal of Ozone Depleting Substances (ODSs) are governed by the following:

- *Ozone-depleting Substances Regulations, 1998, as amended;*
- *O.Reg 463/10, Ozone Depleting Substances and Other Halocarbons.*
- *Federal Halocarbon Regulations, 2003 (FHR).*

When suspected halocarbon-containing equipment is taken out of service, the halocarbon refrigerants must be captured and reclaimed by a licensed technician. The presence of halocarbon refrigerants within unit's no longer in service should be verified. If halocarbon refrigerants are found to be present, they must be captured and reclaimed by a licensed technician. Appropriate records of equipment decommissioning must be maintained in accordance with requirements of the FHR.

## **8.7 Other Hazardous Materials**

The handling and use of these materials should be undertaken by those with proper training (e.g. Workplace Hazardous Materials Information System, etc.) and adhere to any applicable guidelines and/or regulations.

Prior to renovation operations, they should be disposed of appropriately. The transport and disposal of chemical waste is governed by O. Reg. 347/90 – General – Waste Management, as amended.

## **9.0 LIMITATIONS OF REPORT**

This report is intended for client use only. Any use of this document by a third party, or any reliance on or decisions made based on the findings described in this report, are the sole responsibility of such third parties, and DST Consulting Engineers Inc. accepts no responsibility for damages, suffered by any third party as a result of decisions made or actions conducted based on this report. No other warranties are implied or expressed.

The data, conclusions and recommendations which are presented in this report, and the quality thereof, are based on a scope of work authorized by the client. The sampling program included non-destructive asbestos bulk sampling, paint chip, and mortar sampling in select representative areas for laboratory analysis. There is a practical limitation on the number of samples that can be collected in an occupied building. This requires the investigator to extrapolate observations and analytical results between sample locations. The uncertainty, and inherent risk, associated with this necessity increases with the distance between sampling locations. Note, however, that no scope of work, no matter how exhaustive, can guarantee to identify all contaminants. This report therefore cannot warranty that all building conditions are represented by those identified at specific locations.

Recommendations, when included, are made in good faith and are based on several successful experiences.

Note also that standards, guidelines and practices related to DST's scope of work may change with time. Those which were applied at the time of this program may be obsolete or unacceptable at a later date.

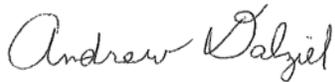
Any comments given in this report on potential remediation problems and possible methods are intended only for the guidance of the designer. The scope of work may not be sufficient to determine all of the factors that may affect construction, clean-up methods and/or costs. Contractors bidding on this project or undertaking clean-ups should, therefore, make their own interpretation of the factual information presented and draw their own conclusions as to how the conditions may affect their work.

Any results from an analytical laboratory or other subcontractor reported herein have been carried out by others, and DST Consulting Engineers Inc. cannot warranty their accuracy. Similarly, DST cannot warranty the accuracy of information supplied by the client.

## 10.0 CLOSURE

We trust that the information contained herein meets your needs. Should you have any questions or comments, please do not hesitate to contact us.

### DST CONSULTING ENGINEERS INC.



Andrew Dalziel  
Project Manager  
[adalziel@dstgroup.com](mailto:adalziel@dstgroup.com)



Brendan Harrigan, P.Eng.  
Principal, Sector Manager  
[bharrigan@dstgroup.com](mailto:bharrigan@dstgroup.com)

**Appendix A  
Floor Plans**

**NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ASSOCIATED TECHNICAL REPORT.
2. DO NOT SCALE DRAWING.
3. ALL FIRST FLOOR CEILING STIPPLE AND PLASTER IS CONSIDERED ASBESTOS-CONTAINING.
4. ALL OTHER FLOORS CEILING STIPPLE IS CONSIDERED ASBESTOS-CONTAINING.
5. HERITAGE PLASTER ELEMENTS WERE NOT SAMPLED AND ARE ASSUMED ASBESTOS- CONTAINING.

**LEGEND:**

-  APPROXIMATE ASBESTOS SAMPLE LOCATION, AS APPLICABLE
-  SURVEY LOCATION REFERENCE
-  CEILING TILES CONTAINING ASBESTOS
-  CEILING PLASTER CONTAINING ASBESTOS
-  CEILING STIPPLE CONTAINING ASBESTOS
-  VINYL FLOOR TILES CONTAINING ASBESTOS
-  DRYWALL JOINT COMPOUND CONTAINING ASBESTOS
-  ACOUSTIC WALL TILES CONTAINING ASBESTOS
-  MECHANICAL/DUCTWORK INSULATION CONTAINING ASBESTOS
-  WINDOW CAULKING CONTAINING ASBESTOS
-  OTHER MATERIALS CONTAINING ASBESTOS
-  FIREPROOFING CONTAINING ASBESTOS

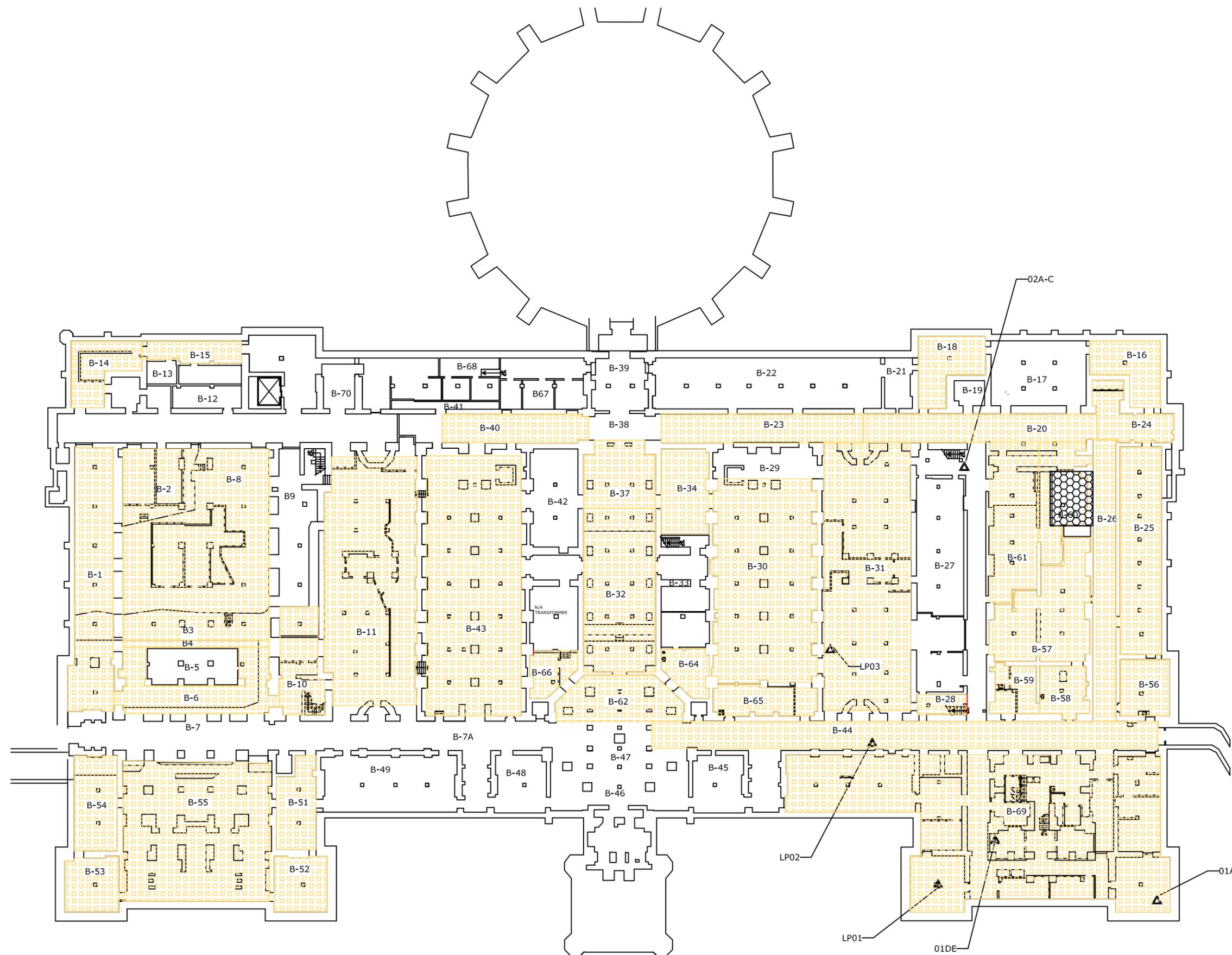
REV	DATE	ISSUE	APPROVAL
A	21/01/13	ORIGINAL	B.H.

PROJECT TITLE  
**DESIGNATED SUBSTANCES SURVEY  
 111 WELLINGTON STREET,  
 PARLIAMENT HILL, OTTAWA, ONTARIO**

DRAWING TITLE  
**CENTRE BLOCK  
 BASEMENT**

DESIGNED BY A.D.	SCALE NTS
DRAWN BY H.R.	DATE January 2013
APPROVED BY B.H.	PROJECT NO.: BE-OT-014755

**FIGURE 1**





**NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ASSOCIATED TECHNICAL REPORT.
2. DO NOT SCALE DRAWING.
3. ALL FIRST FLOOR CEILING STIPPLE AND PLASTER IS CONSIDERED ASBESTOS-CONTAINING.
4. ALL OTHER FLOORS CEILING STIPPLE IS CONSIDERED ASBESTOS-CONTAINING.
5. HERITAGE PLASTER ELEMENTS WERE NOT SAMPLED AND ARE ASSUMED ASBESTOS-CONTAINING.

**LEGEND:**

-  APPROXIMATE ASBESTOS SAMPLE LOCATION, AS APPLICABLE
-  SURVEY LOCATION REFERENCE
-  CEILING TILES CONTAINING ASBESTOS
-  CEILING PLASTER CONTAINING ASBESTOS
-  CEILING STIPPLE CONTAINING ASBESTOS
-  VINYL FLOOR TILES CONTAINING ASBESTOS
-  DRYWALL JOINT COMPOUND CONTAINING ASBESTOS
-  ACOUSTIC WALL TILES CONTAINING ASBESTOS
-  MECHANICAL/DUCTWORK INSULATION CONTAINING ASBESTOS
-  WINDOW CAULKING CONTAINING ASBESTOS
-  OTHER MATERIALS CONTAINING ASBESTOS
-  FIREPROOFING CONTAINING ASBESTOS

REV	DATE	ISSUE	APPROVAL
A	21/01/13	ORIGINAL	B.H.

PROJECT TITLE  
 DESIGNATED SUBSTANCES SURVEY  
 111 WELLINGTON STREET,  
 PARLIAMENT HILL, OTTAWA, ONTARIO

DRAWING TITLE  
**CENTRE BLOCK  
 FIRST FLOOR**

DESIGNED BY A.D.	SCALE NTS
DRAWN BY H.R.	DATE January 2013
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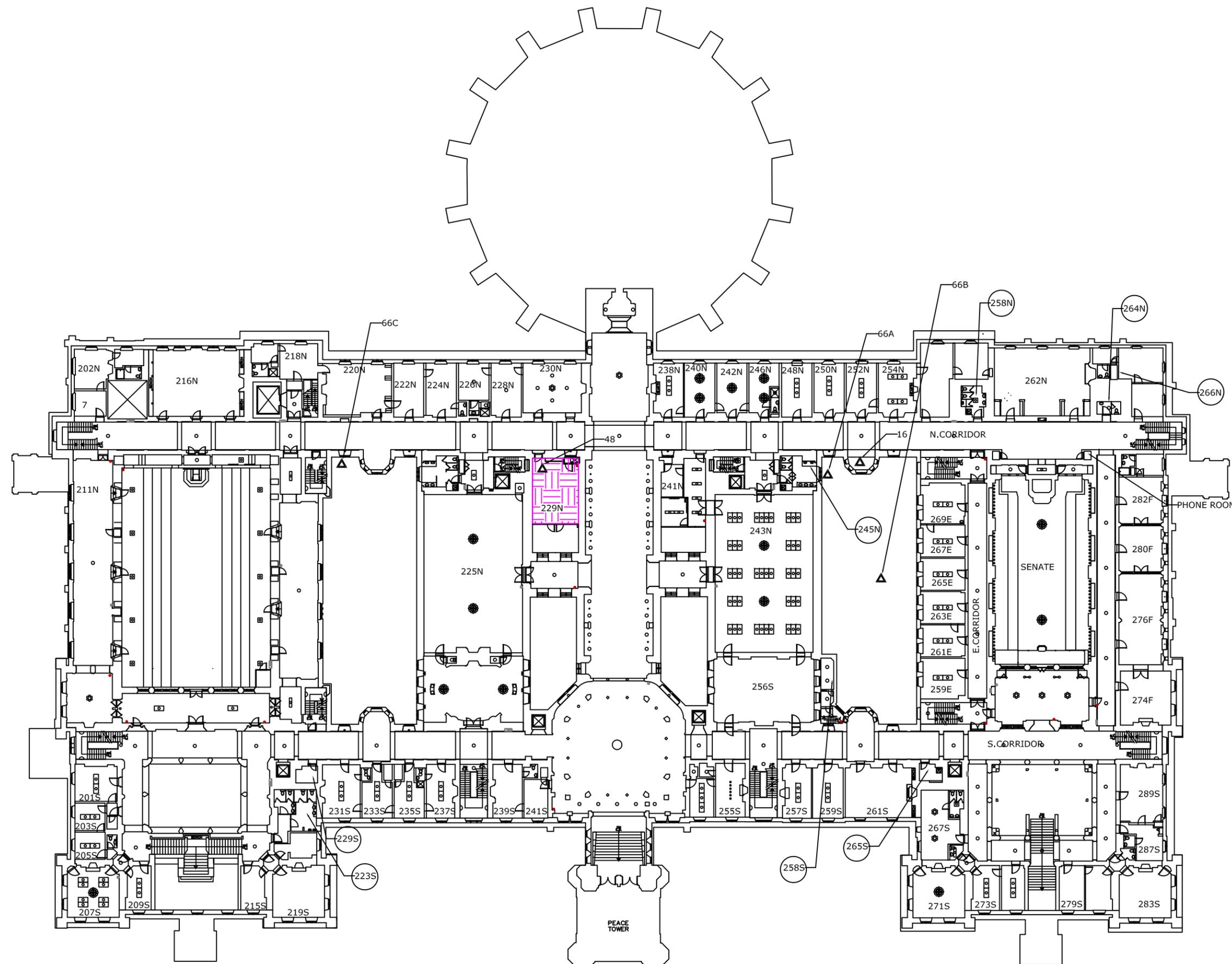
**FIGURE 2**

**NOTES:**

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3. ALL FIRST FLOOR CEILING STIPPLE AND PLASTER IS CONSIDERED ASBESTOS-CONTAINING.
4. ALL OTHER FLOORS CEILING STIPPLE IS CONSIDERED ASBESTOS-CONTAINING.
5. HERITAGE PLASTER ELEMENTS WERE NOT SAMPLED AND ARE ASSUMED ASBESTOS-CONTAINING.

**LEGEND:**

-  APPROXIMATE ASBESTOS SAMPLE LOCATION, AS APPLICABLE
-  SURVEY LOCATION REFERENCE
-  CEILING TILES CONTAINING ASBESTOS
-  CEILING PLASTER CONTAINING ASBESTOS
-  CEILING STIPPLE CONTAINING ASBESTOS
-  VINYL FLOOR TILES CONTAINING ASBESTOS
-  DRYWALL JOINT COMPOUND CONTAINING ASBESTOS
-  ACOUSTIC WALL TILES CONTAINING ASBESTOS
-  MECHANICAL/DUCTWORK INSULATION CONTAINING ASBESTOS
-  WINDOW CAULKING CONTAINING ASBESTOS
-  OTHER MATERIALS CONTAINING ASBESTOS
-  FIREPROOFING CONTAINING ASBESTOS



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PROJECT TITLE  
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DRAWING TITLE  
 CENTRE BLOCK  
 SECOND FLOOR

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**FIGURE 3**

**NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ASSOCIATED TECHNICAL REPORT.
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**LEGEND:**

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-  SURVEY LOCATION REFERENCE
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-  CEILING STIPPLE CONTAINING ASBESTOS
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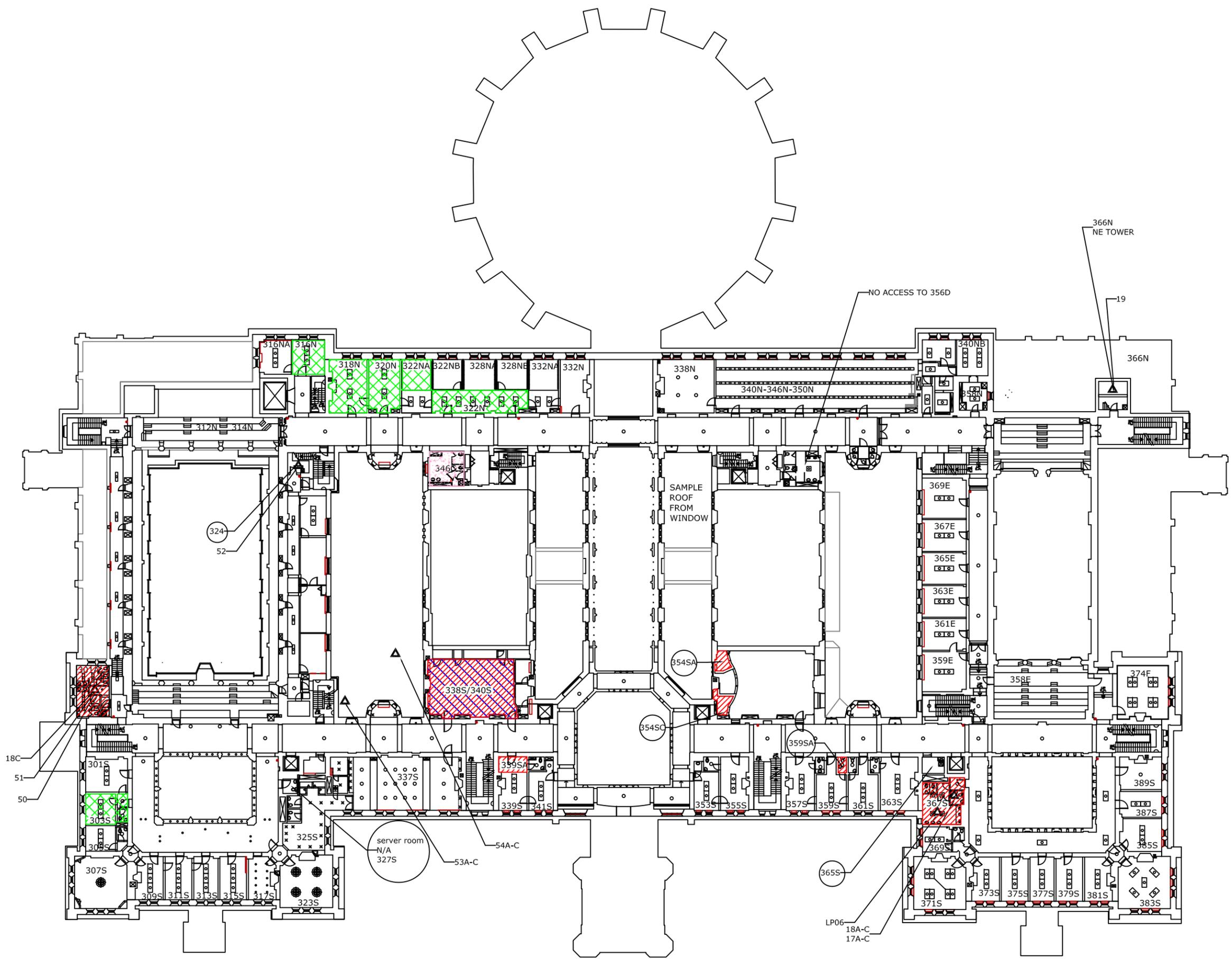
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DRAWING TITLE  
 CENTRE BLOCK  
 THIRD FLOOR

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**FIGURE 4**



**NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ASSOCIATED TECHNICAL REPORT.
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**LEGEND:**

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-  SURVEY LOCATION REFERENCE
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-  WINDOW CAULKING CONTAINING ASBESTOS
-  OTHER MATERIALS CONTAINING ASBESTOS
-  FIREPROOFING CONTAINING ASBESTOS

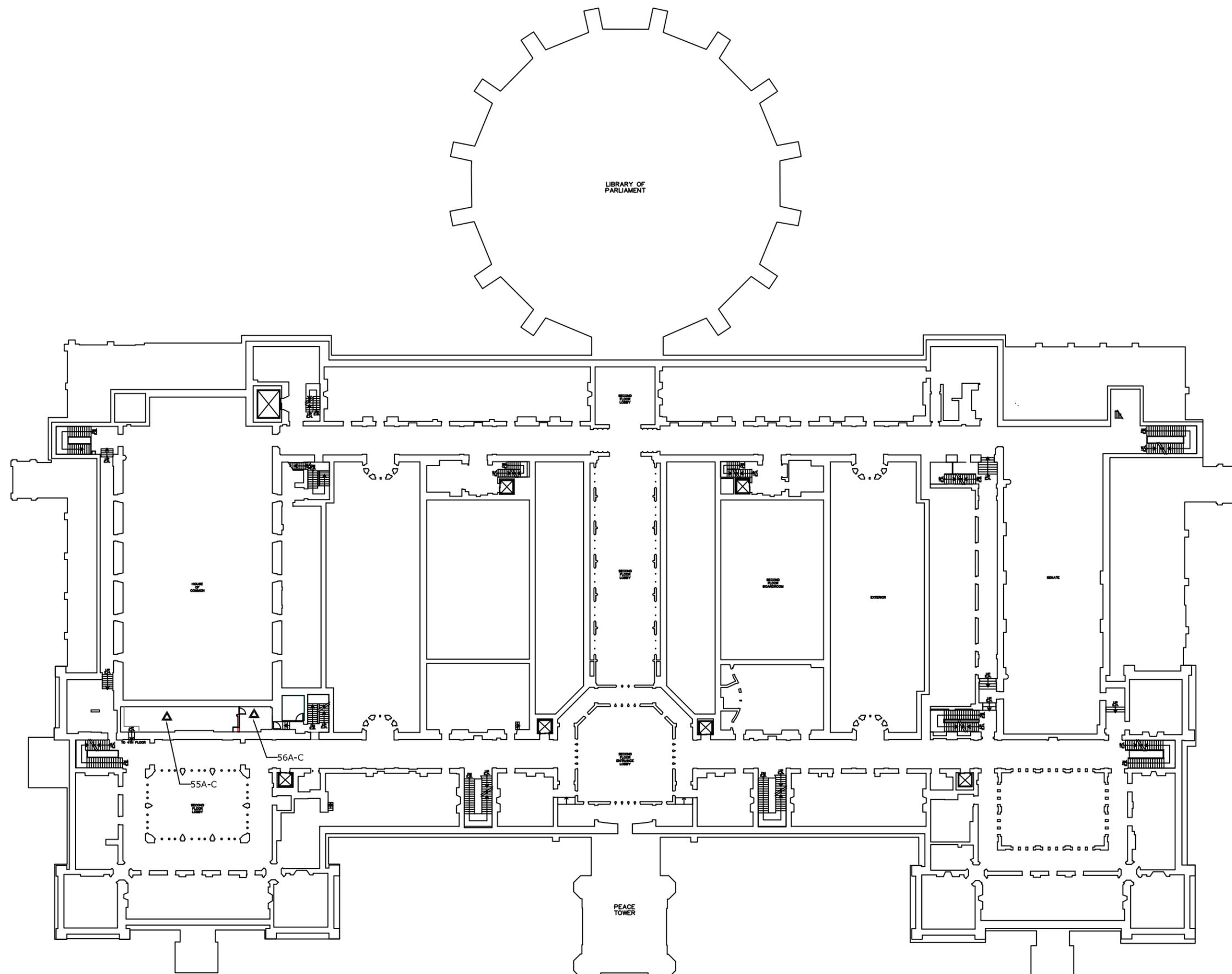
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DRAWING TITLE  
 CENTRE BLOCK  
 THIRD FLOOR- MEZZANINE

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**FIGURE 5**



**NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ASSOCIATED TECHNICAL REPORT.
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**LEGEND:**

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-  SURVEY LOCATION REFERENCE
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-  CEILING STIPPLE CONTAINING ASBESTOS
-  VINYL FLOOR TILES CONTAINING ASBESTOS
-  DRYWALL JOINT COMPOUND CONTAINING ASBESTOS
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-  OTHER MATERIALS CONTAINING ASBESTOS
-  FIREPROOFING CONTAINING ASBESTOS

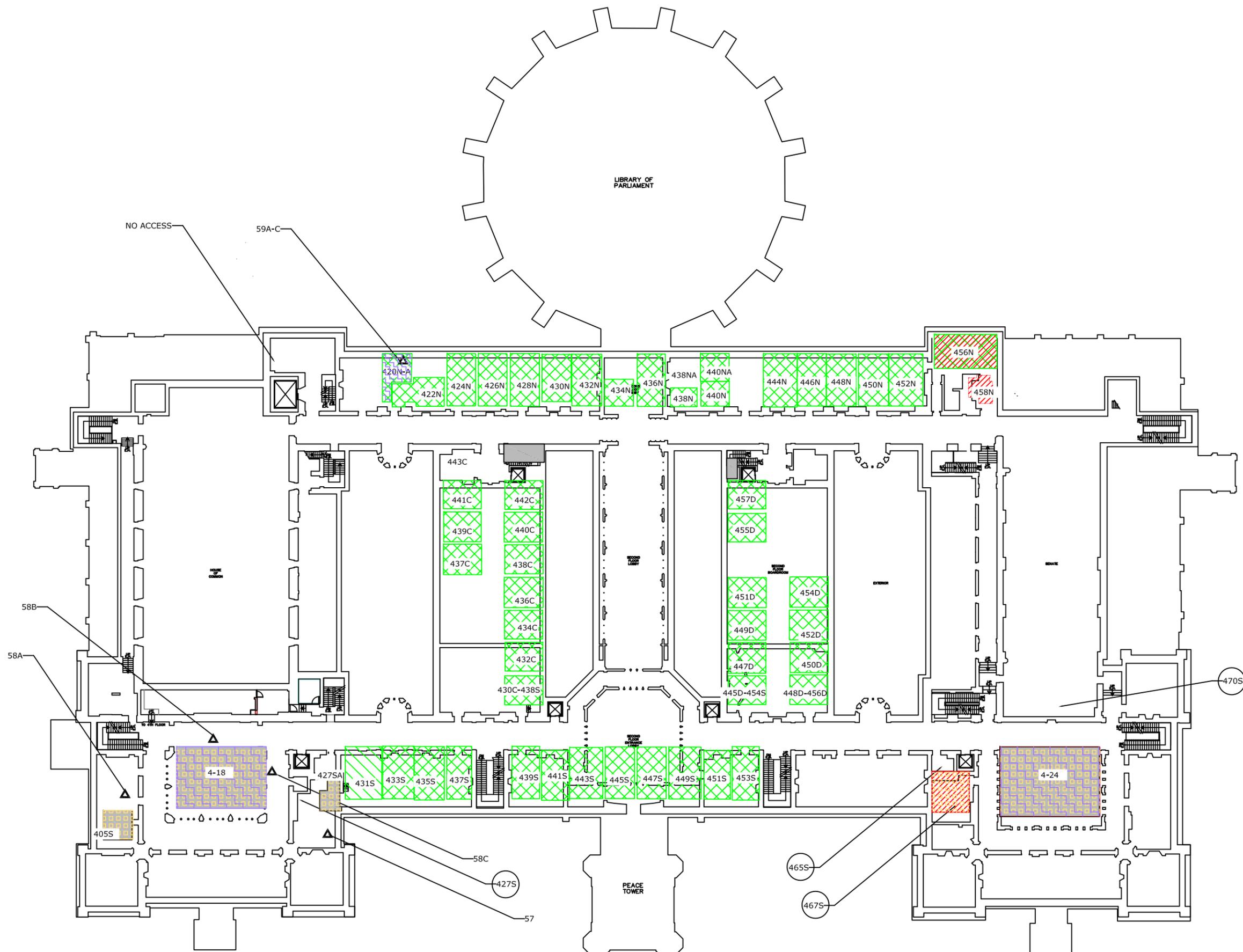
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DRAWING TITLE  
 CENTRE BLOCK  
 FOURTH FLOOR

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**FIGURE 6**





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**NOTES:**

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5. HERITAGE PLASTER ELEMENTS WERE NOT SAMPLED AND ARE ASSUMED ASBESTOS- CONTAINING.

**LEGEND:**

- APPROXIMATE ASBESTOS SAMPLE LOCATION, AS APPLICABLE
- SURVEY LOCATION REFERENCE
- CEILING TILES CONTAINING ASBESTOS
- CEILING PLASTER CONTAINING ASBESTOS
- CEILING STIPPLE CONTAINING ASBESTOS
- VINYL FLOOR TILES CONTAINING ASBESTOS
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- WINDOW CAULKING CONTAINING ASBESTOS
- OTHER MATERIALS CONTAINING ASBESTOS
- FIREPROOFING CONTAINING ASBESTOS

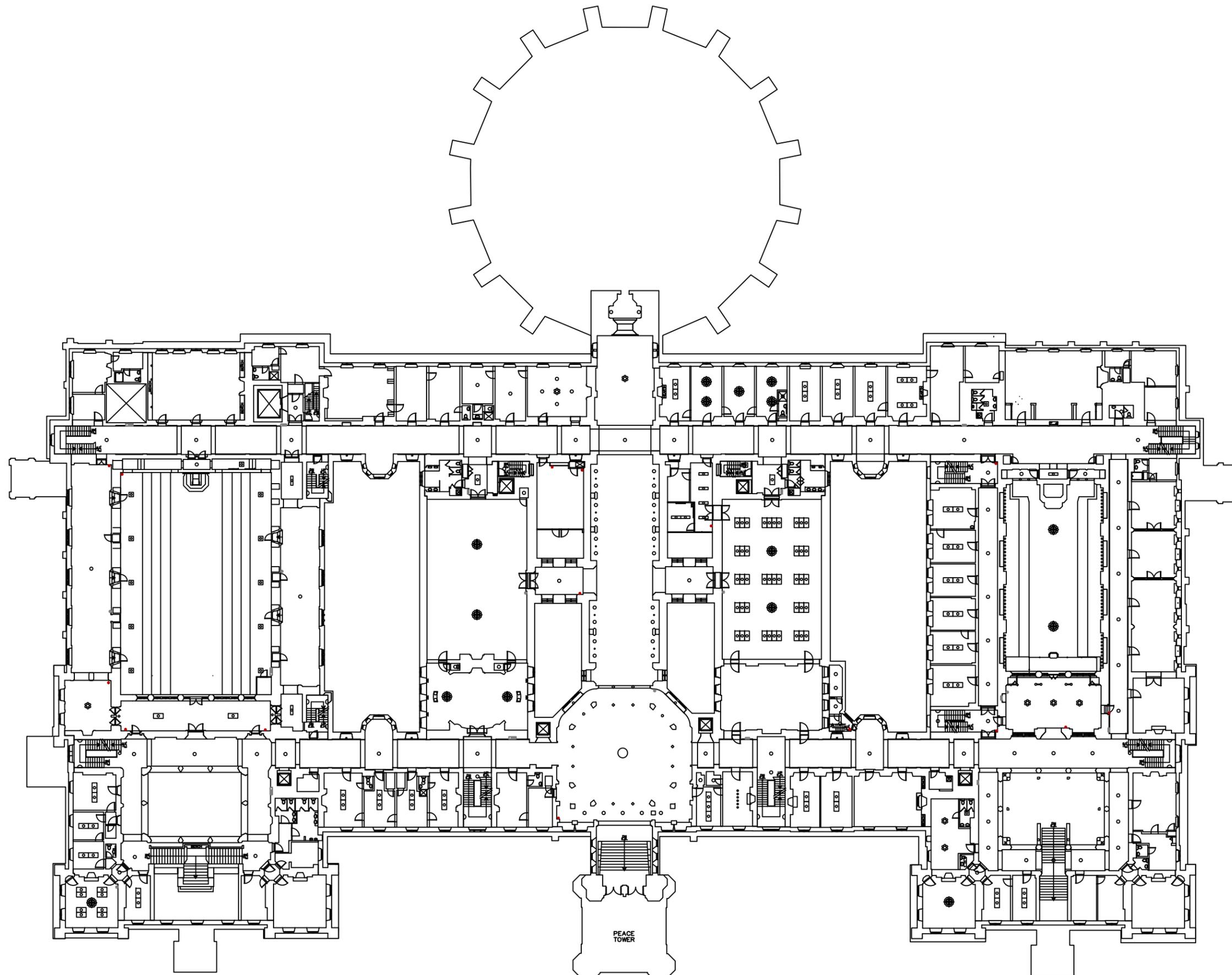
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DRAWING TITLE  
 CENTRE BLOCK  
 FOURTH FLOOR MEZZANINE

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**FIGURE 7**



**NOTES:**

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ASSOCIATED TECHNICAL REPORT.
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**LEGEND:**

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-  FIREPROOFING CONTAINING ASBESTOS

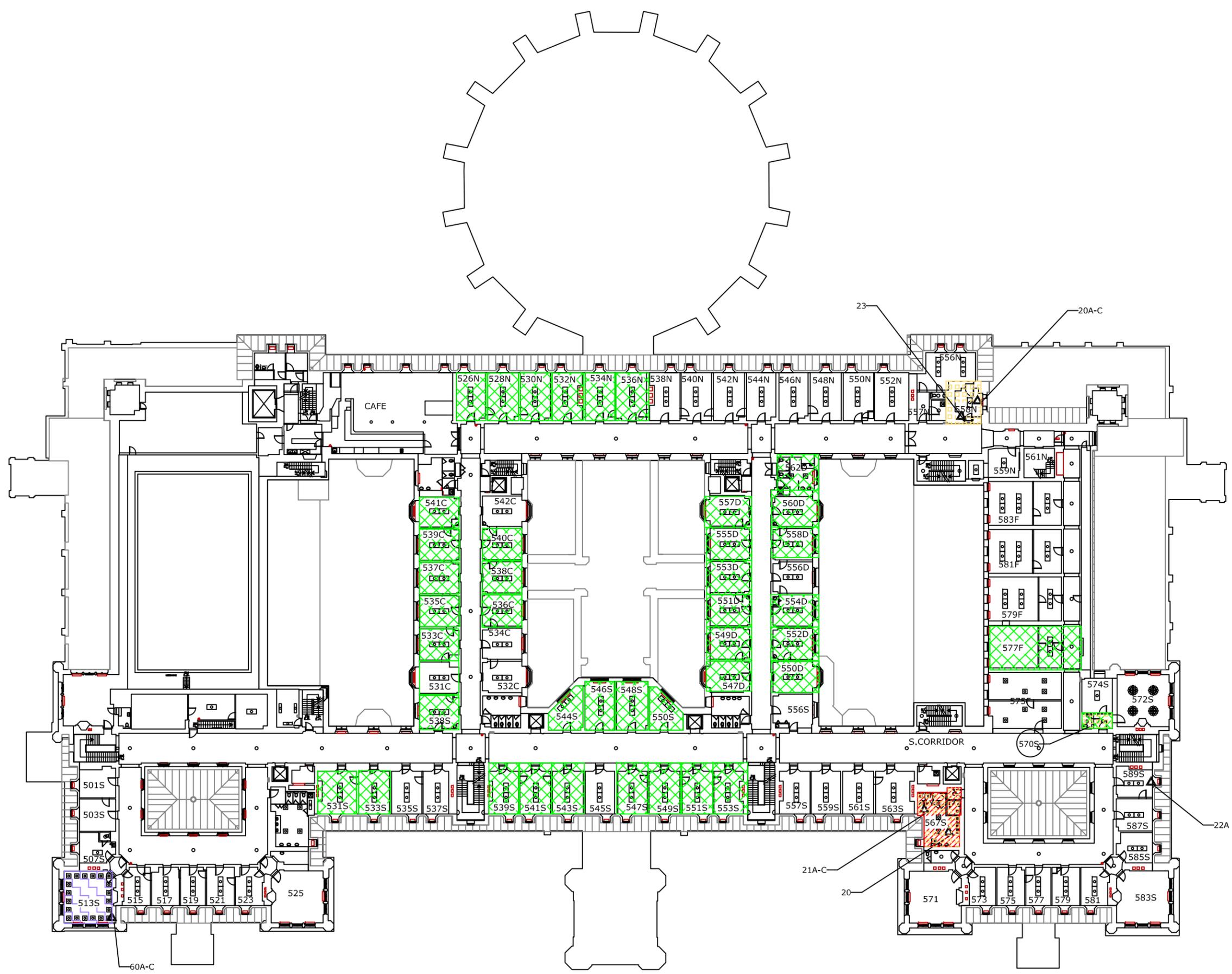
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DRAWING TITLE  
 CENTRE BLOCK  
 FIFTH FLOOR

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**FIGURE 8**



**NOTES:**

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-  CEILING PLASTER CONTAINING ASBESTOS
-  CEILING STIPPLE CONTAINING ASBESTOS
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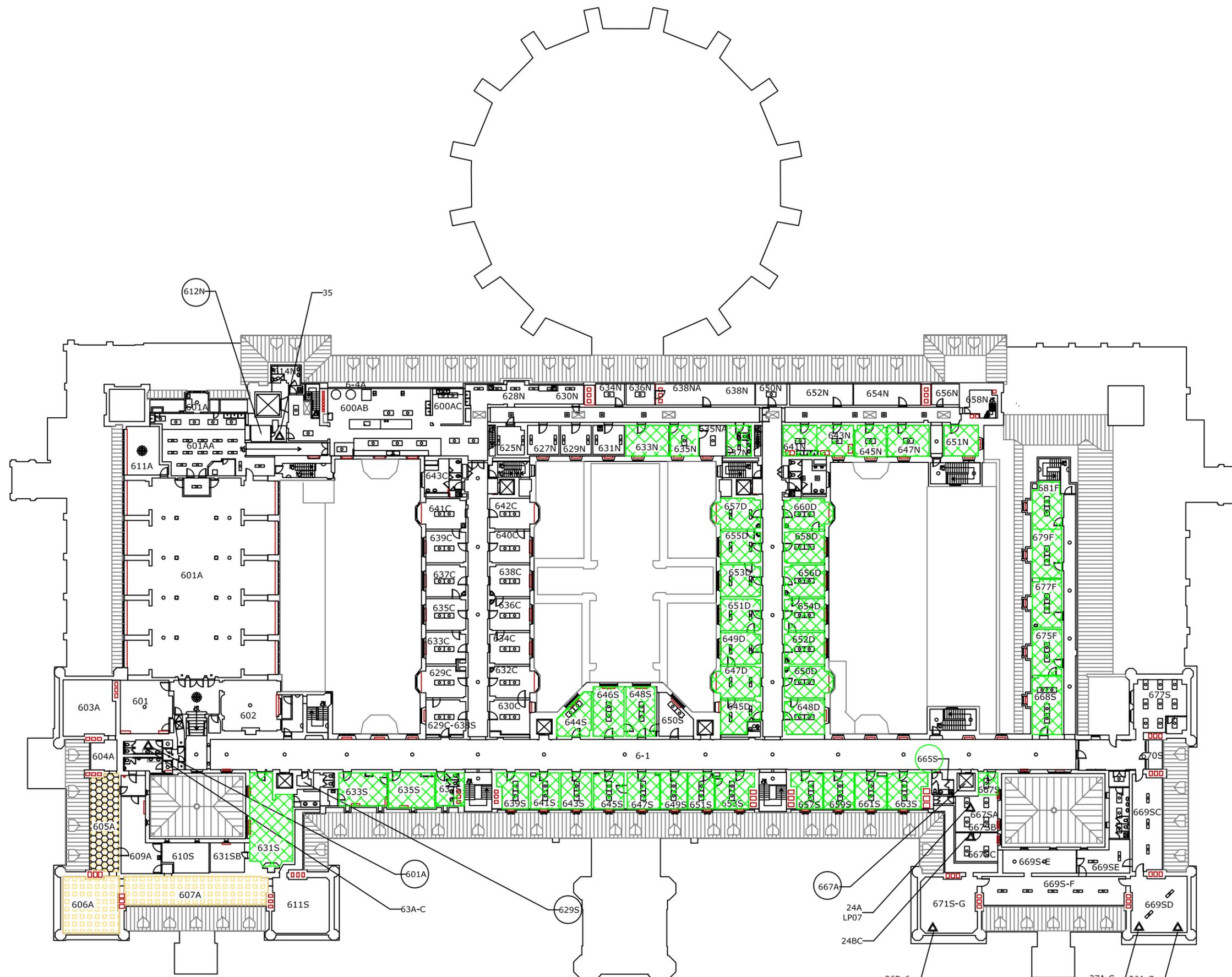
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PROJECT TITLE  
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 111 WELLINGTON STREET,  
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DRAWING TITLE  
 CENTRE BLOCK  
 SIXTH FLOOR

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**FIGURE 9**





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6. ASBESTOS CONTAINING THERMAL INSULATION AND FIREPROOFING OBSERVED IN KITCHEN ATTIC

**LEGEND:**

- APPROXIMATE ASBESTOS SAMPLE LOCATION, AS APPLICABLE
- SURVEY LOCATION REFERENCE
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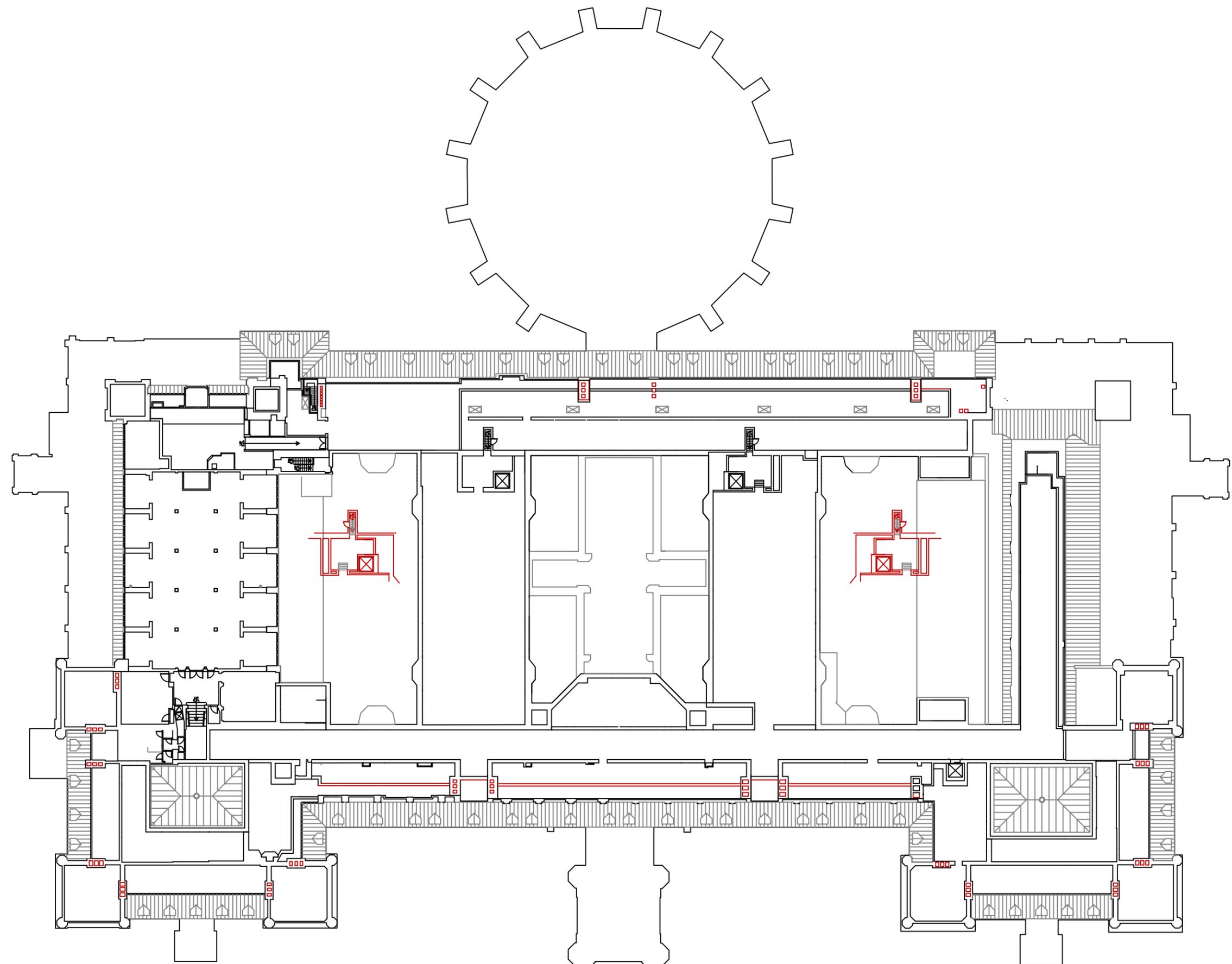
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 PARLIAMENT HILL, OTTAWA, ONTARIO

DRAWING TITLE  
 CENTRE BLOCK  
 ATTIC

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**FIGURE 10**



**NOTES:**

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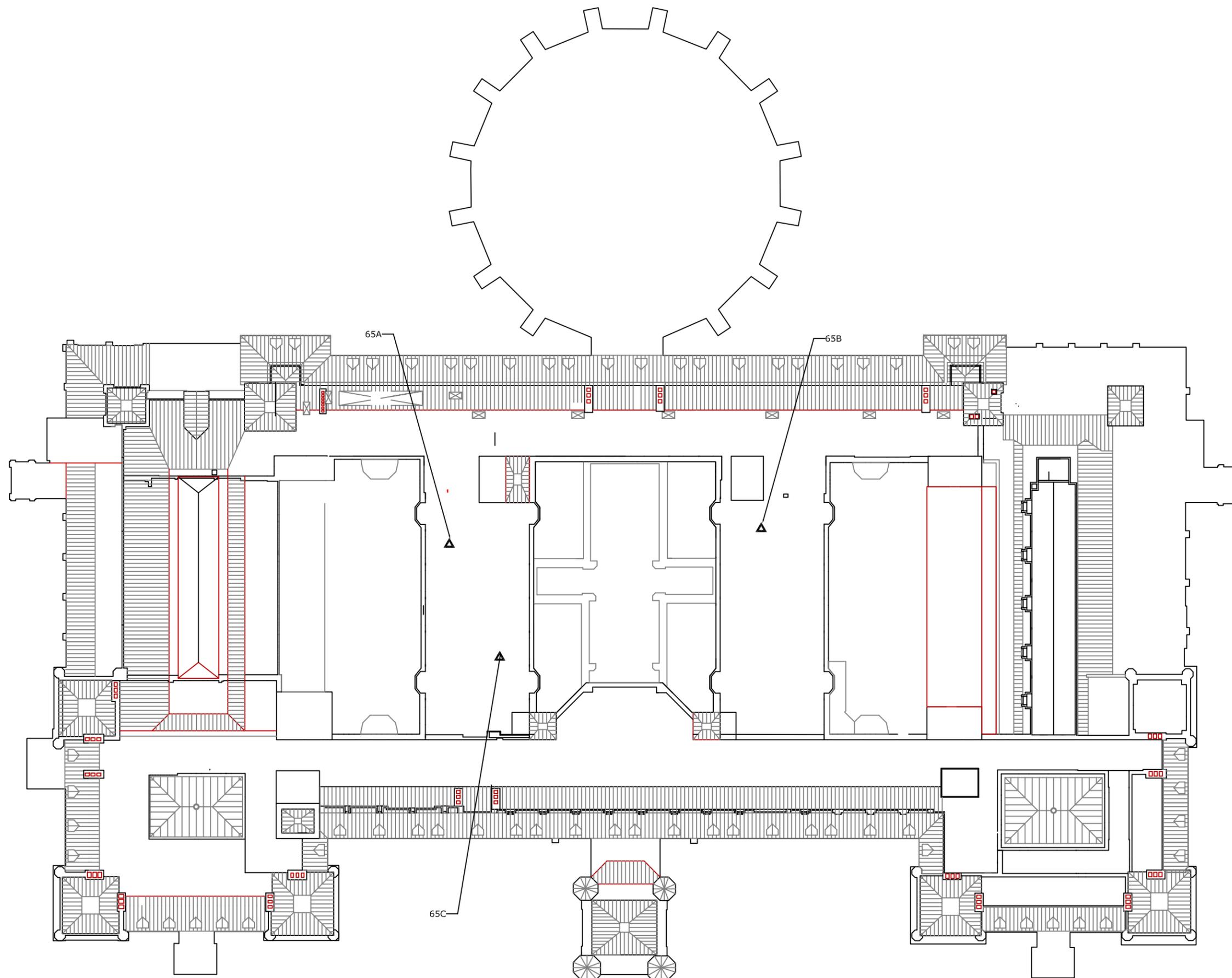
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DRAWING TITLE  
 CENTRE BLOCK  
 ROOF TOP

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**FIGURE 11**



**Appendix B**  
**Results Tables**

<b>Table 1: Summary of Bulk Samples Analyzed for Asbestos – PLM Analysis</b>			
<b>Sample I.D.</b>	<b>Sample Location</b>	<b>Material Description</b>	<b>Asbestos Type &amp; %</b>
14755-01A	Basement, Room 069	Whitewash, Foundation	ND
14755-01B			ND
14755-01C			ND
14755-01D			ND
14755-01E			ND
14755-02A	Basement, Area B-27, Near Stairwell	Wall Plaster	ND
14755-02B			ND
14755-02C			ND
14755-03A	First Floor, Room 187SC	Vinyl Sheet Flooring, Beige Brick Pattern	ND
14755-03B			ND
14755-03C			ND
14755-04A	First Floor, F Corridor	Ceiling Plaster	ND
14755-04B			ND
14755-04C			ND
14755-05	Washroom of Room 174F	Ceiling Plaster	1% Chrysotile
14755-06	First Floor, 182F	Wall Plaster	ND
14755-07	First Floor, 182F	Ceiling Plaster	ND
14755-08	First Floor, 179F	Ceiling Plaster	ND
14755-09A	First Floor, 168 N-C	Vinyl Sheet Flooring, White with Green Diamond	ND
14755-09B			ND
14755-09C			ND
14755-10	First Floor, 159N	Wall Plaster	ND
14755-11	First Floor, Room 159N	Drywall Joint Compound	ND
14755-12A	First Floor, Room 152N	Grey Vinyl Floor Tile, 12" x	ND

14755-12B		12"	ND
14755-12C			ND
14755-13	First Floor, Room 165S	Ceiling Plaster	ND
14755-14A			1% Chrysotile
14755-14B	First Floor, Room 148D	2' x 4' Ceiling Tile, Pinhole	Positive Stop
14755-14C			Positive Stop
14755-15	First Floor, D Corridor	Ceiling Plaster	ND
14755-16	Floor Protrusion, Second Floor, Corridor N	Thermal Patch	ND
14755-17A			ND
14755-17B	Third Floor, Room 367S	Drywall Joint Compound	ND
14755-17C			ND
14755-18A			0.8% Amosite
14755-18B	Third Floor, Room 367S	2' x 4' Ceiling Tiles, Pine Fissure, Red Back	Positive Stop
14755-18C			Positive Stop
14755-19	North East Tower, Room 366N	Plaster	ND
14755-20A			ND
14755-20B	Fifth Floor	Window Caulking	ND
14755-20C			ND
14755-21A			ND
14755-21B	Pipe Chase, Room 567S	Cork and Tar on Piping	ND
14755-21C			ND
14755-22A			ND
14755-22B	Fifth Floor, Room 589S	Fireproofing, Vertical Structural Column	ND
14755-22C			ND
14755-23	Fifth Floor, Room 558N	Plaster	ND

14755-24A			1% Tremolite
14755-24B	Sixth Floor, Room 667S	Texture / Stipple Finish	Positive Stop
14755-24C			Positive Stop
14755-25	Sixth Floor, Room 667A	Wall Plaster	ND
14755-26A	Sixth Floor, Room 677S	Cementitious Spray Applied Finish, Interior of Dormers on Sixth Floor	ND
14755-26B			ND
14755-26C			ND
14755-26D			ND
14755-26E	Sixth Floor, Room 669SD		ND
14755-26F			ND
14755-26G			ND
14755-27A	Sixth Floor, Room 671SG	Thermal Patch, White	ND
14755-27B			ND
14755-27C			ND
14755-28	Peace Tower, 8 <sup>th</sup> Level	Drywall Joint Compound	ND
14755-29A	Throughout Levels of Peace Tower	Stipple Wall and Ceiling Finish	ND
14755-29B			ND
14755-29C			ND
14755-29D			ND
14755-29E			ND
14755-30	Peace Tower, Medium Bells Level	Drywall Joint Compound	ND
14755-31A	Peace Tower, Large Bells Level	Roofing Material – Peace Tower, Large Bells Level	ND
14755-31B			ND
14755-31C			ND
14755-32	Peace Tower, Large Bells Level	Drywall Joint Compound	ND

14755-33A			ND
14755-33B	Peace Tower, Level 6	Fireproofing, Structural	ND
14755-33C			ND
14755-34	Peace Tower, Level 2	Exterior Wall Plaster	ND
14755-35	Sixth Floor, Room 612N	Plaster	ND
14755-36	First Floor, Room 123S	Plaster	ND
14755-37	First Floor, Room 103A	Stipple Ceiling Finish	1% Chrysotile
14755-38	First Floor, Room 125B	Plaster	ND
14755-39A	Peace Tower, First Floor Mechanical Room	Trowelled on Material, Above Ceiling	ND
14755-39B			ND
14755-39C			ND
14755-40	First Floor, Room 188N	Drywall Joint Compound	ND
14755-41	First Floor, Room 134N	Plaster	ND
14256-42A	First Floor, Room 156D	2' x 4' Ceiling Tiles, Pinhole	1% Chrysotile
14755-42B			Positive Stop
14755-42C			Positive Stop
14755-43	First Floor, 156D	Plaster	ND
14755-44A	First Floor, Room 156D	12" x 12" Vinyl Floor Tile, Grey with Red Streak	0.81% Chrysotile
14755-44B			Positive Stop
14755-44C			Positive Stop
14755-45	First Floor, Room 119NC	Drywall Joint Compound	1% Chrysotile
14755-46	First Floor, Room 119NA	Drywall Joint Compound	1% Chrysotile
14755-47A	First Floor, Room 141C	Vinyl Sheet Flooring, Beige	ND
14755-47B			ND
14755-47C			ND
14755-48	Second Floor, Room 229N	Drywall Joint Compound	1% Chrysotile

14755-50	Third Floor, Room 301A	Drywall Joint Compound	ND
14755-51	Third Floor, Room 301A	Plaster	ND
14755-52	Third Floor, Room 324N	Plaster	ND
14755-53A	Third Floor, Room 340S	Mastic	0.53% Chrysotile
14755-53B			Positive Stop
14755-53C			Positive Stop
14755-54A	Third Floor Room 340S Maintenance Room	Plaster (base layer only)	ND
14755-54B			ND
14755-54C			ND
14755-55A	Third Floor Mezzanine, 3M-1	Cement Board	1% Chrysotile
14755-55B			Positive Stop
14755-55C			Positive Stop
14755-56A	Third Floor Mezzanine, 3M-1	Blow-in Insulation	ND
14755-56B			ND
14755-56C			ND
14755-57	Fourth Floor, Room 427SA	Drywall Joint Compound	ND
14755-58A	Fourth Floor, 4-18	Window Caulking, Interior Skylight	5.89% Chrysotile
14755-58B			Positive Stop
14755-58C			Positive Stop
14755-59A	Fourth Floor, Room 420N	Older Window Caulking	5.64% Chrysotile
4755-59B			Positive Stop
14755-59C			Positive Stop
14755-60A	Fifth Floor, Room 513S	Black, Window Caulking	0.88% Chrysotile
14755-60B			ND
14755-60C			ND
14755-61A	Sixth Floor, Room 607A	Tar Wrap on Piping	<MDL

14755-61B			<MDL
14755-61C			ND
14755-62A	Sixth Floor, Room 601A	Brown, Window Caulking, Older Windows	ND
14755-62B			ND
14755-62C			ND
14755-63A	Exterior Facing of Building, Windows of West Staircase, Room 319S and 283S	Window Caulking	<MDL
14755-63B			ND
14755-63C			ND
14755-64A	Sixth Floor Roof, Above Kitchen	Black Tar, Kitchen Exhaust	ND
14755-64B			ND
14755-64C			ND
14755-65A	Sixth Floor Roof	Roofing Material, Inverted Roofing System	ND
14755-65B			ND
14755-65C			ND
14755-66A	Second Floor Courtyard	Roofing Material, Inverted Roofing System	ND
14755-66B			ND
14755-66C			ND

\***Bold** items exceed the 0.5% regulated concentration of asbestos, as per O.Reg. 278/05, as amended.

ND: None Detected

<MDL: Below the minimum detection limit

<b>Table 2: Summary of Bulk Samples Analyzed for Asbestos – TEM Analysis</b>			
<b>Sample I.D.</b>	<b>Sample Location</b>	<b>Material Description</b>	<b>Asbestos Type &amp; %</b>
14755-01A	Basement, Room 069	Whitewash, Foundation	ND
14755-02A	Basement, Area B-27, Near Stairwell	Wall Plaster	ND
14755-03A	First Floor, Room 187SC	Vinyl Sheet Flooring, Beige Brick Pattern	ND
14755-04A	First Floor, F Corridor	Ceiling Plaster	0.53% Chrysotile
14755-06	First Floor, 182F	Wall Plaster	ND
14755-11	First Floor, Room 159N	Drywall Joint Compound	ND
14755-20A	Fifth Floor	Window Caulking	ND
14755-21A	Pipe Chase, Room 567S	Cork and Tar on Piping	ND
14755-22A	Fifth Floor, Room 589S	Fireproofing, Vertical Structural Column	ND
14755-26A	Sixth Floor, Room 677S	Cementitious Spray Applied Finish, Interior of Dormers on Sixth Floor	ND
14755-27A	Sixth Floor, Room 671SG	Thermal Patch, White	ND
14755-29A	Throughout Levels of Peace Tower	Stipple Wall and Ceiling Finish	ND
4755-31A	Peace Tower, Large Bells Level	Roofing Material – Peace Tower, Large Bells Level	ND
14755-33A	Peace Tower, Level 6	Fireproofing, Structural	ND
14755-39A	Peace Tower, First Floor Mechanical Room	Trowelled on Material, Above Ceiling	ND
14755-47B	First Floor, Room 141C	Vinyl Sheet Flooring, Beige	ND
14755-54B	Third Floor Room 340S Maintenance Room	Plaster (base layer only)	ND
14755-56A	Third Floor Mezzanine, 3M- 1	Blow-in Insulation	ND
14755-62C	Sixth Floor, Room 601A	Brown, Window Caulking, Older Windows	ND

<b>Table 2: Summary of Bulk Samples Analyzed for Asbestos – TEM Analysis</b>			
<b>Sample I.D.</b>	<b>Sample Location</b>	<b>Material Description</b>	<b>Asbestos Type &amp; %</b>
14755-64A	Sixth Floor Roof, Above Kitchen	Black Tar, Kitchen Exhaust	ND
14755-65A	Sixth Floor Roof	Roofing Material, Inverted Roofing System	ND
14755-66A	Second Floor Courtyard	Roofing Material, Inverted Roofing System	ND

\***Bold** items exceed the 0.5% regulated concentration of asbestos, as per O.Reg. 278/05, as amended.

ND: None Detected

<MDL: Below the minimum detection limit

<b>Table 3: Summary of Paint Chip Samples Analyzed for Lead</b>			
<b>Sample ID</b>	<b>Sample Location</b>	<b>Sample Description</b>	<b>Lead Result (ug/g or ppm)</b>
<b>14755-LP01</b>	<b>Basement, Room CB036</b>	<b>White Column/Wall Paint</b>	<b>95,400</b>
<b>14755-LP02</b>	<b>Basement, Area B-44</b>	<b>Grey Floor Paint</b>	<b>302</b>
<b>14755-LP03</b>	<b>Basement, Area B-31</b>	<b>White Wall Paint</b>	<b>1,590</b>
<b>14755-LP04</b>	<b>Basement, Area B-11</b>	<b>White Wall Paint</b>	<b>101,000</b>
<b>14755-LP05</b>	<b>Second Floor, Room 258N</b>	<b>Beige Wall Paint</b>	<b>59,300</b>
<b>14755-LP06</b>	<b>Third Floor, Room 367S</b>	<b>Beige Wall Paint</b>	<b>91,400</b>
<b>14755-LP07</b>	<b>Sixth Floor, Room 667SA</b>	<b>Wall Paint</b>	<b>1,770</b>

\***Bold** items represent detectable concentration of lead

**Appendix C**  
**Laboratory Certificates of Analysis**

## Certificate of Analysis

### DST Consulting Engineers Inc. (Ottawa)

203-2150 Thurston Dr.

Ottawa, ON K1G 5T9

Attn: Andrew Dalziel

Phone: (613) 242-2427

Fax: (613) 748-1356

Client PO:

Project: BE OT 014755

Custody: 2243

Report Date: 10-Sep-2012

Order Date: 4-Sep-2012

**Order #: 1236079**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID		
1236079-01	14755-01A	1236079-24	14755-12A
1236079-02	14755-01B	1236079-25	14755-12B
1236079-03	14755-01C	1236079-26	14755-12C
1236079-04	14755-01D	1236079-27	14755-13
1236079-05	14755-01E	1236079-28	14755-14A
1236079-06	14755-02A	1236079-29	14755-14B
1236079-07	14755-02B	1236079-30	14755-14C
1236079-08	14755-02C	1236079-31	14755-15
1236079-09	14755-03A	1236079-32	14755-16
1236079-10	14755-03B	1236079-33	14755-17A
1236079-11	14755-03C	1236079-34	14755-17B
1236079-12	14755-04A	1236079-35	14755-17C
1236079-13	14755-04B	1236079-36	14755-18A
1236079-14	14755-04C	1236079-37	14755-18B
1236079-15	14755-05	1236079-38	14755-18C
1236079-16	14755-06	1236079-39	14755-19
1236079-17	14755-07	1236079-40	14755-20A
1236079-18	14755-08	1236079-41	14755-20B
1236079-19	14755-09A	1236079-42	14755-20C
1236079-20	14755-09B	1236079-43	14755-21A
1236079-21	14755-09C	1236079-44	14755-21B
1236079-22	14755-10	1236079-45	14755-21C
1236079-23	14755-11	1236079-46	14755-22A

Approved By:



Heather S.H. McGregor, BSc  
Laboratory Director - Microbiology

Any use of these results implies your agreement that our total liability in connection with this work, however arising shall be limited to the amount paid by you for this work, and that our employees or agents shall not under circumstances be liable to you in connection with this work

**Client:** DST Consulting Engineers Inc. (Ottawa)  
203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

**Attn:** Andrew Dalziel  
Tel: (613) 242-2427  
Fax: (613) 748-1356

**Project:** BE OT 014755  
**Parcel Report No.:** 1236079

**Received Date:** 04-Sep-12  
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1236079-47	14755-22B	1236079-86	14755-40
1236079-48	14755-22C	1236079-87	14755-41
1236079-49	14755-23	1236079-88	14755-42A
1236079-50	14755-24A	1236079-89	14755-42B
1236079-51	14755-24B	1236079-90	14755-42C
1236079-52	14755-24C	1236079-91	14755-43
1236079-53	14755-25	1236079-92	14755-44A
1236079-54	14755-26A	1236079-93	14755-44B
1236079-55	14755-26B	1236079-94	14755-44C
1236079-56	14755-26C	1236079-95	14755-45
1236079-57	14755-26D	1236079-96	14755-46
1236079-58	14755-26E	1236079-97	14755-47A
1236079-59	14755-26F	1236079-98	14755-47B
1236079-60	14755-26G	1236079-99	14755-47C
1236079-61	14755-27A	1236079-AA	14755-48
1236079-62	14755-27B	1236079-AB	14755-50
1236079-63	14755-27C	1236079-AC	14755-51
1236079-64	14755-28	1236079-AD	14755-52
1236079-65	14755-29A	1236079-AE	14755-53A
1236079-66	14755-29B	1236079-AF	14755-53B
1236079-67	14755-29C	1236079-AG	14755-53C
1236079-68	14755-29D	1236079-AH	14755-54A
1236079-69	14755-29E	1236079-AI	14755-54B
1236079-70	14755-30	1236079-AJ	14755-54C
1236079-71	14755-31A	1236079-AK	14755-55A
1236079-72	14755-31B	1236079-AL	14755-55B
1236079-73	14755-31C	1236079-AM	14755-55C
1236079-74	14755-32	1236079-AN	14755-56A
1236079-75	14755-33A	1236079-AO	14755-56B
1236079-76	14755-33B	1236079-AP	14755-56C
1236079-77	14755-33C	1236079-AQ	14755-57
1236079-78	14755-34	1236079-AR	14755-58A
1236079-79	14755-35	1236079-AS	14755-58B
1236079-80	14755-36	1236079-AT	14755-58C
1236079-81	14755-37	1236079-AU	14755-59A
1236079-82	14755-38	1236079-AV	14755-59B
1236079-83	14755-39A	1236079-AW	14755-59C
1236079-84	14755-39B	1236079-AX	14755-60A
1236079-85	14755-39C	1236079-AY	14755-60B

P: 1-800-749-1947  
E: PARACEL@PARACELLABS.COM  
WWW.PARACELLABS.COM

**OTTAWA**  
300-2319 St. Laurent Blvd.  
Ottawa, ON K1G 4J8

**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

**NIAGARA FALLS**  
5415 Morning Glory Cr.  
Niagara Falls, ON L2J 0A3

**SARNIA**  
123 Christina St. N.  
Sarnia, ON N7T 5T7

**Client:** DST Consulting Engineers Inc. (Ottawa)  
203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

**Attn:** Andrew Dalziel  
Tel: (613) 242-2427  
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1236079-AZ	14755-60C
1236079-BA	14755-61A
1236079-BB	14755-61B
1236079-BC	14755-61C
1236079-BD	14755-62A
1236079-BE	14755-62B
1236079-BF	14755-62C
1236079-BG	14755-63A
1236079-BH	14755-63B
1236079-BI	14755-63C
1236079-BJ	14755-64A
1236079-BK	14755-64B
1236079-BL	14755-64C
1236079-BM	14755-65A
1236079-BN	14755-65B
1236079-BO	14755-65C
1236079-BP	14755-66A
1236079-BQ	14755-66B
1236079-BR	14755-66C

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Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Paracel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-01	04-Sep-12	sample homogenized	White/Grey	Whitewash	No	<b>Client ID: 14755-01A</b> Non-Fibers	100
1236079-02	04-Sep-12	sample homogenized	White/Grey	Whitewash	No	<b>Client ID: 14755-01B</b> Non-Fibers	100
1236079-03	04-Sep-12	sample homogenized	White/Grey	Whitewash	No	<b>Client ID: 14755-01C</b> Non-Fibers	100
1236079-04	04-Sep-12	sample homogenized	White/Grey	Whitewash	No	<b>Client ID: 14755-01D</b> Non-Fibers	100
1236079-05	04-Sep-12	sample homogenized	White/Grey	Whitewash	No	<b>Client ID: 14755-01E</b> Non-Fibers	100
1236079-06	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-02A</b> Non-Fibers	100
1236079-07	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-02B</b> Non-Fibers	100
1236079-08	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-02C</b> Non-Fibers	100
1236079-09	04-Sep-12	sample homogenized	Beige	Vinyl Sheet Flooring	No	<b>Client ID: 14755-03A</b> Cellulose Non-Fibers	[AS-PRE] 40 60
1236079-10	04-Sep-12	sample homogenized	Beige	Vinyl Sheet Flooring	No	<b>Client ID: 14755-03B</b> Cellulose Non-Fibers	[AS-PRE] 40 60
1236079-11	04-Sep-12	sample homogenized	Beige	Vinyl Sheet Flooring	No	<b>Client ID: 14755-03C</b> Cellulose Non-Fibers	[AS-PRE] 40 60
1236079-12	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-04A</b> Non-Fibers	100
1236079-13	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-04B</b> Non-Fibers	100
1236079-14	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-04C</b> Non-Fibers	100

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Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

**NIAGARA FALLS**  
5415 Morning Glory Cr.  
Niagara Falls, ON L2J 0A3  
**SARNIA**  
123 Christina St. N.  
Sarnia, ON N7T 5T7

**Client:** DST Consulting Engineers Inc. (Ottawa)  
203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

**Attn:** Andrew Dalziel  
Tel: (613) 242-2427  
Fax: (613) 748-1356

**Project:** BE OT 014755  
**Parcel Report No.:** 1236079

**Received Date:** 04-Sep-12  
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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Parcel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-15	04-Sep-12	sample homogenized	White/Grey	Plaster	Yes	<b>Client ID: 14755-05</b>	
						Chrysotile	1
						Non-Fibers	99
1236079-16	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-06</b>	
						Non-Fibers	100
1236079-17	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-07</b>	
						Non-Fibers	99
						Other fibers	1
1236079-18	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-08</b>	
						Non-Fibers	100
1236079-19	04-Sep-12	sample homogenized	White/Grey	Vinyl Sheet Flooring	No	<b>Client ID: 14755-09A</b>	[AS-PRE]
						Cellulose	20
						Non-Fibers	80
1236079-20	04-Sep-12	sample homogenized	White/Grey	Vinyl Sheet Flooring	No	<b>Client ID: 14755-09B</b>	[AS-PRE]
						Cellulose	20
						Non-Fibers	80
1236079-21	04-Sep-12	sample homogenized	Green/Grey	Vinyl Sheet Flooring	No	<b>Client ID: 14755-09C</b>	[AS-PRE]
						Cellulose	20
						Non-Fibers	80
1236079-22	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-10</b>	
						Non-Fibers	100
1236079-23	04-Sep-12	sample homogenized	Grey	DIC	No	<b>Client ID: 14755-11</b>	
						Non-Fibers	100
1236079-24	04-Sep-12	sample homogenized	Grey	Floor Tile	No	<b>Client ID: 14755-12A</b>	[AS-PRE]
						Non-Fibers	100
1236079-25	04-Sep-12	sample homogenized	Grey	Floor Tile	No	<b>Client ID: 14755-12B</b>	[AS-PRE]
						Non-Fibers	100
1236079-26	04-Sep-12	sample homogenized	Grey	Floor Tile	No	<b>Client ID: 14755-12C</b>	[AS-PRE]
						Non-Fibers	100

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Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

**NIAGARA FALLS**  
5415 Morning Glory Cr.  
Niagara Falls, ON L2J 0A3  
**SARNIA**  
123 Christina St. N.  
Sarnia, ON N7T 5T7

**Client:** DST Consulting Engineers Inc. (Ottawa)  
203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

**Attn:** Andrew Dalziel  
Tel: (613) 242-2427  
Fax: (613) 748-1356

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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Parcel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-27	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-13</b> Non-Fibers Other fibers	99 1
1236079-28	04-Sep-12	sample homogenized	Grey/Beige	Ceiling Tile	Yes	<b>Client ID: 14755-14A</b> Chrysotile MMVF Non-Fibers	1 80 19
1236079-29	04-Sep-12					<b>Client ID: 14755-14B</b> not analyzed	
1236079-30	04-Sep-12					<b>Client ID: 14755-14C</b> not analyzed	
1236079-31	04-Sep-12	sample homogenized	Grey/White	Plaster	No	<b>Client ID: 14755-15</b> Non-Fibers	100
1236079-32	04-Sep-12	sample homogenized	Brown	Thermal Patch	No	<b>Client ID: 14755-16</b> [AS-PRE] Cellulose MMVF Non-Fibers	10 1 89
1236079-33	04-Sep-12	sample homogenized	Grey	DIC	No	<b>Client ID: 14755-17A</b> Non-Fibers	100
1236079-34	04-Sep-12	sample homogenized	Grey	DIC	No	<b>Client ID: 14755-17B</b> Non-Fibers	100
1236079-35	04-Sep-12	sample homogenized	Grey	DIC	No	<b>Client ID: 14755-17C</b> Non-Fibers	100
1236079-36	04-Sep-12	sample homogenized	White/Grey	Ceiling Tile	Yes	<b>Client ID: 14755-18A</b> [AS-PRE] Amosite Cellulose MMVF Non-Fibers	0.8 20 56.16 23.04
1236079-37	04-Sep-12					<b>Client ID: 14755-18B</b> [AS-PRE] not analyzed	

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E: PARACEL@PARACELLABS.COM  
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300-2319 St. Laurent Blvd.  
Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
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**Project:** BE OT 014755  
**Paracel Report No.:** 1236079

**Received Date:** 04-Sep-12  
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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Paracel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-38	04-Sep-12					Client ID: 14755-18C [AS-PRE] not analyzed	
1236079-39	04-Sep-12	sample homogenized	White/Grey	Plaster	No	Client ID: 14755-19 Non-Fibers	100
1236079-40	04-Sep-12	sample homogenized	Grey	Caulking	No	Client ID: 14755-20A [AS-PRE] Non-Fibers	100
1236079-41	04-Sep-12	sample homogenized	Grey	Caulking	No	Client ID: 14755-20B [AS-PRE] Non-Fibers	100
1236079-42	04-Sep-12	sample homogenized	Grey	Caulking	No	Client ID: 14755-20C [AS-PRE] Non-Fibers	100
1236079-43	04-Sep-12	sample homogenized	Black/Brown	Tar/Cork	No	Client ID: 14755-21A [AS-PRE] Non-Fibers	100
1236079-44	04-Sep-12	sample homogenized	Black/Brown	Tar/Cork	No	Client ID: 14755-21B [AS-PRE] Non-Fibers	100
1236079-45	04-Sep-12	sample homogenized	Black/Brown	Tar/Cork	No	Client ID: 14755-21C [AS-PRE] Non-Fibers	100
1236079-46	04-Sep-12	sample homogenized	Brown	Floor Tile	No	Client ID: 14755-22A [AS-PRE] Non-Fibers	100
1236079-47	04-Sep-12	sample homogenized	Brown	Floor Tile	No	Client ID: 14755-22B [AS-PRE] Non-Fibers	100
1236079-48	04-Sep-12	sample homogenized	Brown	Floor Tile	No	Client ID: 14755-22C [AS-PRE] Non-Fibers	100
1236079-49	04-Sep-12	sample homogenized	White/Grey	Plaster	No	Client ID: 14755-23 Non-Fibers	100
1236079-50	04-Sep-12	sample homogenized	White/Grey	Plaster	Yes	Client ID: 14755-24A Tremolite Non-Fibers	1 99
1236079-51	04-Sep-12					Client ID: 14755-24B not analyzed	
1236079-52	04-Sep-12					Client ID: 14755-24C not analyzed	

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**OTTAWA**  
300-2319 St. Laurent Blvd.  
Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

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Paracel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-53	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-25</b> Non-Fibers	100
1236079-54	04-Sep-12	sample homogenized	Grey	Cementious Spray	No	<b>Client ID: 14755-26A</b> Non-Fibers	100
1236079-55	04-Sep-12	sample homogenized	Grey	Cementious Spray	No	<b>Client ID: 14755-26B</b> Non-Fibers	100
1236079-56	04-Sep-12	sample homogenized	Grey	Cementious Spray	No	<b>Client ID: 14755-26C</b> Non-Fibers	100
1236079-57	04-Sep-12	sample homogenized	Grey	Cementious Spray	No	<b>Client ID: 14755-26D</b> Non-Fibers	100
1236079-58	04-Sep-12	sample homogenized	Grey	Cementious Spray	No	<b>Client ID: 14755-26E</b> Non-Fibers	100
1236079-59	04-Sep-12	sample homogenized	Grey	Cementious Spray	No	<b>Client ID: 14755-26F</b> Non-Fibers	100
1236079-60	04-Sep-12	sample homogenized	Grey	Cementious Spray	No	<b>Client ID: 14755-26G</b> Non-Fibers	100
1236079-61	04-Sep-12	sample homogenized	Grey	White Patch	No	<b>Client ID: 14755-27A</b> [AS-PRE] Cellulose Non-Fibers	40 60
1236079-62	04-Sep-12	sample homogenized	Grey	White Patch	No	<b>Client ID: 14755-27B</b> [AS-PRE] Cellulose Non-Fibers	40 60
1236079-63	04-Sep-12	sample homogenized	Grey	White Patch	No	<b>Client ID: 14755-27C</b> [AS-PRE] Cellulose Non-Fibers	40 60
1236079-64	04-Sep-12	sample homogenized	Grey	DJC	No	<b>Client ID: 14755-28</b> Non-Fibers	100
1236079-65	04-Sep-12	sample homogenized	White	Stipple	No	<b>Client ID: 14755-29A</b> Non-Fibers	100
1236079-66	04-Sep-12	sample homogenized	White	Stipple	No	<b>Client ID: 14755-29B</b> Non-Fibers	100

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Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

**NIAGARA FALLS**  
5415 Morning Glory Cr.  
Niagara Falls, ON L2J 0A3  
**SARNIA**  
123 Christina St. N.  
Sarnia, ON N7T 5T7

**Client:** DST Consulting Engineers Inc. (Ottawa)  
203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

**Attn:** Andrew Dalziel  
Tel: (613) 242-2427  
Fax: (613) 748-1356

**Project:** BE OT 014755  
**Paracel Report No.:** 1236079

**Received Date:** 04-Sep-12  
**Report Date:** 10-Sep-12

**Asbestos by PLM \*\*MDL - 0.5%\*\***

Paracel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-67	04-Sep-12	sample homogenized	White/Yellow	Stipple	No	<b>Client ID: 14755-29C</b> Non-Fibers	100
1236079-68	04-Sep-12	sample homogenized	White/Yellow	Stipple	No	<b>Client ID: 14755-29D</b> Non-Fibers	100
1236079-69	04-Sep-12	sample homogenized	White/Yellow	Stipple	No	<b>Client ID: 14755-29E</b> Non-Fibers	100
1236079-70	04-Sep-12	sample homogenized	Grey	DJC	No	<b>Client ID: 14755-30</b> Non-Fibers	100
1236079-71	04-Sep-12	sample homogenized	Black	Roofing Material	No	<b>Client ID: 14755-31A</b> Cellulose Non-Fibers	[AS-PRE] 40 60
1236079-72	04-Sep-12	sample homogenized	Black	Roofing Material	No	<b>Client ID: 14755-31B</b> Cellulose Non-Fibers	[AS-PRE] 40 60
1236079-73	04-Sep-12	sample homogenized	Black	Roofing Material	No	<b>Client ID: 14755-31C</b> Cellulose Non-Fibers	[AS-PRE] 40 60
1236079-74	04-Sep-12	sample homogenized	Grey	DJC	No	<b>Client ID: 14755-32</b> Non-Fibers	100
1236079-75	04-Sep-12	sample homogenized	Grey	Fireproofing	No	<b>Client ID: 14755-33A</b> MMVF Non-Fibers	50 50
1236079-76	04-Sep-12	sample homogenized	Grey	Fireproofing	No	<b>Client ID: 14755-33B</b> MMVF Non-Fibers	50 50
1236079-77	04-Sep-12	sample homogenized	Grey	Fireproofing	No	<b>Client ID: 14755-33C</b> MMVF Non-Fibers	50 50
1236079-78	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-34</b> Non-Fibers	100

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**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

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5415 Morning Glory Cr.  
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203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

**Attn:** Andrew Dalziel  
Tel: (613) 242-2427  
Fax: (613) 748-1356

**Project:** BE OT 014755  
**Parcel Report No.:** 1236079

**Received Date:** 04-Sep-12  
**Report Date:** 10-Sep-12

**Asbestos by PLM \*\*MDL - 0.5%\*\***

Parcel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-79	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-35</b> Non-Fibers Other fibers	99 1
1236079-80	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-36</b> Non-Fibers	100
1236079-81	04-Sep-12	sample homogenized	White	Plaster/Stipple	Yes	<b>Client ID: 14755-37</b> Chrysotile Non-Fibers	1 99
1236079-82	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-38</b> Non-Fibers Other fibers	99 1
1236079-83	04-Sep-12	sample homogenized	Grey/Brown	Cement	No	<b>Client ID: 14755-39A</b> Non-Fibers	100
1236079-84	04-Sep-12	sample homogenized	Grey/Brown	Cement	No	<b>Client ID: 14755-39B</b> Non-Fibers	100
1236079-85	04-Sep-12	sample homogenized	Grey	Cement	No	<b>Client ID: 14755-39C</b> Non-Fibers	100
1236079-86	04-Sep-12	sample homogenized	Grey	DJC	No	<b>Client ID: 14755-40</b> Non-Fibers	100
1236079-87	04-Sep-12	sample homogenized	Grey	Plaster	No	<b>Client ID: 14755-41</b> Non-Fibers	100
1236079-88	04-Sep-12	sample homogenized	White/Grey	Ceiling Tile	Yes	<b>Client ID: 14755-42A</b> Chrysotile MMVF Non-Fibers	1 80 19
1236079-89	04-Sep-12					<b>Client ID: 14755-42B</b> not analyzed	[AS-PRE]
1236079-90	04-Sep-12					<b>Client ID: 14755-42C</b> not analyzed	[AS-PRE]

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Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
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**Project:** BE OT 014755  
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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Parcel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-91	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-43</b> Non-Fibers Other fibers	99 1
1236079-92	04-Sep-12	sample homogenized	Grey	Floor Tile	Yes	<b>Client ID: 14755-44A</b> Chrysotile Non-Fibers	[AS-PRE] 0.81 99.19
1236079-93	04-Sep-12					<b>Client ID: 14755-44B</b> not analyzed	[AS-PRE]
1236079-94	04-Sep-12					<b>Client ID: 14755-44C</b> not analyzed	[AS-PRE]
1236079-95	04-Sep-12	sample homogenized	Grey	DIC	Yes	<b>Client ID: 14755-45</b> Chrysotile Non-Fibers	1 99
1236079-96	04-Sep-12	sample homogenized	Grey	DIC	Yes	<b>Client ID: 14755-46</b> Chrysotile Non-Fibers	1 99
1236079-97	04-Sep-12	sample homogenized	Beige	Vinyl Sheet Flooring	No	<b>Client ID: 14755-47A</b> Cellulose Non-Fibers	[AS-PRE] 10 90
1236079-98	04-Sep-12	sample homogenized	Beige	Vinyl Sheet Flooring	No	<b>Client ID: 14755-47B</b> Cellulose Non-Fibers	[AS-PRE] 10 90
1236079-99	04-Sep-12	sample homogenized	Beige	Vinyl Sheet Flooring	No	<b>Client ID: 14755-47C</b> Cellulose Non-Fibers	[AS-PRE] 10 90
1236079-AA	04-Sep-12	sample homogenized	Grey	DIC	Yes	<b>Client ID: 14755-48</b> Chrysotile Non-Fibers	1 99
1236079-AB	04-Sep-12	sample homogenized	Grey	DIC	No	<b>Client ID: 14755-50</b> Non-Fibers	100

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Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

**NIAGARA FALLS**  
5415 Morning Glory Cr.  
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**SARNIA**  
123 Christina St. N.  
Sarnia, ON N7T 5T7

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203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

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**Project:** BE OT 014755  
**Parcel Report No.:** 1236079

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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Parcel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-AC	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-51</b> Non-Fibers	100
1236079-AD	04-Sep-12	sample homogenized	White/Grey	Plaster	No	<b>Client ID: 14755-52</b> Non-Fibers	100
1236079-AE	04-Sep-12	sample homogenized	Black	Mastic	Yes	<b>Client ID: 14755-53A</b> [AS-PRE] Chrysotile Cellulose MMVF Non-Fibers	0.53 5 0.53 93.94
1236079-AF	04-Sep-12					<b>Client ID: 14755-53B</b> [AS-PRE] not analyzed	
1236079-AG	04-Sep-12					<b>Client ID: 14755-53C</b> [AS-PRE] not analyzed	
1236079-AH	04-Sep-12	sample homogenized	Grey	Plaster	No	<b>Client ID: 14755-54A</b> Non-Fibers	100
1236079-AI	04-Sep-12	sample homogenized	Grey	Plaster	No	<b>Client ID: 14755-54B</b> Non-Fibers	100
1236079-AJ	04-Sep-12	sample homogenized	Grey	Plaster	No	<b>Client ID: 14755-54C</b> Non-Fibers	100
1236079-AK	04-Sep-12	sample homogenized	Grey	Cement	Yes	<b>Client ID: 14755-55A</b> Chrysotile Cellulose Non-Fibers	1 1 98
1236079-AL	04-Sep-12					<b>Client ID: 14755-55B</b> not analyzed	
1236079-AM	04-Sep-12					<b>Client ID: 14755-55C</b> not analyzed	
1236079-AN	04-Sep-12	sample homogenized	Grey	Insulation	No	<b>Client ID: 14755-56A</b> MMVF Non-Fibers	80 20

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203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

**Attn:** Andrew Dalziel  
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Fax: (613) 748-1356

**Project:** BE OT 014755  
**Parcel Report No.:** 1236079

**Received Date:** 04-Sep-12  
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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Parcel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-AO	04-Sep-12	sample homogenized	Grey	Insulation	No	<b>Client ID: 14755-56B</b> MMVF Non-Fibers	80 20
1236079-AP	04-Sep-12	sample homogenized	Grey	Insulation	No	<b>Client ID: 14755-56C</b> MMVF Non-Fibers	80 20
1236079-AQ	04-Sep-12	sample homogenized	Grey	DIC	No	<b>Client ID: 14755-57</b> Non-Fibers	100
1236079-AR	04-Sep-12	sample homogenized	Brown/Black	Caulking	Yes	<b>Client ID: 14755-58A</b> [AS-PRE] Chrysotile Non-Fibers	5.89 94.11
1236079-AS	04-Sep-12					<b>Client ID: 14755-58B</b> [AS-PRE] not analyzed	
1236079-AT	04-Sep-12					<b>Client ID: 14755-58C</b> [AS-PRE] not analyzed	
1236079-AU	04-Sep-12	sample homogenized	Brown/Black	Caulking	Yes	<b>Client ID: 14755-59A</b> [AS-PRE] Chrysotile Non-Fibers	5.64 94.36
1236079-AV	04-Sep-12					<b>Client ID: 14755-59B</b> [AS-PRE] not analyzed	
1236079-AW	04-Sep-12					<b>Client ID: 14755-59C</b> [AS-PRE] not analyzed	
1236079-AX	04-Sep-12	sample homogenized	Grey	Caulking	Yes	<b>Client ID: 14755-60A</b> [AS-PRE] Chrysotile Non-Fibers	0.88 99.12
1236079-AY	04-Sep-12					<b>Client ID: 14755-60B</b> [AS-PRE] not analyzed	
1236079-AZ	04-Sep-12					<b>Client ID: 14755-60C</b> [AS-PRE] not analyzed	

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Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

**NIAGARA FALLS**  
5415 Morning Glory Cr.  
Niagara Falls, ON L2J 0A3  
**SARNIA**  
123 Christina St. N.  
Sarnia, ON N7T 5T7

**Client:** DST Consulting Engineers Inc. (Ottawa)  
203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

**Attn:** Andrew Dalziel  
Tel: (613) 242-2427  
Fax: (613) 748-1356

**Project:** BE OT 014755  
**Parcel Report No.:** 1236079

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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Parcel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-BA	04-Sep-12	sample homogenized	Black	Tar Wrap	Yes	Client ID: 14755-61A [AS-PRE] [ASTrc] Chrysotile Cellulose Non-Fibers	<MDL 30 70
1236079-BB	04-Sep-12	sample homogenized	Black	Tar Wrap	Yes	Client ID: 14755-61B [AS-PRE] [ASTrc] Chrysotile Cellulose Non-Fibers	<MDL 30 70
1236079-BC	04-Sep-12	sample homogenized	Black	Tar Wrap	No	Client ID: 14755-61C [AS-PRE] Cellulose Non-Fibers	30 70
1236079-BD	04-Sep-12	sample homogenized	Grey	Caulking	No	Client ID: 14755-62A [AS-PRE] Non-Fibers	100
1236079-BE	04-Sep-12	sample homogenized	Grey	Caulking	No	Client ID: 14755-62B [AS-PRE] Non-Fibers	100
1236079-BF	04-Sep-12	sample homogenized	Grey	Caulking	No	Client ID: 14755-62C [AS-PRE] Non-Fibers	100
1236079-BG	04-Sep-12	sample homogenized	Grey	Caulking	Yes	Client ID: 14755-63A [AS-PRE] [ASTrc] Chrysotile Non-Fibers	<MDL 100
1236079-BH	04-Sep-12	sample homogenized	Grey	Caulking	No	Client ID: 14755-63B [AS-PRE] Non-Fibers	100
1236079-BI	04-Sep-12	sample homogenized	Grey	Caulking	No	Client ID: 14755-63C [AS-PRE] Non-Fibers	100
1236079-BJ	04-Sep-12	sample homogenized	Black	Tar	No	Client ID: 14755-64A [AS-PRE] Non-Fibers	100
1236079-BK	04-Sep-12	sample homogenized	Black	Tar	No	Client ID: 14755-64B [AS-PRE] Non-Fibers	100
1236079-BL	04-Sep-12	sample homogenized	Black	Tar	No	Client ID: 14755-64C [AS-PRE] Non-Fibers	100

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300-2319 St. Laurent Blvd.  
Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
Mississauga, ON L5N 6J3

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203-2150 Thurston Dr.  
Ottawa, ON K1G 5T9

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**Asbestos by PLM \*\*MDL - 0.5%\*\***

Paracel I.D.	Sample Date	Layers Analyzed	Colour	Description	Asbestos Detected:	Material Identification	% Content
1236079-BM	04-Sep-12	sample homogenized	Black	Roofing Material	No	<b>Client ID: 14755-65A</b> [AS-PRE]	
						Cellulose	40
						Non-Fibers	60
1236079-BN	04-Sep-12	sample homogenized	Black	Roofing Material	No	<b>Client ID: 14755-65B</b> [AS-PRE]	
						Cellulose	40
						Non-Fibers	60
1236079-BO	04-Sep-12	sample homogenized	Black	Roofing Material	No	<b>Client ID: 14755-65C</b> [AS-PRE]	
						Cellulose	40
						Non-Fibers	60
1236079-BP	04-Sep-12	sample homogenized	Black/Grey	Roofing Material	No	<b>Client ID: 14755-66A</b> [AS-PRE]	
						Cellulose	40
						MMVF	1
1236079-BQ	04-Sep-12	sample homogenized	Black/Grey	Roofing Material	No	<b>Client ID: 14755-66B</b> [AS-PRE]	
						Cellulose	40
						MMVF	1
1236079-BR	04-Sep-12	sample homogenized	Black/Grey	Roofing Material	No	<b>Client ID: 14755-66C</b> [AS-PRE]	
						Cellulose	40
						MMVF	1
							59
						Non-Fibers	59

MMVF: Man Made Vitreous Fibers: Fiberglass, Mineral Wool, Rockwool, Glasswool  
Analytes in bold indicate asbestos content which may include:  
Actinolite, Amosite, Anthophyllite, Chrysotile, Crocidolite and/or Tremolite.

**Analysis Summary Table**

Analysis	Method Reference/Description	Lab Location	NVLAP Lab Code *	Analysis Date
Asbestos by PLM	by EPA 600/R-93/116	Ottawa West Lab	200812-0	10-Sep-12

\* Reference to the NVLAP term does not permit the user of this report to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

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300-2319 St. Laurent Blvd.  
Ottawa, ON K1G 4J8  
**MISSISSAUGA**  
6645 Kitimat Rd. Unit #27  
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**Project:** BE 0T 014755

**Received Date:** 04-Sep-12

**Paracel Report No.:** 1236079

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### **Report Notes**

AS-PRE Due to the difficult nature of the bulk sample (interfering fibers/binders), additional NOB preparation was required prior to analysis

ASTrc Trace asbestos was observed below the noted detection limit but could not be accurately quantified.

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Ottawa, ON K1G 4J8

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5415 Morning Glory Cr.  
Niagara Falls, ON L2J 0A3

**SARNIA**  
123 Christina St. N.  
Sarnia, ON N7T 5T7

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Page 1 of 1

Client Name: <u>DST Consulting Engineers</u>	Project Reference: <u>BE07014755</u>	TAT: <input checked="" type="checkbox"/> Regular <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Same Day Date Required: _____
Contact Name: <u>Andrew Dalziel</u>	Quote #	
Address: <u>2150 Thurston Dr.</u>	PO #	
	Email Address: <u>adalziel@dstgroup.com</u>	
Telephone: <u>(613) 748-1415</u>		

## ASBESTOS ANALYSIS

Matrix Type: A (Air) O (Other) Regulatory/Guideline Requirements: \_\_\_\_\_ Required Analyses:  PCM  PLM  PLM 400PC  PLM 1000PC  Chatfield

Paracel Order Number: <u>1236079</u>		Matrix	Matrix Description	Sampling Date	Air Volume (L)	Positive Stop?	Is the Sample Layered?	If Yes, Describe Sample Layer(s) to be Analysed Separately
Sample ID								
1	<u>SEE ATTACHED</u>					<u>Yes</u>		
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

Comments: \_\_\_\_\_ Method of Delivery: Walk-in

Relinquished By (Print & Sign): <u>Andrew Dalziel</u> <u>Andrew Dalziel</u>	Received by Driver/Depot: <u>myc</u>	Received at Lab: <u>Karen Wiggins</u>	Verified By: <u>Karen Wiggins</u>
Date/Time: <u>8 Sept 4/12 4:00 PM</u>	Date/Time: <u>Sept 4/12 5:24</u>	Date/Time: <u>09/05/12 8:30</u>	Date/Time: <u>09/05/12 9:22</u>

## Subcontracted Analysis

**DST Consulting Engineers Inc. (Ottawa)**

 203-2150 Thurston Dr.  
 Ottawa, ON K1G 5T9  
 Attn: Andrew Dalziel

 Tel: (613) 242-2427  
 Fax: (613) 748-1356

 Paracel Report No.: **1239097**  
 Client Project(s): **BE OT 014755**  
 Client PO:  
 Reference:  
 CoC Number: **2243**

 Order Date: 25-Sep-12  
 Report Date: 2-Oct-12

Sample(s) from this project were subcontracted for the listed parameters. A copy of the subcontractor's report is attached

Paracel ID	Client ID	Analysis
1239097-01	14755-01A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-02	14755-02A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-03	14755-03ABC	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-04	14755-04ABC	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-05	14755-06	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-06	14755-09A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-07	14755-11	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-09	14755-20ABC	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-10	14755-21ABC	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-11	14755-22A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-12	14755-26A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-13	14755-27A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-14	14755-29ABCDE	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-15	14755-31A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-16	14755-33A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-17	14755-39A	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-18	14755-47B	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-19	14755-54B	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-20	14755-56ABC	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-21	14755-62C	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-22	14755-64AB	Asbestos, TEM % by VAE (EPA 600/R-93)
1239097-23	14755-65A	Asbestos, TEM % by VAE (EPA 600/R-93)

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***Subcontracted Analysis***

Client: **DST Consulting Engineers Inc. (Ottawa)**

Client PO:

Client Project(s): **BE OT 014755**

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**Parcel ID**

1239097-24

**Client ID**

14755-66A

**Analysis**

Asbestos, TEM % by VAE (EPA 600/R-93)

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

<http://www.emsl.com>[buffalolab@emsl.com](mailto:buffalolab@emsl.com)

EMSL Order: 141204805

CustomerID: PARA21

CustomerPO:

ProjectID:

Attn: **Heather S. H. McGregor**  
**Paracel Laboratories Ltd.**  
**300-2319 St. Laurent Blvd.**  
**Ottawa, ON, CN K1G 4J8**

Phone: (613) 731-9577  
 Fax: (613) 731-9064  
 Received: 09/28/12 9:30 AM  
 Analysis Date: 10/2/2012  
 Collected: 9/4/2012

Project: 1239097

**Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM**  
**via EPA/600/R-93/116 Section 2.5.5.1**

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
01A 141204805-0001		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected
02A 141204805-0002		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected
03A 141204805-0003		Gray Fibrous Homogeneous	100	None	No Asbestos Detected
04A 141204805-0004		Gray Non-Fibrous Heterogeneous	99.5	None	0.53% Chrysotile
06 141204805-0005		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected
09A 141204805-0006	Insufficient Material				
11 141204805-0007		Gray /Tan Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
20A 141204805-0008		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected
21A 141204805-0009		Black Non-Fibrous Homogeneous	100	None	No Asbestos Detected

Analyst(s)

Rhonda McGee (22)Rhonda McGee, Laboratory Manager  
or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial report from 10/02/2012 10:31:01

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

<http://www.emsl.com>[buffalolab@emsl.com](mailto:buffalolab@emsl.com)

EMSL Order: 141204805

CustomerID: PARA21

CustomerPO:

ProjectID:

Attn: **Heather S. H. McGregor**  
**Paracel Laboratories Ltd.**  
**300-2319 St. Laurent Blvd.**  
**Ottawa, ON, CN K1G 4J8**

Phone: (613) 731-9577  
 Fax: (613) 731-9064  
 Received: 09/28/12 9:30 AM  
 Analysis Date: 10/2/2012  
 Collected: 9/4/2012

Project: 1239097

**Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM**  
**via EPA/600/R-93/116 Section 2.5.5.1**

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
22A 141204805-0010		Brown Non-Fibrous Homogeneous	100	None	No Asbestos Detected
26A 141204805-0011		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected
27A 141204805-0012		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected
29A 141204805-0013		Tan /White Non-Fibrous Heterogeneous	100	None	No Asbestos Detected
31A 141204805-0014		Black Fibrous Homogeneous	100	None	No Asbestos Detected
33A 141204805-0015		Gray Fibrous Homogeneous	100	None	No Asbestos Detected
39A 141204805-0016		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected
47B 141204805-0017		Gray /Cream Fibrous Heterogeneous	100	None	No Asbestos Detected
54B 141204805-0018		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected

Analyst(s)

Rhonda McGee (22)Rhonda McGee, Laboratory Manager  
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial report from 10/02/2012 10:31:01

**EMSL Analytical, Inc.**

490 Rowley Road, Depew, NY 14043

Phone/Fax: (716) 651-0030 / (716) 651-0394

<http://www.emsl.com>[buffalolab@emsl.com](mailto:buffalolab@emsl.com)

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**Paracel Laboratories Ltd.**  
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Phone: (613) 731-9577  
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 Received: 09/28/12 9:30 AM  
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Project: 1239097

**Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM**  
**via EPA/600/R-93/116 Section 2.5.5.1**

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES
56A 141204805-0019		Gray Fibrous Homogeneous	100	None	No Asbestos Detected
62C 141204805-0020		Gray Non-Fibrous Homogeneous	100	None	No Asbestos Detected
64A 141204805-0021		Black Non-Fibrous Homogeneous	100	None	No Asbestos Detected
65A 141204805-0022		Black Fibrous Heterogeneous	100	None	No Asbestos Detected
66A 141204805-0023		Gray /Black Non-Fibrous Heterogeneous	100	None	No Asbestos Detected

Analyst(s)

Rhonda McGee (22)

Rhonda McGee, Laboratory Manager  
 or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial report from 10/02/2012 10:31:01

**Appendix D**  
**Database of Asbestos-Containing Materials**

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
Basement	B01	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	25	linear m	Previously sampled (1998)	
Basement	B01	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	25	fittings	Previously sampled (1998)	
Basement	B01	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	65	linear m	Previously sampled (1998)	
Basement	B01	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	65	linear m	Previously sampled (1998)	
Basement	B03	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	90	m <sup>2</sup>	Previously sampled (1998)	
Basement	B04	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	250	m <sup>2</sup>	Previously sampled (1998)	
Basement	B06	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	250	m <sup>2</sup>	Previously sampled (1998)	
Basement	B08	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	65	linear m	Previously sampled (1998)	
Basement	B08	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	1	exposed end	Previously sampled (1998)	
Basement	B08	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	150	m <sup>2</sup>	Previously sampled (1998)	
Basement	B08	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	1	m <sup>2</sup>	Previously sampled (1998)	Damaged canvas wrap.
Basement	B08	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	25	linear m	Previously sampled (1998)	
Basement	B08	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	4	exposed ends	Previously sampled (1998)	
Basement	B08	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	18	fittings	Previously sampled (1998)	
Basement	B08	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	1	fitting	Previously sampled (1998)	
Basement	B10	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	90	m <sup>2</sup>	Previously sampled (1998)	
Basement	B10	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	10	fittings	Previously sampled	
Basement	B10	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	1	fittings	Previously sampled (1998)	
Basement	B10	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	10	linear m	Previously sampled (1998)	
Basement	B10	Holes in Concrete	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	F - Fair	<0.5	m <sup>2</sup>	Previously sampled (1998)	Parging material applied in gaps in the concrete wall. Un canvassed.
Basement	B10	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	20	linear m	Previously sampled (1998)	
Basement	B10	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	6	linear m	Previously sampled (1998)	
Basement	B11	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	25	fittings	Previously sampled (1998)	
Basement	B11	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	1	fittings	Previously sampled (1998)	
Basement	B11	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	175	linear m	Previously sampled (1998)	
Basement	B11	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	35	m <sup>2</sup>	Previously sampled (1998)	
Basement	B14	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	15	linear m	Previously sampled (1998)	
Basement	B14	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	55	fittings	Previously sampled (1998)	
Basement	B14	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B14	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	15	linear m	Previously sampled (1998)	
Basement	B15	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	10	linear m	Previously sampled (1998)	

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
Basement	B15	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	30	fittings	Previously sampled (1998)	
Basement	B15	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	10	linear m	Previously sampled (1998)	
Basement	B15	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	10	linear m	Previously sampled (1998)	
Basement	B16	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B16	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B16	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	15	fittings	Previously sampled (1998)	
Basement	B18	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B18	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B18	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	15	fittings	Previously sampled (1998)	
Basement	B02	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	200	m <sup>2</sup>	Previously sampled (1998)	
Basement	B02	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	25	linear m	Previously sampled (1998)	
Basement	B02	Fire Door	Other Materials Containing Asbestos	Fire Door Lining Material	B	Friable	Suspect		G - Good	1	Door		
Basement	B02	Duct Coupling	Mechanical/pipe insulation	Duct Coupling	B	Friable	Suspect		G - Good	1	Unit		
Basement	B20	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B20	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	1	exposed end	Previously sampled (1998)	
Basement	B20	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	<0.5	linear m	Previously sampled (1998)	
Basement	B20	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B20	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	<1	m <sup>2</sup> of debris	Previously sampled (1998)	Area of debris on ductwork.
Basement	B20	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B23	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	10	m <sup>2</sup>	Previously sampled (1998)	
Basement	B23	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	25	linear m	Previously sampled (1998)	
Basement	B24	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	22	fittings	Previously sampled (1998)	
Basement	B24	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	1	fitting	Previously sampled (1998)	
Basement	B24	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	20	linear m	Previously sampled (1998)	
Basement	B24	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	<1	linear m	Previously sampled (1998)	
Basement	B24	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	<1	m <sup>2</sup> of debris	Previously sampled (1998)	

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
Basement	B24	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	6	linear m	Previously sampled (1998)	
Basement	B24	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	<1	linear m	Previously sampled (1998)	
Basement	B25	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	8	fittings	Previously sampled (1998)	
Basement	B25	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	90	linear m	Previously sampled (1998)	
Basement	B25	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	<1	linear m	Previously sampled (1998)	
Basement	B26	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	85	linear m	Previously sampled (1998)	
Basement	B26	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	12	fittings	Previously sampled (1998)	
Basement	B28	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	12	linear m	Previously sampled (1998)	
Basement	B28	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	1	exposed end	Previously sampled (1998)	
Basement	B28	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	4	fittings	Previously sampled (1998)	
Basement	B30	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	25	fittings	Previously sampled (1998)	
Basement	B30	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	80	m <sup>2</sup>	Previously sampled (1998)	
Basement	B30	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	<1	m <sup>2</sup>	Previously sampled (1998)	
Basement	B30	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	230	linear m	Previously sampled (1998)	
Basement	B31	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	2	fiting remnants	Previously sampled (1998)	
Basement	B31	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	<0.5	m <sup>2</sup> of debris	Previously sampled (1998)	
Basement	B31	Duct Coupling	Mechanical/pipe insulation	Duct Coupling	B	Friable	Suspect		G - Good	1	Unit		
Basement	B32	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	100	linear m	Previously sampled (1998)	
Basement	B32	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	54	fittings	Previously sampled (1998)	
Basement	B32	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	70	linear m	Previously sampled (1998)	
Basement	B32	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	1	m <sup>2</sup>	Previously sampled (1998)	

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
Basement	B32	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B34	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	10	linear m	Previously sampled (1998)	
Basement	B37	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	100	linear m	Previously sampled (1998)	
Basement	B37	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	30	fittings	Previously sampled (1998)	
Basement	B37	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	70	linear m	Previously sampled (1998)	
Basement	B37	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	1	m <sup>2</sup>	Previously sampled (1998)	
Basement	B37	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B40	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	35	linear m	Previously sampled (1998)	
Basement	B40	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	10	fittings	Previously sampled (1998)	
Basement	B43	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	55	fittings	Previously sampled (1998)	
Basement	B43	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	F - Fair	1	fittings	Previously sampled (1998)	
Basement	B43	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	50	linear m	Previously sampled (1998)	
Basement	B43	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	25	linear m	Previously sampled (1998)	
Basement	B43	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	25	linear m	Previously sampled (1998)	
Basement	B44	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	85	linear m	Previously sampled (1998)	
Basement	B44	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	85	linear m	Previously sampled (1998)	
Basement	B44	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	12	fittings	Previously sampled (1998)	
Basement	B51	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	10	fittings	Previously sampled (1998)	
Basement	B51	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	15	linear m	Previously sampled (1998)	
Basement	B52	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	20	fittings	Previously sampled (1998)	
Basement	B52	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	30	linear m	Previously sampled (1998)	
Basement	B52	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	30	linear m	Previously sampled (1998)	

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
Basement	B53	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	20	fittings	Previously sampled (1998)	
Basement	B53	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	30	linear m	Previously sampled (1998)	
Basement	B53	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	30	linear m	Previously sampled (1998)	
Basement	B54	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	10	fittings	Previously sampled (1998)	
Basement	B54	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	15	linear m	Previously sampled (1998)	
Basement	B55	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	50	fittings	Previously sampled (1998)	
Basement	B55	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	25	linear m	Previously sampled (1998)	
Basement	B56	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	15	linear m	Previously sampled (1998)	
Basement	B56	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	6	fittings	Previously sampled (1998)	
Basement	B57	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	125	m <sup>2</sup>	Previously sampled (1998)	
Basement	B58	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	60	m <sup>2</sup>	Previously sampled (1998)	
Basement	B58	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	<0.5	m <sup>2</sup>	Previously sampled (1998)	Rip in canvas, area exposed.
Basement	B59	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	70	m <sup>2</sup>	Previously sampled (1998)	
Basement	B60	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	5	linear m	Previously sampled (1998)	
Basement	B60	Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	3	exposed ends	Previously sampled (1998)	
Basement	B60	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	3	fittings	Previously sampled (1998)	
Basement	B60	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	110	m <sup>2</sup>	Previously sampled (1998)	
Basement	B60	Fire Door	Other Materials Containing Asbestos	Fire Door Lining Material	B	Friable	Suspect		G - Good	1	Door		
Basement	B60	Duct Coupling	Mechanical/pipe insulation	Duct Coupling	B	Friable	Suspect		G - Good	1	Unit		
Basement	B61	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	110	m <sup>2</sup>	Previously sampled (1998)	
Basement	B61	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	3	m <sup>2</sup>	Previously sampled (1998)	Damaged canvas.

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Basement	B61	Duct Coupling	Mechanical/pipe insulation	Duct Coupling	B	Friable	Suspect		G - Good	1	Unit		
Basement	B62	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	40	m <sup>2</sup>	Previously sampled (1998)	
Basement	B62	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	20	fittings	Previously sampled (1998)	
Basement	B62	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	25	linear m	Previously sampled (1998)	
Basement	B64	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	20	m <sup>2</sup>	Previously sampled (1998)	
Basement	B65	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	80	linear m	Previously sampled (1998)	
Basement	B65	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	54	fittings	Previously sampled (1998)	
Basement	B65	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	8	linear m	Previously sampled (1998)	
Basement	B65	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	1	m <sup>2</sup>	Previously sampled (1998)	
Basement	B65	Piping	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	40	linear m	Previously sampled (1998)	
Basement	B66	Ductwork	Mechanical/pipe insulation	Aircell Duct Insulation	B / C exposed	Friable	Chrysotile	50-75%	G - Good	10	m <sup>2</sup>	Previously sampled (1998)	
Basement	B69	Room CB033, Piping	Mechanical/pipe insulation	Mag Block Pipe Insulation	C exposed	Friable	Chrysotile	25-50%	P - Poor	1	exposed end	Previously sampled (1998)	Appeared to be from previous abatement. Area had been recently renovated.
Basement	B69	Room CB032, Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	1	exposed end	Previously sampled (1998)	Appeared to be from previous abatement. Area had been recently renovated.
First	118	Ceiling	Plaster	Plaster	C concealed	Non-friable	Chrysotile	0.5-5%	G - Good	25	m <sup>2</sup>	Previously sampled (1998)	
First	101A	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
First	101N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
First	101S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	15	m <sup>2</sup>	VS 14755-37	
First	102NA	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	10	m <sup>2</sup>	VS 14755-37	
First	102NB	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	10	m <sup>2</sup>	VS 14755-37	

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
First	102NC	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	10	m <sup>2</sup>	VS 14755-37	
First	103A	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	14755-37	
First	103S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	15	m <sup>2</sup>	VS 14755-37	
First	105A	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
First	105S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	15	m <sup>2</sup>	VS 14755-37	
First	107A	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
First	107S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	15	m <sup>2</sup>	VS 14755-37	
First	109A	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
First	119N-A	Wall	Drywall Joint Compound	Old compound behind new material.	C concealed / D	Friable	Chrysotile	1.00%	G - Good			14755-46	Unable to fully quantify. Material behind newer drywall.
First	119N-C	Wall	Drywall Joint Compound		A	Friable	Chrysotile	1.00%	G - Good			VS 14755-45	
First	119N-C	Wall	Drywall Joint Compound		A	Friable	Chrysotile	1.00%	G - Good			14755-45	
First	119N-D	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	15	fittings	Previously sampled (1998)	
First	119N-D	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	F - Fair	3	fittings	Previously sampled (1998)	
First	119S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	15	m <sup>2</sup>	VS 14755-37	
First	130S	Ceiling	Ceiling Tiles	2' x 4' Pinhole	C exposed	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	G - Good	8	m <sup>2</sup>	Previously sampled (1998)	
First	130SB	Wall	Other Materials Containing Asbestos	Acoustic Wall Tiles (1' x 1')	C exposed	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	G - Good	5	m <sup>2</sup>	Previously sampled (1998)	
First	130SB	Wall	Other Materials Containing Asbestos	Acoustic Wall Tiles (1' x 1')	C exposed	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	P - Poor	<1	m <sup>2</sup>	Previously sampled (1998)	
First	130SC	Ceiling	Ceiling Tiles	2' x 4' Pinhole	C exposed	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	G - Good	3	m <sup>2</sup>	Previously sampled (1998)	
First	131N	Ceiling	Ceiling Tiles	2' x 4' Pinhole	C exposed	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	G - Good	3	m <sup>2</sup>	Previously sampled (1998)	

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
First	133C	Ceiling	Plaster	Plaster	C concealed	Non-friable	Chrysotile	0.5-5%	G - Good	25	m <sup>2</sup>	Previously sampled (1998)	
First	134C	Ceiling	Plaster	Plaster	C concealed	Non-friable	Chrysotile	0.5-5%	G - Good	25	m <sup>2</sup>	Previously sampled (1998)	
First	144C	Ceiling	Ceiling Tiles	2' x 4' Pinhole	C exposed	Friable	Chrysotile	1.00%	G - Good	3	m <sup>2</sup>	VS 14755-42A	
First	148D	Ceiling	Ceiling Tiles	2' x 4' Pinhole Fissure, Red Back	C exposed	Friable	Chrysotile	1.00%	G - Good	8	m <sup>2</sup>	14755-14A	
First	156D	Floor	Vinyl Floor Tile	12" x 12" Grey and Red	A	Non-friable	Chrysotile	0.81%	G - Good	20	m <sup>2</sup>	14755-44A	
First	156D	Ceiling	Ceiling Tiles	2' x 4' Pinhole	C exposed	Friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	14755-42A	
First	174F	Ceiling	Plaster	Plaster	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	14755-05	
First	All Rooms	Ceiling	Plaster		C exposed / C concealed	Non-friable	Chrysotile	0.5-5% / 1%	G - Good			Previously sampled (1998) and 14755-05	
First	119N-D	Wall	Drywall Joint Compound		A	Friable	Chrysotile	1.00%	G - Good			VS 14755-45	
Second	229N	Wall	Drywall Joint Compound		A	Non-friable	Chrysotile	1.00%	G - Good			14755-48	
Third	301A	Ceiling	Ceiling Tiles	2' x 2' Pinhole Fissure, Red Back	C exposed	Friable	Amosite	0.80%	G - Good	25	m <sup>2</sup>	14755-18A	
Third	303S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Third	316N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Third	318N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Third	320N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Third	322N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Third	322NA	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Third	346C	Inside Wall Hatch	Suspected Asbestos-Containing Material	Spray on Structural Steel	D	Friable	Suspect						Visible from the hatch, unable to fully verify. Confined space.
Third	338S / 340S	Ceiling	Other Materials Containing Asbestos	Remnant Mastic	C concealed	Non-friable	Chrysotile	0.53%	G - Good	15	m <sup>2</sup>	14755-53	

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Third	338S / 340S	Wall / Ceiling	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	P - Poor	<0.5	m <sup>2</sup>	Previously sampled (1998)	Remnant, in corner cupboard, unencapsulated.
Third	339SA	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	C exposed	Friable	Chrysotile	25-50%	G - Good	5	linear m	Previously sampled (1998)	
Third	339SA	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	2	fittings	Previously sampled (1998)	
Third	354SA	Wall	Other Materials Containing Asbestos	Acoustic Wall Tiles (1' x 1')	A	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	G - Good	10	m <sup>2</sup>	Previously sampled (1998)	
Third	354SA	Wall	Other Materials Containing Asbestos	Acoustic Wall Tiles (1' x 1')	A	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	P - Poor	1	m <sup>2</sup>	Previously sampled (1998)	Remnant material attached to mastic.
Third	354SC	Wall	Other Materials Containing Asbestos	Acoustic Wall Tiles (1' x 1')	A	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	G - Good	10	m <sup>2</sup>	Previously sampled (1998)	
Third	354SC	Wall	Other Materials Containing Asbestos	Acoustic Wall Tiles (1' x 1')	A	Friable	Amosite; Chrysotile	0.5-5%; 5-25%	P - Poor	1	m <sup>2</sup>	Previously sampled (1998)	Remnant material attached to mastic.
Third	354SC	Pipe Chase	Mechanical/pipe insulation	Aircell Pipe Insulation	D	Friable	Chrysotile	25-50%	U - Unknown			Previously sampled (1998)	Unable to fully quantify. Limited visual
Third	354SC	Pipe Chase	Mechanical/pipe insulation	Mag Block Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	U - Unknown			Previously sampled (1998)	Unable to fully quantify. Limited visual
Third	359SA	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	D	Friable	Chrysotile	25-50%	U - Unknown			Previously sampled (1998)	
Third	367S	Ceiling	Ceiling Tiles	2' x 2' Pinhole Fissure, Red Back	C exposed	Friable	Amosite	0.80%	G - Good	25	m <sup>2</sup>	VS 14755-18A	
Third	367S	Ceiling	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	C concealed	Friable	Chrysotile	25-50%	G - Good	<0.5	m <sup>2</sup> of debris	Previously sampled (1998)	Above ceiling
Third	367S	Pipe Chase	Mechanical/pipe insulation	Aircell Pipe Insulation	D	Friable	Chrysotile	25-50%	U - Unknown			Previously sampled (1998)	Unable to fully quantify. Limited visual from hatch.
Third / Fourth	House of Commons	Window	Other Materials Containing Asbestos	Grey caulking	A / C exposed	Non-friable	Chrysotile	4.00%	G - Good			Previously sampled (2011)	Caulking observed on all stain-glass windows in the House of Commons, new caulking has been applied overtop in some places
Third Floor Mezzanine	3M-1	Deck	Other Materials Containing Asbestos	Cement Board	C concealed	Non-friable	Chrysotile	1.00%	G - Good	40	m <sup>2</sup>	14755-55	
Fourth	4-18	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	20	fittings	Previously sampled (1998)	No access, surveyed from window. Limited visual.
Fourth	4-18	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	100	linear m	Previously sampled (1998)	No access, surveyed from window. Limited visual.
Fourth	4-18	Window	Other Materials Containing Asbestos	Window Caulking	C exposed	Non-friable	Chrysotile	5.89%	G - Good			14755-58A	Mixture of caulking. Caulking that appeared older was sampled.
Fourth	4-24	Window	Other Materials Containing Asbestos	Window Caulking	C exposed	Non-friable	Chrysotile	5.89%	G - Good			14755-58A	Mixture of caulking. Caulking that appeared older was sampled.

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Fourth	4-24	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	20	fittings	Previously sampled (1998)	
Fourth	4-24	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	G - Good	100	linear m	Previously sampled (1998)	
Fourth	4-24	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B / C exposed	Friable	Chrysotile	25-50%	P - Poor	1	linear m	Previously sampled (1998)	
Fourth	405S	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	C concealed	Friable	Chrysotile	50-75%	G - Good	1	fitting	Previously sampled (1998)	
Fourth	420NA	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	420NA	Window	Other Materials Containing Asbestos	Window Caulking	C exposed	Non-friable	Chrysotile	5.64%	G - Good	3	linear m	14755-59A	
Fourth	422N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	424N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	426N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	427SA	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B / C exposed	Friable	Chrysotile	50-75%	G - Good	3	fittings	Previously sampled (1998)	
Fourth	428N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	430C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	430N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	431S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	432C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	432N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	433S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	434C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	434N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	

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Fourth	435S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	436C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	436N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	436N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	437C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	437S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	438C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	438N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	439C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	439S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	440C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	440N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	440NA	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	441C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	441S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	442C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	443S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	444N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	445D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	

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Fourth	445S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	446N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	15	m <sup>2</sup>	VS 14755-37	
Fourth	447D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	30	m <sup>2</sup>	VS 14755-37	
Fourth	447S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	448D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	448N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	10	m <sup>2</sup>	VS 14755-37	
Fourth	449D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	449S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	450D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	450N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	451D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fourth	451S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	452D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	452N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	453S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	454D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	455D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	456N	Ceiling	Ceiling Tiles	2' x 4' Pinhole Fissure, Red Back	C exposed	Friable	Amosite	0.80%	G - Good	10	m <sup>2</sup>	VS 14755-18A	
Fourth	456N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C concealed	Non-friable	Amosite	0.80%	G - Good	10	m <sup>2</sup>	VS 14755-37	

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Fourth	457D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	25	m <sup>2</sup>	VS 14755-37	
Fourth	458N	Ceiling	Ceiling Tiles	2' x 4' Pinhole Fissure, Red Back	C exposed	Friable	Amosite	0.80%	G - Good	15	m <sup>2</sup>	VS 14755-18A	
Fourth	467S	Ceiling	Ceiling Tiles	2' x 2' Pinhole Fissure, Red Back	C exposed	Friable	Amosite	0.80%	G - Good	25	m <sup>2</sup>	VS 14755-18A	
Fourth	467S	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	D	Friable	Chrysotile	25-50%	U - Unknown			Previously sampled (1998)	Limited visual, unknown quantity. Visible from hatch of pipe chase.
Fifth	513-S	Window	Other Materials Containing Asbestos	Window Caulking	C exposed	Non-friable	Chrysotile	0.88%	G - Good			14755-60A	Mixture of caulking. Caulking that appeared older was sampled.
Fifth	526N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	528N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	530N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	531C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	531S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	532N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	533C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	533S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	534N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	535C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	536C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	536N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	537C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	538C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	

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Fifth	538S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	539C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	539S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	540C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	541C	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	541S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	543S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	544S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	546S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	547D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	547S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	548S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	549D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	549S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	550D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	550S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	551D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	551S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	552D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	

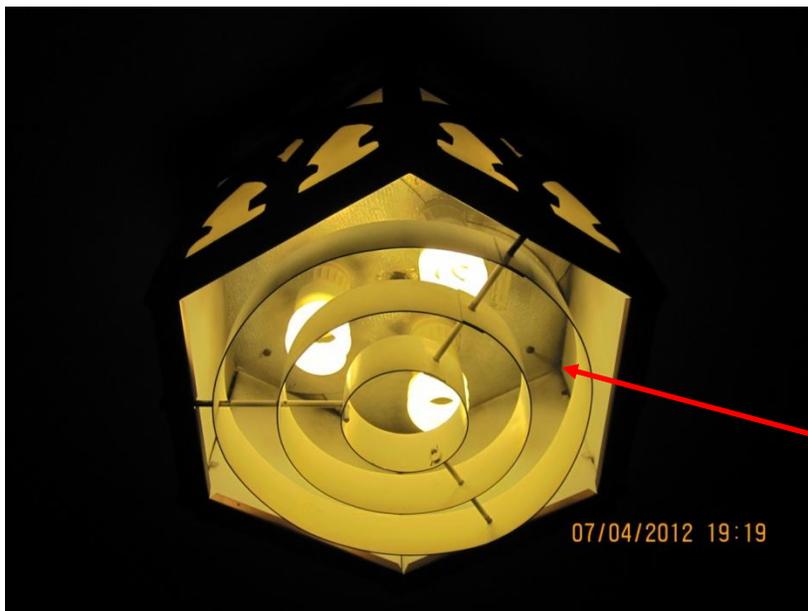
Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
Fifth	553D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	553S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	554D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	555D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	557D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	558D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	558N	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	D	Friable	Chrysotile	25-50%	U - Unknown			Previously sampled (1998)	Limited visual, unknown quantity. 2 runs visible.
Fifth	560D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	562D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	567S	Ceiling	Ceiling Tiles	2' x 2' Pinhole Fissure, Red Back	C exposed	Friable	Amosite	0.80%	G - Good	15	m <sup>2</sup>	VS 14755-18A	
Fifth	567S	Pipe Chase	Mechanical/pipe insulation	Anti-sweat Pipe Insulation	C concealed	Friable	Chrysotile	25-50%	P - Poor	<1	m <sup>2</sup> of debris	Previously sampled (1998)	
Fifth	570S	Above Solid Ceiling	Mechanical/pipe insulation	Pipe Insulation Debris (including anti-sweat, grey cement compound, and mag block debris)	C concealed / D	Friable	Chrysotile	25-50%	P - Poor	<1	m <sup>2</sup> of debris	Previously sampled (1998)	
Fifth	570S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Fifth	577F	Ceiling	Sprayed decorative/acoustic/stipple finishes	Stipple Ceiling	C exposed	Non-friable	Chrysotile	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-37	
Sixth	605A	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B	Friable	Chrysotile	25-50%	G - Good	10	linear m	Previously sampled (1998)	
Sixth	605A	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B	Friable	Chrysotile	50-75%	G - Good	2	fittings	Previously sampled (1998)	
Sixth	605A	Fire Door	Other Materials Containing Asbestos	Fire Door Lining Material	B	Friable	Suspect		G - Good	4	Doors		
Sixth	606A	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B	Friable	Chrysotile	25-50%	G - Good	2	linear m	Previously sampled (1998)	
Sixth	607A	Piping	Mechanical/pipe insulation	Aircell Pipe Insulation	B	Friable	Chrysotile	25-50%	G - Good	10	linear m	Previously sampled (1998)	

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Sixth	607A	Piping	Mechanical/pipe insulation	Pipe fittings - grey cement compound	B	Friable	Chrysotile	50-75%	G - Good	8	fittings	Previously sampled (1998)	
Sixth	631S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	633N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	633S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	635N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	635S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	637N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	637S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	639S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	641N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	641S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	643N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	643S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	644S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	645D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	645N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	645S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	646S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	647D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
Sixth	647N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	647S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	648D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	648S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	649D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	649S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	650D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	651D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	651N	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	651S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	652D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	653D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	653S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	654D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	655D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	656D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	657D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	657S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	658D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	

Floor	Room / Area	Specific Location	Equipment Type	Material Description	Accessibility	Friability (Friable, Non-Friable)	Asbestos Type	% Present	Condition (Good, Fair, Poor, Abated, Unknown)	Approximate Quantity	Units	Sample I.D.	Comments
Sixth	659S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	660D	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	661S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	663S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	667S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	14755-24A	
Sixth	667S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	P - Poor	5	m <sup>2</sup>	14755-24A	
Sixth	668S	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	675F	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	677F	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	679F	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	681F	Ceiling	Sprayed decorative/acoustic/stipple finishes	Textured / Stipple Ceiling	C exposed	Non-friable	Tremolite	1.00%	G - Good	20	m <sup>2</sup>	VS 14755-24A	
Sixth	Kitchen Attic	Ceiling	Thermal Insulation	Parging	B / C exposed	Non-friable	Chrysotile	20.00%	G - Good			Previously sampled (2011)	
Sixth	Kitchen Attic	Ceiling	Fireproofing	Applied to beams in attic area	B / C exposed	Non-friable	Chrysotile	4.00%	G - Good			Previously sampled (2011)	
Exterior		Roof	Other Materials Containing Asbestos	Roofing material below Copper Roofing Materials	D		Suspect						
Throughout	Throughout	Light Heat Shields	Suspected Asbestos-Containing Material	Light Heat Shields - Older Lighting	B, C, D	N/A	Suspect	Suspect	U - Unknown	Unknown	Not Applicable		Observed mainly in hallways.
Throughout	Throughout	Cast Iron Piping	Suspected Asbestos-Containing Material	Cast Iron Drain Pipe Joint Caulking	B, C, D	N/A	Suspect	Suspect	U - Unknown	Unknown	Not Applicable		

**Appendix E**  
**Select Photographs**



**Photo 1:** Light heat shields are suspected to contain asbestos. The material was observed in good condition in light fixtures throughout the building.



**Photo 2:** Asbestos-containing aircell (previously sampled) was observed in various locations throughout the building, predominately in the basement.



**Photo 3:** Mercury containing thermostats were observed in select rooms of the building. They were reportedly not in use and were left place following a retrofit of the building.



**Photo 4:** 1' x 1' Acoustic Wall Tiles, (previously sampled, 1998) observed in select areas on the first and third floor contains 0.5-5% Amosite and 5-25% Chrysotile.



**Photo 5:** Roofing material, inverted roofing system (Sample 14755-65A-C and 66A-C) sampled from the sixth floor and second floor courtyard were sampled and do not contain regulated amounts of asbestos.



**Photo 6:** Exterior window, west face of building. Caulking from the outside of these windows was reportedly newer, and was sampled and found to not contain regulated amounts of asbestos.



**Photo 7:** Suspected PCB-containing light ballast was observed in the elevator at the rear of the building. Fluorescent light ballasts associated with the T12 light fixtures in the building are suspected to contain PCBs.



**Photo 8:** Aircell insulation on ductwork (previously sampled, 1998) contains regulated amounts of asbestos. This material was observed throughout the basement of the building. Small sections were observed in poor/fair condition, as seen above.