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REPORT ON

Phase I Environmental Site Assessment 101 Wurtemberg Street Ottawa, Ontario

Submitted to:

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REPORT



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Executive Summary

Golder Associates Ltd. (hereafter referred to as “Golder”) was retained by Claridge Inc. (hereafter referred to as “Claridge”) to conduct a Phase I Environmental Site Assessment (hereafter referred to as “Phase I ESA”) for the property (hereafter referred to as the “Site”) located at 101 Wurtemburg Street in Ottawa, Ontario. The Site is occupied by one building, which is currently vacant.

The Executive Summary highlights key points from the report only; for complete information and findings, as well as the limitations, the reader should examine the complete report.

The Phase I ESA was completed in accordance with the November 2001 Canadian Standards Association document entitled Phase I Environmental Site Assessment, Z768-01 (R2006). The scope of work for this project was described in the Golder correspondence dated January 24, 2011. Authorization to proceed with the Phase I ESA was provided by Mr. Jim Burghout on January 25, 2011. It is understood that the Phase I ESA is being carried out for due diligence purposes as part of the proposed redevelopment of the Site.

Access to the building was not provided to Golder during the Phase I ESA Site visit and as such, the interior areas were not assessed. At the time of the Site visit, the exterior ground surface was snow-covered, which limited the observations for potential presence of stains or stressed vegetation.

Based on the information obtained during the Phase I ESA, one issue of potential environmental concern related to potential impacts on soil and groundwater at the Site is identified as follows:

- Based on a review of the Slope Stability Assessment for the Site performed by Golder (2010), fill material is present at the east end of the Site with a range in thickness between 0-3 m. In addition, the aerial photograph review indicates that an in-ground swimming pool existed on Site between 1988 and 2002. Due to the unknown origin and quality of the fill material at the east end of the site and the fill material used to fill in the former in-ground swimming pool, the fill material is considered to be an issue of potential environmental concern.

Two issues of potential environmental concern related to the building at the Site were identified as follows:

- Based on the year of the building construction (1950s-1960s) asbestos containing material (ACM) may be present. No access to the building was provided to Golder during the Phase I ESA Site visit and as such, the presence of ACM in the interior areas was not assessed. The presence of ACMs in good condition is not considered an issue unless demolition of the building or renovations are undertaken. Prior to any renovations or demolition the suspected ACMs should be sampled according to O.Reg. 278/05 to confirm the presence/absence of asbestos in these materials. All ACMs should be abated prior to renovation or demolition activities;
- Based on the year of the building construction (1950s-1960s), there is the potential for presence of PCB-containing material and equipment, UFFI, lead-containing paint (original layers) and lead solder in the building. No access to the building was provided to Golder during the Phase I Site visit and as such, the potential presence of these substances could not be assessed. If any of these issues of environmental concern exist on the Site, they should be dealt with prior to demolition or renovation of the building being undertaken.



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1.0 INTRODUCTION AND BACKGROUND

1.1 General

Golder Associates Ltd. (hereafter referred to as “Golder”) was retained by Claridge Inc. (hereafter referred to as “Claridge”) to conduct a Phase I Environmental Site Assessment (hereafter referred to as “Phase I ESA”) for the property (hereafter referred to as the “Site”) located at 101 Wurtemberg Street in Ottawa, Ontario. The Site is occupied by one building, which is currently vacant.

The Phase I ESA was completed in accordance with the November 2001 Canadian Standards Association document entitled Phase I Environmental Site Assessment, Z768-01 (R2006). The scope of work for this project was described in the Golder correspondence dated January 24, 2011. Authorization to proceed with the Phase I ESA was provided by Mr. Jim Burghout on January 25, 2011. It is understood that the Phase I ESA is being carried out for due diligence purposes as part of the proposed redevelopment of the Site.

1.2 Scope of Work

As previously indicated, the scope of work for the Phase I ESA carried out on the Site is based on the November 2001 Canadian Standards Association (hereafter referred to as “CSA”) document entitled Phase I Environmental Site Assessment, Z768-01 (R2006). The Phase I ESA consisted of the following components:

- Background and records review;
- A Site visit;
- Interviews with regulatory officials and/or personnel associated with the Site;
- An evaluation of information obtained; and,
- Preparation of this report.

This Phase I ESA report is not a compliance audit or review. Any environmental compliance issues noted are mentioned as they relate to physical conditions present at the time of the Site visit. This Phase I ESA did not include an evaluation of operational or management systems compliance. Furthermore, Golder did not conduct a health and safety, engineering or structural evaluation of the Site.

A “designated substance”, as defined in The Occupational Health and Safety Act (hereafter referred to as “OHS”) and the Workplace Hazardous Material Information System (hereafter referred to as “WHMIS”) regulation (1990) is a “biological, chemical or physical agent or combination thereof prescribed as a designated substance to which the exposure of a worker is prohibited, regulated, restricted, limited, or controlled”. Sections of this report discuss the designated substances normally reviewed as part of a Phase I ESA. The designated substances review was performed for the Site as a whole. No intrusive sampling or analytical testing for materials/substances of potential environmental concern (i.e., polychlorinated biphenyls, lead, mercury, asbestos-containing materials, mould, etc.) was undertaken as part of this Phase I ESA. No soil, water, liquid, gas, product or chemical sampling and analytical testing at or in the vicinity of the Site were conducted as part of this assessment.



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Access to the building was not provided to Golder during the Phase I ESA Site visit and as such, the interior areas were not assessed. At the time of the Site visit, the exterior ground surface was snow-covered, which limited the observation of the ground surface for potential presence of stains or stressed vegetation.



2.0 SITE DESCRIPTION

2.1 Site Setting and Activities

The general location of the Site is shown on the Key Plan, Figure 1 and the general Site configuration is shown on the Site Plan, Figure 2. Characteristics of the Site, based on the Golder Site visit carried out on February 1, 2011 are as follows:

SITE CHARACTERISTICS	
Use	Residential Building
Address or Location	101 Wurtemburg Street, Ottawa, Ontario
Setting	The Site is located on the east side of Wurtemburg Street, at the approximate intersection of Wurtemburg Street and Clarence Street East. Land use in the vicinity of the Site consists of residential land uses.
Area (approx.)	768 m ²
Legal Description	PLAN 43586 S46 CLARENCE; CLOSED N8 LOT 6 WURTEMBURG E based on the information provided on the City of Ottawa website
Configuration	Approximately rectangular (See Site Plan, Figure 2)
Services	The Site is serviced with municipal water & sewer, hydro services, and natural gas. These services are likely not operational as the building is vacant.
Presence of Fill Material	No piles of fill material were observed on the Site. Fill material has been used for construction purposes (backfill around the building and driveway sub-grade material). There is also potential fill where the swimming pool previously existed and fill may be present at the east end of the Site according to previous reports.
Other Site Comments	Building condition may be structurally unsafe as it is vacant and not maintained.
Waste Storage	The Site Representative indicated that no waste is produced on Site (interview).
Exterior Areas	
Gravel Areas	None observed, as the Site was snow covered
Landscaped/Grassed Areas	None observed, as the Site was snow covered
Paved Areas	None observed, as the Site was snow covered
Treed Areas	No trees were observed on the Site. There are trees to the east of the Site, next to the Rideau River.
Exterior Storage Tanks	Underground storage tanks (“USTs”) and/or above ground storage tanks (“ASTs”) are discussed in Sections 4.7.1 and 4.7.2.
Other Exterior Observations	Slight slope of the area is downward towards the northwest. There is a steep slope to the east of the Site, leading to the Rideau River. Several building cracks were observed on the exterior walls.
Building	
Name	101 Wurtemburg Street
Occupant(s)	Vacant building
Location	Western portion of the Site



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SITE CHARACTERISTICS

Building (continued)

Configuration	Single, detached, two storey, split level house, square footprint
Construction Date	According to the air photo review the house was constructed sometime between 1955 and 1968.
Renovation/Addition Date	None observed
Floors (including ground floor)	Two
Basement	Half of basement, partially below ground surface
Footprint Area (approx.)	140 m ² (1500 sq. ft.)
Total Area (approx.)	185 m ² (2000 sq. ft.)
Elevators	None expected – no access to the interior of the house
Grease trap	None expected – no access to the interior of the house
Oil/Water Interceptor/sump	None expected – no access to the interior of the house
Hoist	None expected – no access to the interior of the house
Air Emissions	No air emissions are generated from the Site as it is vacant.
Heating	The heating in the Site building is via: <ul style="list-style-type: none">■ Natural Gas was likely used, but the house hasn't been heated recently
Cooling	No air conditioners were observed on the exterior of the house
Electricity Back-up Generator On-Site	None observed on the exterior of the house
Building Construction	<ul style="list-style-type: none">■ Foundation: concrete■ Framing: wood■ Walls: brick
Exterior Finish	<ul style="list-style-type: none">■ Roof: sloped asphalt shingle■ Façade: brick and false stone■ Entrances: one entrance was located at the west and two entrances are located at the east side of the building
Interior Finish	<ul style="list-style-type: none">■ Not observed

2.2 Regional Geological Setting

The following maps/reports were reviewed to determine the general geological and topographical conditions in the area of the Site:

- *Golder Associates Ltd. GIS Database* (Reference - Digital Basemap Data supplied by DMTI Spatial Inc., Canmap, 2006);



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- Map 1506A, *Surficial Geology*, Ottawa, Ontario, Belanger J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open file D3256, 2001; and,
- Map 1508A, *Generalized Bedrock Geology*, Ottawa, Ontario, Belanger J. R., Urban Geology of the National Capital Area, Geological Survey of Canada, Open file D3256, 2001.

Geological information on the Site and/or surrounding area [200 metres (“m”)], based on the above, is as follows:

GEOLOGICAL INFORMATION

Native Subsurface Soils (expected)	Offshore marine deposits: clay and silt underlying erosion terraces
Depth to Bedrock (approximately)	15 to 25 m
Type of Bedrock (expected)	Shale
Topography (expected)	Slight slope downward to the northwest and a steep slope at the east end of the Site towards the Rideau River
Regional Groundwater Flow (inferred)	East, towards Rideau River
Nearest Open Water Body	Rideau River located approximately 20 m east of the Site.
Prominent Physical Features	None

A Slope Stability Assessment was conducted by Golder in July 2010. In general, the subsurface conditions (based on an earlier report) on this Site consist of (in sequence):

- Up to about 3 m of fill material (but likely less than 1 m in the table land area closest to the slope);
- Approximately 7 to 10 m of silty clay, of which the upper portion has been weathered to a stiff crust. The bottom 6 m are unweathered and have a firm to stiff consistency;
- Approximately 2 to 5 m of compact to dense sand (fine sand and silty sand);
- Glacial till extended to about 28 m depth (but likely thickening from south to north); and,
- Shale bedrock.

Based on a review of the subsurface conditions reported in the Slope Stability Assessment, which was performed by Golder in 2010, it appears that fill material is present on the Site. However, the origin and quality of the fill is unknown.



3.0 RECORDS REVIEW

3.1 Historical Information Review

Historical information on the Site and/or surrounding area (200 m) was obtained from the following sources:

SUMMARY OF HISTORICAL INFORMATION SOURCES

Interview(s)			
Name	Interview Date	Position	Company
* Jim Burghout	February 1, 2011	Development Manager	Claridge Residential Inc. (owner of the Site)

*Note: Hereafter known as the "Site Representative".

Aerial Photograph Review

Year	1928	1933	1955	1968	1974	1988	1997	2002, 2005, and 2008
No.	A17-80	A4571-66	A14763-79	A20899-44	A23687-91	A27275-165	A28332-45	City of Ottawa e-maps
Scale	1:5,000	1:6,000	1:5,000	1:3,600	1:6,000	1:3,000	1:7,000	1:6,468

Title Search

No title search provided

Review of Fire Insurance Plan Records

Source(s)	National Archives, Ottawa
Year(s)	1948, 1956

Review of Street Directories

Source(s)	National Archives, Ottawa
Year(s)	1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980, 1990, 1999/2000, 2009/2010

Previous Environmental Reports

None

3.1.1 Interviews

Refer to the Summary of Historical Information Sources table for interview contact information. The Site representative provided the following information via questionnaire which is pertinent to the Phase I ESA:

- The current Site building has always been used as a residential dwelling;
- The current Site owner is Claridge Residential Inc.;
- The Site Representative indicated that he is not aware of the presence of any historical or current fuel underground storage tanks ("USTs") on the Site. In addition, he indicated that he is not aware of the presence of any historical or current fuel aboveground storage tanks ("ASTs") on the Site;
- There are no reported mould issues at the Site;



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- No storage, handling or management of chemicals takes place at the Site except the storage of general cleaning chemicals;
- No asbestos-containing material (“ACM”) survey has been conducted at the Site; and,
- Information regarding the fill origin and quality was requested from the Site Representative, and he indicated that no information was known.

3.1.2 Aerial Photograph Review

Selected aerial photographs for the Site were obtained from the National Air Photo Library in Ottawa, Ontario by Golder personnel. The review of the aerial photographs was conducted to develop a general history of the development of the Site and surrounding properties. Aerial photographs may be at a scale that limits a detailed review of the Site and surrounding area. Information obtained from the aerial photographs is summarized as follows:

Date Scale	Site	Surrounding Property Direction			
		North	East	South	West
1928 1:5,000	The Site is vacant and cleared	Residential properties	Rideau River	Residential properties	Wurtemberg Street followed by Clarence Street and residential properties
1933 1:6,000	As per 1928	As per 1928	As per 1928	As per 1928	As per 1928
1955 1:5,000	As per 1933	As per 1933	As per 1933	As per 1933	As per 1933
1968 1:3,600	The Site is developed with the current house	The residential property immediately north is now vacant land	As per 1955	Developed with current multi-storey apartment building	As per 1955
1974 1:7,000	As per 1968	As per 1968 with another residential property to the north now vacant land	As per 1968	As per 1968	As per 1968
1988 1:3,000	As per 1974 Developed with a swimming pool	Developed with a multi-storey office building	As per 1974	As per 1974	As per 1974
1997 1:7,000	As per 1988	As per 1988	As per 1988	As per 1988	As per 1988



Date Scale	Site	Surrounding Property Direction			
		North	East	South	West
2002 City of Ottawa eMap 1:6,468	As per 1997	As per 1997	As per 1997	As per 1997	As per 1997
2005 City of Ottawa eMap 1:6,468	As per 2002 except swimming pool is no longer visible	As per 2002	As per 2002	As per 2002	As per 2002
2008 City of Ottawa eMap 1:6,468	As per 2005	As per 2005	As per 2005	As per 2005	As per 2005

The review of aerial photographs of the Site and surrounding area indicates that the Site was undeveloped vacant land prior to 1968 when the Site was developed with the current Site building. The surrounding lands were developed with residential houses prior to 1928 and have been occupied mainly by residential houses and apartment buildings until recently with the development of an office building on the properties to the north of the Site prior to 1988.

The aerial photograph review of the Site and surrounding area (within approximately 250 m) indicates that an in-ground swimming pool existed on Site between 1988 and 2002. Due to the unknown origin and quality of the fill material used to fill in the former in-ground swimming pool, it is considered that the fill material is an issue of potential environmental concern. No other obvious issues of potential environmental concern were identified in the aerial photograph review.

3.1.3 Chain of Title Search

A chain of title search was not provided for review for this Phase I ESA.

3.1.4 Agreement of Purchase and Sale (“A of P/S”)

As part of the CSA Z768-01(R2006) protocol, when an A of P/S exists, it should be reviewed for information on vendor warranties or special conditions concerning contamination. If an A of P/S is provided, Golder will review it for vendor warranties or special conditions concerning contamination. If, in Golder’s opinion, the A of P/S indicates any issues of potential environmental concern with respect to the Site, a copy of Golder’s review will be forwarded to Claridge (with a brief discussion) so that it can be appended to this report. No A of P/S was provided to Golder. It is Golder’s understanding that Claridge owns the Site and will be redeveloping it. Therefore, no A of P/S will need to be reviewed.



3.1.5 Review of Fire Insurance Plan (“FIP”) Records

Research was carried out at the National Archives in Ottawa, Ontario to review fire insurance plans or drawings for the Site. Fire insurance plans from 1925 (revised in 1948) and 1956 were available for the Site. The review of the FIP indicated the following:

- The Site was vacant in the 1948 and 1956 FIPs;
- The surrounding lands in immediate vicinity of the Site are occupied by the New Zealand High Commission, and residential houses; and,
- No USTs or ASTs were indicated on the Site and on the adjacent properties on 1948 and 1956 FIPs.

3.1.6 Review of Street Directories

A review of City Directories at the National Archives in Ottawa, Ontario was completed for the Site (as described in Section 2.1 Site Setting and Activities) and addresses within approximately 250 m of the Site. The following was of note based on the street directories review:

- The Site was listed since at least 1970 and was occupied by Jules Morin until 1990 when it was listed as vacant. In 1999/2000 the Site was occupied by Stephen Shulte;
- 111 Wurtemberg Street (approximately 25 m south of the Site, east side of Wurtemberg Street) was listed as Seigniority Apartments in 1980 and 1990 street directories. The same address was not listed in the other street directories searched;
- 95 Wurtemberg Street (approximately 25 m north of the Site, east side of Wurtemberg Street) was listed as the USSR trade mission building in 1980 and 1990 street directories. The address was not listed in the other street directories searched;
- 105 Wurtemberg Street (located on the east side of Wurtemberg Street and south of the Site) was listed as New Zealand Embassy in 1950 and occupied by a physician in 1920 and 1930 street directories. This address currently does not exist and as such, the exact location of this former facility with respect to the Site is unknown;
- 197 Wurtemberg Street (approximately 140 m southeast of the Site) was listed as the Embassy of Turkey in 1960, 1970, 1980, 1990, 1999/2000 and 2009/10; and,
- The surrounding lands were listed mainly as residential properties with the exception of the above mentioned listings.

The review of the street directories indicated that the Site was occupied by a residential building since at least 1970.

Surrounding properties were occupied by residential and institutional properties.

The review of the street directories does not indicate any obvious issues of potential environmental concern.

3.1.7 Previous Reports

No previous environmental reports completed for the Site were provided for review as part of this Phase I ESA. However, Golder did perform a slope stability assessment (refer to Section 2.2).



3.2 Regulatory Information Review

Regulatory information requests and reviews for the Site and/or surrounding area (250 m) included the following sources:

SUMMARY OF REGULATORY INFORMATION

Regulatory Agencies and/or Government Departments Contacted

Ontario Ministry of Environment ("MOE")

Technical Standards Safety Authority ("TSSA")

City of Ottawa ("City")

City Documents

- 1988 Intera report entitled Mapping and Assessment of Former Industrial Sites, City of Ottawa.*
**Note:* This report was reviewed if the Site was within the City of Ottawa municipal boundary prior to the 2001 amalgamation.
 - 2004 City of Ottawa Waste Disposal Sites Inventory.
-

MOE and EC Documents/Databases

- MOE Database on PCB Storage Sites, 2000*;
- Waste Disposal Site Inventory, June 1991;
- MOE Database on Brownfields Environmental Site Registry - Records of Site Condition ("RSC"), October 2004;
- Inventory of Coal Gasification Plant Waste Sites in Ontario, April 1987;
- MOE Database on Registered Waste Generators 2001*; and,
- EC National Pollutant Release Inventory ("NPRI"), March 2006

**Note:* The information extracted from the MOE PCB Storage Sites and Waste Generator databases was used by Golder under license with the Ontario Ministry of Environment, Queens Printer for Ontario (2000 and 2001).

3.2.1 Ontario Ministry of Environment Correspondence

The Ontario Ministry of Environment ("MOE") was contacted (refer to copy of correspondence in Appendix B) to provide an Index Report with respect to active orders and approvals for the Site as detailed below:

- Active orders under the Environmental Protection Act ("EPA"), the Ontario Water Resources Act ("OWRA"), and the Pesticides Act ("PA"); and,
- Approvals under Sections 9 and 39 of the EPA as well as Sections 52 and 53 of the OWRA.

At the time of preparation of this report, a formal response from the MOE had not been received by Golder. When a formal response to Golder's request for information is received, it will be reviewed. If, in Golder's opinion, the response details any issues of potential environmental concern with respect to the Site, a copy will be forwarded to Claridge (with a brief discussion) so that it can be appended to this report.



3.2.2 Technical Standards and Safety Authority Correspondence

The Technical Standards and Safety Authority (“TSSA”) was contacted via e-mail (refer to copy of correspondence in Appendix B) to determine if any commercial fuel USTs were registered on or near the Site. In addition, inquiries were made to determine if there are records of fuel spills, accidents or incidents on or near the Site. The TSSA has maintained records since 1987 but it should be noted that there is currently no requirement in Ontario to register private underground fuel oil storage tanks for heating purposes.

TSSA responded via email on January 31, 2011 and indicated that the TSSA had no registrations for USTs for the Site, currently or historically, nor are there any records of incidents, accidents or spills on adjacent properties.

3.2.3 City of Ottawa Correspondence

Golder forwarded a request (refer to copy of correspondence in Appendix B) to the City of Ottawa (“City”), for the following information:

- Active orders under the EPA, the OWRA, and the PA;
- Approvals;
- Reports relating to environmental concerns;
- Records of non-compliance or regulatory concerns;
- Dumping infractions, spills or discharges to the environment;
- Violations of sewer use or environmental by-laws;
- Historic information related to landfill or dump sites on or in proximity to the Site; and,
- Any other environmental information.

At the time of preparation of this report, a formal response from the City had not been received by Golder. When a formal response to Golder’s request for information is received, it will be reviewed. If, in Golder’s opinion, the response details any issues of potential environmental concern with respect to the Site, a copy will be forwarded to Claridge (with a brief discussion) so that it can be appended to this report.

3.2.4 City of Ottawa Document Review

Prior to the 2001 amalgamation, the City did not have a consolidated database of environmental concerns for City properties and typically referred all inquiries to the *1988 Mapping and Assessment of Former Industrial Sites, City of Ottawa, Intera Technologies Ltd.* (hereafter known as the “1988 Intera Report”). This report describes an inventory and assessment study of former industrial sites that were active in the former (prior to the 2001 amalgamation) City of Ottawa from 1850 to 1984 that likely produced or handled hazardous wastes and materials. The sites were subsequently screened to identify higher priority sites which were subdivided into Group I, Group II and Group III sites.

- Group I Sites – Sufficient evidence to indicate that wastes are present on-Site and that there is a high potential for environmental impact.



- Group II Sites – Sufficient evidence to indicate that wastes are likely remnant on-Site.
- Group III Sites – Unlikely that significant quantities of waste exist at the Site today and therefore the potential for environmental impact is minimal.

The review of the 1988 Intera Report indicated that there are no former industrial sites within 500 m of the Site.

The review of the 2004 City of Ottawa Waste Disposal Sites Inventory indicated the following:

- The former private dump (Site ID # Ur-25) was located approximately 200 m northeast of the Site at Kingsview Park (Vanier). Given that the former private dump is located on the opposite side of the Rideau River and it is considered hydrogeologically downgradient. The historical presence of this dump is not considered an issue of concern for the Site;
- The former municipal dump (Site ID # Ur-30) was located approximately 400 m northwest of the Site, at Porter Island, located in the Rideau River. Given that the former dump was located down-gradient with respect to the Site (inferred groundwater and surface water flow is toward north) it is considered that the likelihood of impacts from this facility to the Site is low; and,
- The former municipal dump (Site ID # Ur-34) was located approximately 850 m northwest of the Site (Bordeau Park). Given that the former dump was located downstream with respect to the Site, the distance between the former dump and the Site and that the Site is buffered by roads and underlying services, land and buildings it is considered that the historical presence of this dump is not an issue of potential environmental concern for the Site.

3.2.5 Ontario Ministry of Environment Document Review

3.2.5.1 MOE Database on PCB Storage Sites, 2000

Based on a search (250 m radius from Site) of the MOE database of PCB Storage Sites, the Site is not a registered PCB Storage Site and no registered PCB Storage Sites are known to be located within approximately 250 m of the Site.

3.2.5.2 Waste Disposal Site Inventory, June 1991

A search of the 1991 MOE (*Waste Disposal Site Inventory*) indicates three records of closed waste disposal Sites within 850 m of the Site. The MOE waste disposal inventory identified the presence of the former disposal sites listed in the 2004 City of Ottawa Waste Disposal Sites Inventory discussed in Section 3.2.4 of this report.

3.2.5.3 Inventory of Coal Gasification Plant Waste Sites in Ontario, April 1987

A review of the (*Inventory of Coal Gasification Plant Waste Sites in Ontario*) (250 m radius from the Site) was carried out. The latter classification includes tar distillation plants, creosoting plants, roofing felt and tarred paper products manufacturers, by-product charcoal and coke oven plants of the iron and steel industry, industrial manufactured gas plants, and wood distillation plants.

The review indicated that there are no registered former coal gasification plants or industrial sites producing and/or using coal tar or related tars within 250 m of the Site.



3.2.5.4 *MOE Database on Registered Waste Generators, 2001*

A review of the MOE database on registered waste generators indicates no records of registered waste generators within 250 m of the Site.

3.2.5.5 *MOE Database on Brownfields Environmental Site Registry - Records of Site Condition ("RSC"), October 2004*

A search of the brownfields environmental site registry was carried out for the Site to determine whether a record of site condition has been filed for the Site. The search indicated that no RSC has been filed for the Site.

3.2.5.6 *Environment Canada National Pollutant Release Inventory ("NPRI"), 2006*

The NPRI provides information for the facility's total releases to air, water and land and also includes any disposal and /or recycling the facility may have. The search of the Environment Canada NPRI (within 250 m of the Site) indicated that there are no registered facilities located within 250 m of the Site.



4.0 SITE VISIT

A Site visit was carried out by a representative of Golder staff on February 1, 2010. At the time of the Site reconnaissance the ground surface was snow covered which restricted the ground surface examination for visual or olfactory indications of potential environmental concern.

No access was provided to Golder to the building during the Phase I ESA Site visit and as such, the interior areas were not assessed.

The Site is occupied by a single, detached two storey, split-level residential building. The building is currently vacant.

The visit was documented with a checklist, photographs and additional notes where warranted. The Site was examined for visual and olfactory indications of potential environmental concern. The Site visit also included a cursory inspection of adjacent properties from the Site and publicly accessible areas. The approximate limits of the Site (i.e., Site boundary) are noted on the Site Plan, Figure 2. Refer to the Site Characteristics table in Section 2.1 for a general description of the Site.

4.1 Outside (Exterior) Areas

The Site is generally flat but there is an elevation difference between the Site and the surrounding lands east of the Site. The slope of the area is downwards towards the north-northwest. At the time of the Site visit, the exterior ground surface was snow-covered, which limited the observations of issues of potential environmental concern (i.e. stains, sheens, or stressed vegetation) at the Site. At the time of the Site visit, no piles of fill material were observed on the Site. Based on the slope stability assessment completed for the Site by Golder (2010), fill material may be present on-Site ranging in thickness between 0-3 m. Due to the fact that the origin and quality of the fill material are unknown, it is considered that presence of fill material is an issue of potential environmental concern.

4.2 Interior (Building) Areas

At the time of the Site visit, access to the building was not provided to Golder.

4.2.1 Suspect Asbestos-Containing Materials

Since the late 1970's the manufacture and use of asbestos-containing building materials has continued to decrease. There is no firm cut-off date outlining when asbestos in building materials was discontinued. Manufacturers produced and ceased production of asbestos-containing materials at different times. It is commonly presumed that buildings constructed prior to 1980 are more likely to contain both friable and non-friable forms of asbestos such as mechanical insulations, ceiling tiles, floor tiles, ceiling textures etc. Generally, buildings constructed from 1980 to 1985/86 are more likely to contain non-friable asbestos in the form of floor tiles, sheet flooring, drywall joint compound etc. Even buildings constructed much more recently may contain asbestos-containing building materials ("ACM") in the form of caulking, roofing materials, fire stop, mastic or transite piping.

Ontario Regulation ("O. Reg.") 278/05, which replaced O. Reg. 838/90, became law on November 1, 2005. This regulation governs work that disturbs or is likely to disturb ACMs in provincially regulated buildings and applies to contractors in the province of Ontario (even in a federal workplace). O. Reg. 278/05 outlines the specific



procedure for identification of ACMs, protocols for their removal, the requirements for building owners and asbestos management, and the training requirements for asbestos workers. A written asbestos management plan is required for every commercial building (in Ontario) with asbestos (friable and non-friable). The only method of confirming whether materials are asbestos-containing is to sample and analyze the suspect materials. No sampling of any material was carried out as part of this Phase I ESA and no asbestos management plan was completed during this Phase I ESA.

Based on the year of the building construction (1950s-1960s), it is Golder's opinion that ACMs (friable and non-friable) may be present at the Site, given that the use of friable ACMs was generally discontinued in the late 1970s/early 1980s. At the time of the Site visit, no access was provided to the building and as such, the presence of potential ACM in the building was not assessed. The presence of ACMs in good condition is not considered an issue unless demolition of the building or renovations is undertaken. Mr. Jim Burghout indicated that no ACM survey was carried out at the Site. If renovations or demolition of the building are undertaken, the suspected ACMs should be sampled according to O.Reg. 278/05 to confirm the presence/absence of asbestos in these materials. All ACMs should be abated prior to renovation or demolition activities.

4.2.2 Suspect PCB-Containing Materials and Equipment

In Canada, the Federal Chlorobiphenyls Regulation, SOR/91-152 prohibits polychlorinated biphenyls ("PCBs") from being used in products, equipment, machinery, electrical transformers and capacitors which were manufactured or imported into the country after July 1, 1980. However, older equipment in use after this date may still contain PCBs if the equipment's fluid has not been changed or the equipment was not decontaminated when the fluid was changed to a non-PCB-containing fluid. In general, potential PCB-containing equipment could include fluorescent, mercury and sodium vapour light ballasts, oil-filled capacitors and oil-filled transformers.

The use of PCB-containing materials in products, equipment, machinery, electrical transformers and capacitors was discontinued in the early 1980s. The Site Representative indicated that there are no electrical transformers, capacitors, fluorescent light ballasts or other equipment that may contain PCBs present on the Site. No pad-mounted electrical transformers were observed on the exterior of the Site. No building access was provided to Golder during the Phase I ESA Site visit and as such, the potential for suspected PCB-containing materials and equipment in the interior areas was not assessed. Based on the year of building construction (1950s-1960s), original fluorescent light ballasts within the building (if any present) may contain PCBs.

4.2.3 Urea Formaldehyde Foam Insulation

Urea formaldehyde foam insulation ("UFFI") is low-density foam, which is formed by the polymerization of urea and formaldehyde liquids. The concerns with UFFI are human health and safety, and are associated with the release of gases as the UFFI cures, ages and degrades. UFFI was widely used as an insulating material until December 1980 when a ban on the use of UFFI was enacted under the Hazardous Products Act ("HPA"). UFFI was commonly injected through walls by drilling injection holes, typically in roof structures, ceilings and overhangs. Except for residential properties, the HPA does not require the licensing, approval or registration of a property where UFFI has been identified.

It should be noted that access to the building was not obtained at the time of the Site visit, and as such the presence of UFFI in the interior areas was not assessed. Based on the year of the building construction (1950s-1960s), UFFI may be present in the Site building, given that UFFI was banned in 1980.



4.2.4 Lead

Lead in the workplace is regulated under OHSA. As outlined in the OHSA, persons in the workplace are required to be notified of the presence of lead in the workplace. The exposure to lead in the workplace can be managed through various methods, including encapsulation and removal. Although lead-based paints were banned from use on exterior, or interior surfaces of buildings, furniture or household products in the late 1970s, various commercial paints are still known to contain lead in concentrations greater than the 0.5 percent weight to weight of lead (e.g., road paint). No sampling of any material (for the presence of lead) was carried out as part of this Phase I ESA.

Based on the year of the building construction (1950s-1960s), lead-based piping and/or paints may be present in the building. Although the building was likely repainted since its construction, it is possible that the original paint layer(s) may be lead-containing. During the Site visit, the building could not be accessed and as such, the potential for lead-containing pipes and paint in the interior of the building could not be assessed. Lead related issues should be dealt with if demolition or renovation of the building is undertaken.

4.2.5 Ozone-Depleting Substances

An ozone-depleting substance (“ODS”) refers to any substance containing chlorofluorocarbon (“CFC”), hydrochlorofluorocarbon (“HCFC”), halon or any other material capable of destroying ozone in the atmosphere. ODSs have been used in rigid polyurethane foam and insulation, laminates, aerosols, air conditioners, fire extinguishers, cleaning solvents and the sterilization of medical equipment. Federal regulations introduced in 1995 required the elimination of production and import of CFCs by January 1, 1996 (subject to certain essential uses) and a freeze on the production and import of HCFC-22 by January 1, 1996. These regulations also require the complete elimination of HCFC-22 by the year 2020.

Because the regulations govern only the production and import of certain ODSs, they are allowed to be used in Canada, as long as there is a supply in place. Eventually the supply will run out, and the present equipment will either need to be refitted or replaced. Based on discussions with several air conditioning companies, it is understood that there is a sufficient supply of CFCs and HCFC-22 in Canada for at least the next several years. The federal Hazardous Products Act (“HPA”) does not require the licensing, approval or registration of a property in which ODSs have been identified. However, provincial regulations require the licensing of contractors who handle ODSs through equipment servicing.

Access to the Site was not obtained during the Site visit, and no ozone depleting substances were observed to be stored around the exterior areas of the building.

4.2.6 Radon

Radon gas is a product of the decay series that begins with uranium. Radon is produced directly from radium, which can be commonly found in geological units which contain black shale and/or granite. Radon gas can migrate through the ground and enter buildings through porous concrete or fractures. In open air or locations with high air circulation, radon is not considered a health problem, due to the dilution of the gas. In confined spaces (i.e., basements) it can concentrate and become a health hazard.



Given the geological setting of the Site (15-25 m to the shale bedrock), radon gas is not considered to be an issue of potential health concern for the building occupants. However, only actual testing of radon gas concentrations could determine if it is an actual health concern. Radon gas can be managed through appropriate air exchange.

4.2.7 Mercury

The building was not accessed at the time of the Site visit and as such, it was not possible to assess whether mercury containing thermostats were present in the building. Any mercury within the buildings should be removed if demolition of the building is undertaken.

4.2.8 Air Emissions

It is outside the scope of this Phase I ESA to comment on whether or not the air emissions meet the requirements of applicable regulations since the Phase I ESA is not a compliance audit or review. Any environmental compliance issues noted are mentioned as they relate to physical conditions present at the time of the Site visit and do not include operational or management systems compliance.

Sources of air emissions identified at the Site are limited to those generated from off-Site (i.e., the Seigniorie apartment buildings).

4.2.9 Mould

Due to access restrictions to the building interior, it was not possible to assess whether current sources of mould (i.e., recent water damage) exist within the building interior.

4.2.10 Radioactive Materials

No radioactive substances, requiring licensing, are known to be present or to have been located on the Site.

4.3 Solid Waste Disposal Practices and/or Areas of Storage/Waste

It is outside the scope of this Phase I ESA to comment on whether or not the waste disposal practices meet the requirements of applicable regulations since the Phase I ESA is not a compliance audit or review. Any environmental compliance issues noted are strictly mentioned as they relate to physical conditions present at the time of our visit and do not include operational or management systems compliance.

Given that the Site is currently unoccupied, it is unlikely that solid waste is being generated. During the Site visit, an electrical heating apparatus was observed beneath a staircase east of the building. It is likely that this electrical apparatus was associated with the former swimming pool, which was observed in the 1988 and 1997 aerial photographs.

No issues of potential environmental concern were noted with respect to the non-hazardous waste removal processes at the assessed areas of the Site.

4.4 Water and Wastewater Discharges

It is outside the scope of this Phase I ESA to comment on whether or not the wastewater discharges from the Site meet the requirements of applicable regulations since the Phase I ESA is not a compliance audit or review. Any environmental compliance issues noted are strictly mentioned as they relate to physical conditions present



at the time of the Site visit and do not include operational or management systems compliance. In general, it is the responsibility of individual facilities/companies to ensure that sewer discharges meet the applicable municipal requirements. If non-compliance situations arise, a “compliance program” may result which is basically an agreement between the municipality and the facility/company to correct the non-compliant sewer discharges.

The water supply is from municipal water sources and sanitary discharges from the Site are to the municipal sewer. The Site is connected to the municipal storm sewer. Surface water runoff is likely towards the northwest or through natural soil infiltration. No process water is generated at the Site.

4.5 Odour, Noise and Vibration

No major sources of odour, noise or vibration were noted on the Site.

4.6 Electromagnetic Radiation (“EMF”)

Electromagnetic radiation is generally associated with high voltage power lines. No high voltage power lines were noted within 200 m of the Site.

4.7 Storage Tanks

4.7.1 Aboveground Storage Tanks

No ASTs were observed on the Site. The Site Representative indicated that he is not aware of the presence of any former AST on the Site. Piping likely associated with an AST was observed on adjacent lands within 10 m south of the Site. This piping is thought to be associated with a backup generator on the apartment building complex rather than a source of heating. A tank fill monitor was mounted on the exterior of the apartment building, indicating that there is a system in place to prevent spills and overfills of the AST. This AST is not interpreted to be an issue of potential environmental concern. In addition, it was observed that the apartment building to the south and other residences to the west of the Site area are heated by natural gas, indicating less potential for heating oil ASTs in the surrounding properties. The source of heating of the embassy to the north of the Site was not identified at the time of the Site visit.

4.7.2 Underground Storage Tanks

Based on information obtained during the Phase I ESA, no petroleum or chemical USTs are suspected to be present on the Site. No evidence (fill/vent pipes extending through walls or slabs/ground surface, no staining or any obvious odours) was observed during the Site visit to indicate the current presence or former presence of fuel or chemical USTs. In addition, the Site Representative indicated that he is not aware of the presence of any historical USTs on the Site.

4.8 Storage, Handling and Disposal of Hazardous Materials

It is outside the scope of this Phase I ESA to comment on whether or not the storage, handling and disposal of hazardous materials meets the requirements of applicable regulations since the Phase I ESA is not a compliance audit or review. Any environmental compliance issues noted are mentioned as they relate to physical conditions present at the time of the Site visit and do not include operational or management systems compliance.



The search of the MOE Database on Registered Waste Generators and on-line MOE HWIN indicated that the current owner of the Site and its adjacent properties are not registered waste generators. Given that the Site is a residential house, hazardous waste is not expected to be generated at the Site. However, given that no access was provided to Golder to the building at the time of the Site visit, no observations were made with respect to the waste management practices. The Site Representative indicated that storage, handling or management of chemicals has never taken place on the Site.

4.9 Adjacent Land Use

Based on visual observations during the Site visit, adjacent property use is for residential, office and commercial purposes. A summary of adjacent land use is as follows:

North

- An office building (The Embassy of the Russian Federation – Trade Representative Office),

South

- The Seignior apartment buildings;

East

- Rideau River; and,

West

- Wurtemberg Street followed by Clarence Street East and residential properties.

No current industrial complexes, retail fuel outlets or dry cleaning facilities are present in the immediate vicinity of the Site. Based on current adjacent land uses no issues of potential environmental concern were identified.



5.0 FINDINGS

Access to the building was not provided to Golder during the Phase I ESA Site visit and as such, the interior areas were not assessed. At the time of the Site visit, the exterior ground surface was snow-covered, which further limited the observations.

Based on the information obtained during the Phase I ESA, one issue of potential environmental concern related to potential impacts on soil and groundwater at the Site is identified as follows:

- Based on a review of the Slope Stability Assessment for the Site performed by Golder (2010), fill material is present at the east end of the Site with a range in thickness between 0-3 m. In addition, the aerial photograph review indicates that an in-ground swimming pool existed on Site between 1988 and 2002. Due to the unknown origin and quality of the fill material at the east end of the Site and the fill material used to fill in the former in-ground swimming pool, the fill material is considered to be an issue of potential environmental concern.

Two building-related issues of potential environmental concern were identified at the Site as follows:

- Based on the year of the building construction (1950s-1960s) asbestos containing material (ACM) may be present. No access to the building was provided to Golder during the Phase I ESA Site visit and as such, the presence of ACM in the interior areas was not assessed. An asbestos survey should be conducted to determine the presence/absence of ACMs in the building. If any ACMs are present, an Asbestos Management Plan should be in place as required per O.Reg. 278/05. The presence of ACMs in good condition is not considered an issue unless demolition of the building or renovations are undertaken. Prior to any renovations or demolition the suspected ACMs should be sampled according to O.Reg. 278/05 to confirm the presence/absence of asbestos in these materials. All ACMs should be abated prior to renovation or demolition activities.
- Based on the year of the building construction (1950s-1960s), there is the potential for presence of PCB-containing material and equipment, UFFI, lead-containing paint (original layers) and lead solder in the building. No access to the building was provided to Golder during the Phase I Site visit and as such, the potential presence of these substances could not be assessed. If any of these issues of environmental concern exist on the Site, they should be dealt with if demolition or renovation of the building is undertaken.



6.0 LIMITATIONS AND USE OF REPORT

This report was prepared for the exclusive use of Claridge Inc. and is intended to provide an assessment of the current environmental conditions for the Site located at 101 Wurtemburg Street in Ottawa, Ontario. Any use which another party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the other parties. Should additional parties require reliance on this report, written authorization from Golder Associates Ltd. will be required. No assurance is made regarding the accuracy and completeness of the data obtained from other parties. Golder Associates Ltd. disclaims responsibility for consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the Phase I ESA visit of the Site conducted by Golder Associates Ltd. It is based solely on Site conditions encountered at the time of the Site visit on February 1, 2011 supplemented by a review of historical information and data obtained by Golder Associates Ltd. as described in this report. At the time of the Site reconnaissance the ground surface was snow covered which restricted the ground surface examination for visual or olfactory indications of potential environmental concern.

No soil, water, liquid, gas, mould, product or chemical sampling and analytical testing at or in the vicinity of the Site were conducted as part of this assessment.

In evaluating the Site, Golder Associates Ltd. has relied in good faith on information provided by others noted in this report. We have assumed that the information provided is factual and accurate. We accept no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

If new information is discovered during future work, including but not limited to, site assessment, excavations, borings or other studies, Golder Associates Ltd. should be requested to re-evaluate the conclusions presented in this report and to provide amendments as required.



7.0 CLOSURE

We trust that this report meets your current needs. If you have any questions, or if we may be of further assistance, please do not hesitate to contact the undersigned.

GOLDER ASSOCIATES LTD.

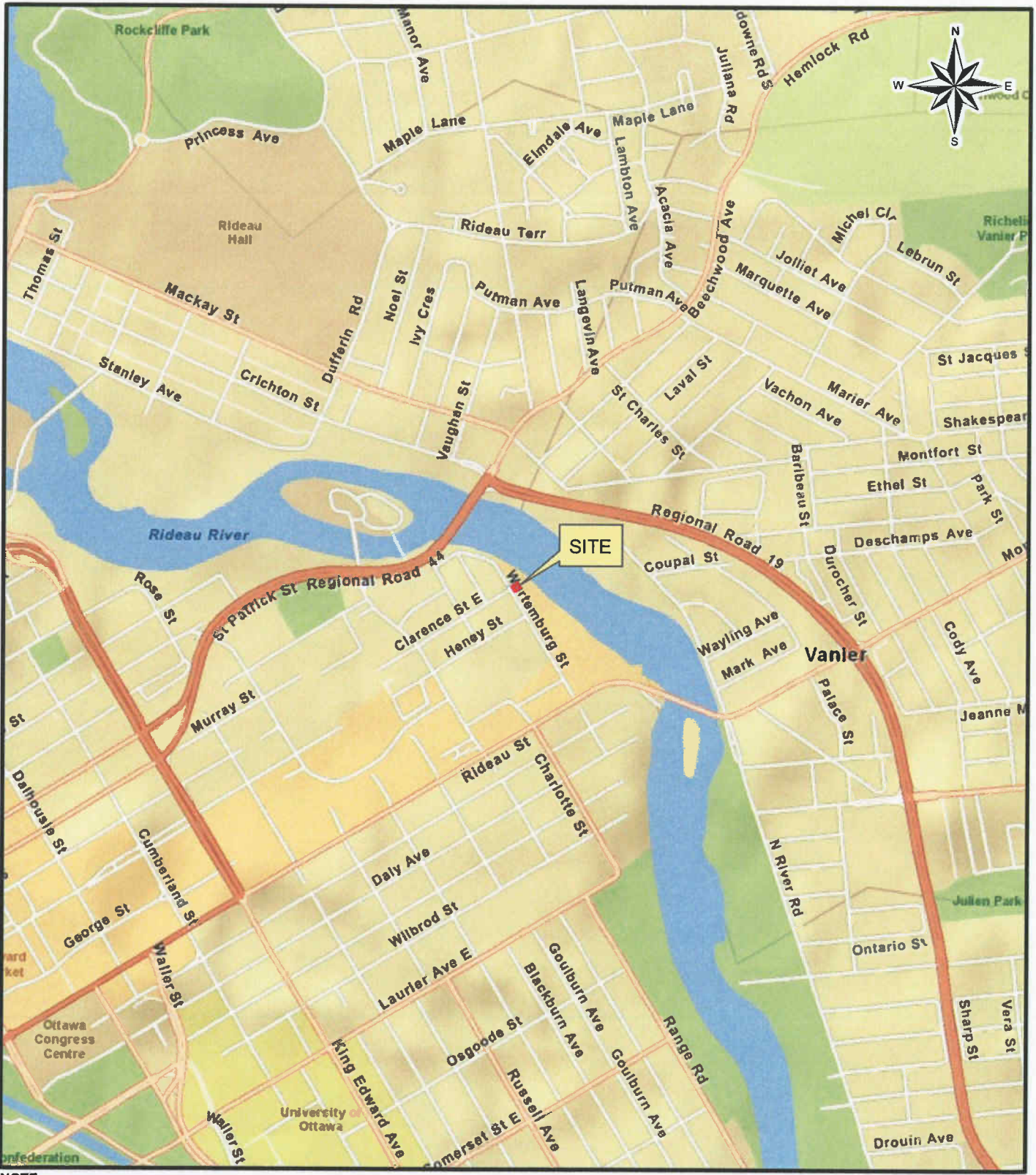
Hayley Roach, B.Sc.
Junior Environmental Scientist

Tim Robertson, P.Eng.
Associate

HR/MS/BGS/clb/kf

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NOTE
 THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING
 GOLDER ASSOCIATES LTD. REPORT No. 10-1122-0017

REFERENCE
 DATA PROVIDED BY ESRI CANADA, 2010
 PROJECTION: MERCATOR AUXILIARY SPHERE DATUM: WGS 84



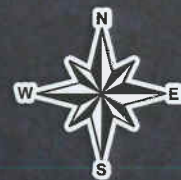
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PROJECT
 PHASE I ESA - 101 WURTEMBERG STREET, OTTAWA, ON

FIGURE 1

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RIDEAU RIVER

THE EMBASSY OF THE
RUSSIAN FEDERATION,
TRADE REPRESENTATIVE
OFFICE

APPROXIMATE SITE
BOUNDARY

APPROXIMATE
LOCATION OF AST

RESIDENTIAL
SUBDIVISION

RESIDENTIAL
SUBDIVISION

THE SEIGNIORY APARTMENTS

Wurtemberg St.

Wurtemberg St.

Clarence St. E

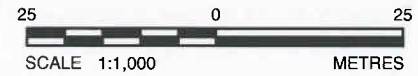


NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE ACCOMPANYING
GOLDER ASSOCIATES LTD. REPORT No. 10-1122-0017

REFERENCE

DATA PROVIDED BY ESRI CANADA, 2010
PROJECTION: MERCATOR AUXILIARY SPHERE DATUM: WGS 84



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PROJECT No. 10-1122-0017		FIGURE 2
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APPENDIX A

Site Photographs



APPENDIX A

Site Photographs



Photograph 1: View looking east, facing Wurtemberg Street towards the front of the Site (101 Wurtemberg Street).



Photograph 2: This is the view looking west from the front of the Site looking down Clarence Street. The surrounding properties are mainly residential.



APPENDIX A Site Photographs



Photograph 3: This is the adjacent property to the north of the Site. It is currently occupied by the Russian Embassy –Trade Representative Office.



Photograph 4: This is the view of the adjacent property (The Embassy of the Russian Federation –Trade Representative Office) to the north, with a view of the Rideau River in the background. There is a significant drop in elevation between the Site and the adjacent properties to the north and south, which becomes apparent when you look from the east side of the Site.



APPENDIX A Site Photographs



Photograph 5: This is the adjacent property to the south, consisting of the apartment (The Seignior Apartments), and underground parking garage. This property is heated by natural gas.



Photograph 6: View looking south towards the vent and fill pipes associated with the apartment buildings. It is interpreted that these pipes connect to an aboveground storage tank in the parking garage, which is used to fuel a backup generator. These pipes are located approximately 10 m away from the property.



APPENDIX A Site Photographs



Photograph 7: View looking south towards the east-facing exterior building wall, showing structural damage to the stairs and foundation (visible cracks).



Photograph 8: View of a heating apparatus found underneath the exterior stairs, with visible electrical input and pipes for liquid input and output. This is thought to be associated with a former swimming pool on Site.



APPENDIX A Site Photographs



Photograph 9: View of the Southeastern corner of the building, showing evidence that the Site has natural gas heating.



Photograph 10: View looking west towards the south-facing exterior wall showing further structural damage. This photograph also shows a utility pole with what is thought to be a source of electricity to the Site (hydro wires). There were no pole-mounted transformers observed on the Site or nearby.



APPENDIX A

Site Photographs



Photograph 11: View looking south towards the adjacent property. This photo shows an air vent, which was releasing air emissions in the vicinity of the south-eastern portion of the Site.



Photograph 12: View looking east towards the eastern portion of the Site (covered by snow). The fence is interpreted to mark the property boundary, and vegetation has filled the slope leading down to the Rideau River. The buildings visible in the distance are on the opposite site of the Rideau River.



APPENDIX B

Regulatory Documentation



FACSIMILE

DATE January 26, 2010

TO City of Ottawa
Development Approvals Division

CC

FROM Hayley Roach

PROJECT No. 11-1122-0017

FAX No. 613-560-6006

TOTAL PAGES 5 (Including cover sheet)

EMAIL nroach@golder.com

REQUEST FOR ENVIRONMENTAL INFORMATION FOR A PHASE I ENVIRONMENTAL SITE ASSESSMENT, 101 WURTEMBERG STREET, OTTAWA, ONTARIO

We are in the process of preparing a Phase I Environmental Site Assessment for the site noted above and are requesting that the City provide information from their files with respect to this site.

As per your requirements we have included the Request for Information – Phase I Environmental Site Assessment form, a disclaimer form, property owner authorization and key plan.

The information that we are requesting includes, but is not limited to, the following:

- Active Orders under the Environmental Protection Act (EPA), the Ontario Water Resources Act (OWRA), and the Pesticides Act (PA)
- Approvals
- Reports relating to environmental concerns
- Records of non-compliance or regulatory concerns
- Dumping infractions, spills or discharges to the environment
- Violations of sewer use or environmental by-laws
- Historic information related to landfill or dumpsites on or in proximity to the property
- Any other environmental information

Your usual prompt attention to this matter is appreciated. Should you have any questions please contact our office.

Golder Associates Ltd.

HR

Hard copy to follow by mail:

Yes No

Please advise immediately if any pages are not received. This transmission is intended only for the recipient(s) names above and contain privileged and confidential information. Any unauthorized disclosure, dissemination or copying of this transmission is strictly prohibited. If you have received this transmission in error, please immediately notify our receptionist by telephone and destroy this transmission. Thank you.

N:\Active\2011\1122 - Contaminated Lands\11-1122-0017 Phase I ESA Clardige 101 Wurtemberg\Fax-002 City Request.doc



Golder Associates Ltd.

32 Steacie Drive, Kanata, Ontario, Canada K2K 2A9

Tel: +1 (613) 592 9600 Fax: +1 (613) 592 9601 www.golder.com

Golder Associates: Operations in Africa, Asia, Australasia, Europe, North America and South America

This form has been prepared by Golder Associates, for client use, with regard to submissions to the City of Ottawa ("City") for environmental related information on the property noted below. It will be used by Golder Associates, who have been retained to carry out a Phase I Environmental Site Assessment.

This form is to be completed by the property owner/agent and forwarded to Golder Associates Ltd. who will then append it with a request for information to the City. The intent of the form is to notify the City that Golder Associates Ltd. is authorised to access the requested environmental information.

.....

Property Location Information:

Civic Address 101 Wurtemberg Street
Ottawa, ONT

Legal Description x Part of lot 6, Plan 43586
and Part of Clarence Street closed
by Bylaw 149-55

Property Contact Information:

Owner x Claridge Residential Inc.

Phone Number x 613-233-6030

Fax Number x 613-233-8290

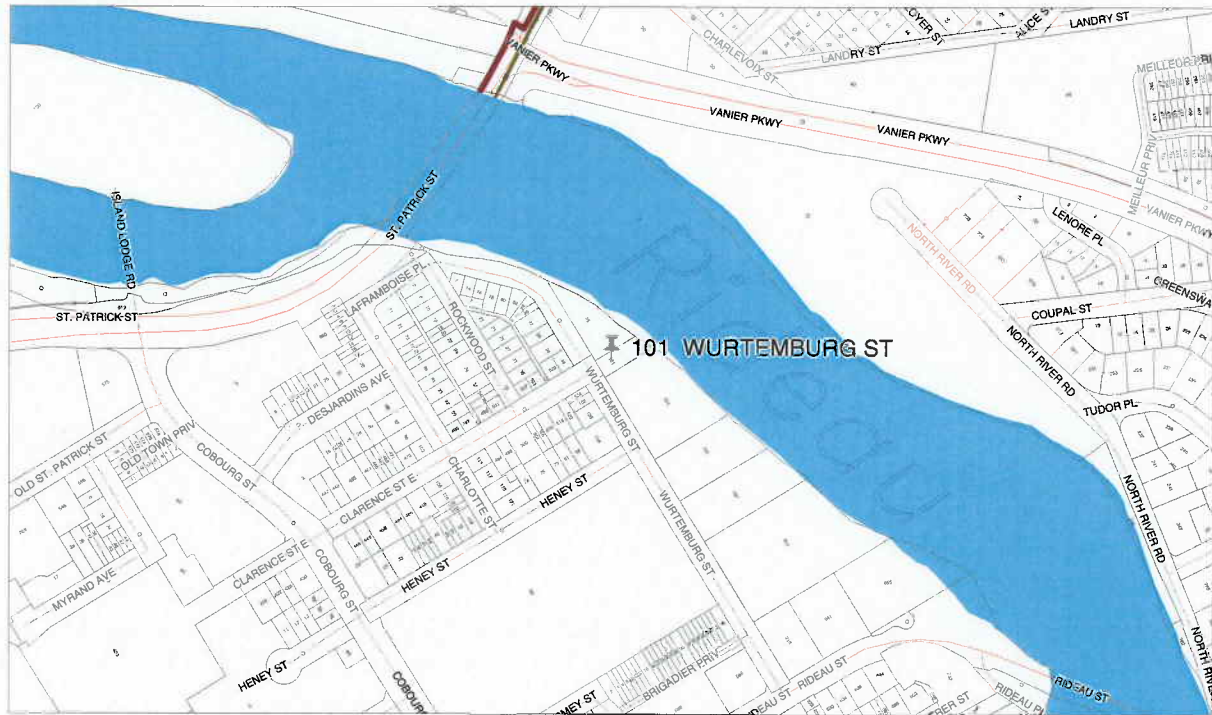
Owner Representative x Jim Burghart

Owner Representative Signature x Burghart

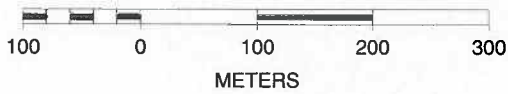
Date x Jan. 26/11

Ottawa

- Roads
- Transportation
- Property
-  Property Parcels
- Surface Water
- Boundaries



SCALE 1 : 6,468



DISCLAIMER
For use with HLUI Database

CITY OF OTTAWA ("the City") is the owner of the HISTORICAL LAND USE INVENTORY ("HLUI"), a database of information on the type and location of land uses within the geographic area of Ottawa, which had or have the potential to cause contamination in soil, groundwater or surface water.

The City, in providing information from the HLUI, to Golder ("the Requester") does so only under the following conditions and understanding:

1. This is a free service offered by the City.
2. The information which is contained in the HLUI has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that such records and sources of information may be flawed. Changes in municipal addresses over time may have introduced error in such records and sources of information. The City is not responsible for any errors or omissions in the HLUI and reserves the right to change and update the HLUI without further notice. The City does not, however, make any commitment to update the HLUI. Accordingly, all information from the HLUI is provided "as is".
3. City staff will perform a search of the HLUI based on the information given by the Requester. City staff will make every effort to be accurate, however, the City does not provide an assurance, guarantee, warranty, representation (express or implied), as to the availability, accuracy, completeness or currency of information which will be provided to the Requester. The HLUI in no way confirms the presence or absence of contamination or pollution of any kind. The information to be provided by the City to the Requester is provided on the assumption that no person shall rely on it without undertaking independent verification of it for any purpose whatsoever and all liability to any such person is denied.
4. The City, its employees, servants, agents, boards, officials or contractors take no responsibility for any actions, claims, losses, liability, judgments, demands, expenses, costs, damages or harm suffered by any person whatsoever including negligence in compiling or disseminating information in the HLUI.
5. Copyright is reserved to the City.
6. Any use of the information provided from the HLUI which a third party makes, or any reliance on or decisions to be based on it, are the responsibilities of such third parties. The City, its employees, servants, agents, boards, officials or contractors accept no responsibility for any damages, if any, suffered by a third party as a result of decisions made as a result of an information search of the HLUI.
7. Any use of this service by the Requestor indicates an acknowledgement, acceptance and limits of this disclaimer.
8. All information collected under this request and all records provided in response to this request are subject to the provisions of the *Municipal Freedom of Information and Protection of Privacy Act*, R.S.O. 1990,c. M56, as amended.

Signed: Hayley Roach Dated: 26 Jan 11
Per: Hayley Roach
(Please print name)
Title:
Company: Golder Associates

CONFIDENTIAL

File No.: 11-1122-0017
Deadline for Response: A.S.A.P.

Phase 1 – Environmental Site Assessment

Request for Information

(Informal Request)*

1. REQUESTER INFORMATION

- a) Name of Requester: Golder Associates
- b) Address of Requester: 32 Steacie Drive
- c) Telephone Number: 613 592-9600
- d) Site Address: Lot- 101 Concession: _____
Street: Wurtemberg Street City/Town: Ottawa
Postal Code: K1N 8Z7
- e) Legal Plan Attached: Yes () No (x)
- f) Site Owner: Claridge Residential
- g) Adjacent Property Owners: Seigniorly Apartments (111 Wurtemberg)
Trade Representative office - Russian Embassy (95 Wrtmberg)
- h) Date of Ownership: Approx 1990
Previous Owner(s): Steven Shulte
Jules Marin
- i) Type of Site: (x) vacant, () residential, () commercial,
(x) other (specify) Boarded-up house
- j) Requestors relationship to Site: Consultant
- k) Date of Previous Request: N/A
- l) Date of Previous ESA: N/A
- m) Information Requested: As per cover page

2. CONFIDENTIALITY

- a) Consent Required: (x) Owner () Tenant () Purchaser () Legal**
- b) Consent Obtained: (x) Owner () Tenant () Purchaser () Legal**

*(If formal MFIPPA request, please forward to Corporate Access and Privacy Coordinator, Clerk's Department)

** (Consent letters must contain the information required, give authorization to requestor, and be dated and signed)

DATE January 26, 2010

TO Ministry of the Environment

CC

FROM Hayley Roach

PROJECT No. 11-1122-0017

FAX No. 613-521-5437

TOTAL PAGES 2 (Including cover sheet)

EMAIL hroach@golder.com

**REQUEST FOR ENVIRONMENTAL INFORMATION FOR A PHASE I ENVIRONMENTAL SITE
ASSESSMENT, 101 WURTEMBERG STREET, OTTAWA, ONTARIO**

We are in the process of preparing a Phase I Environmental Site Assessment for the site noted above. For your reference we have included a key plan showing the location of the study area.

It is requested that the Ministry provide an Index Review Report with respect to the following:

- Active Orders under the Environmental Protection Act (EPA), the Ontario Water Resources Act (OWRA), and the Pesticides Act (PA); and,
- Approvals under Sections 9 and 39 of the EPA as well as Sections 52 and 53 of the OWRA.

Your usual prompt attention to this matter is appreciated. Should you have any questions please contact our office.

Golder Associates Ltd.

HR

Hard copy to follow by mail: Yes No

Please advise immediately if any pages are not received. The document(s) included in this transmission are intended only for the recipient(s) names above and contain privileged and confidential information. Any unauthorized disclosure, dissemination or copying of this transmission is strictly prohibited. If you have received this transmission in error, please immediately notify our receptionist by telephone and destroy this transmission. Thank you.

N:\Active\2011\1122 - Contaminated Lands\11-1122-0017 Phase I ESA Clardige 101 Wurtemberg\Fax-001 MOE Request.doc

Roach, Hayley

From: plal@tssa.org on behalf of publicinformationservices@tssa.org
Sent: January 31, 2011 9:29 AM
To: Roach, Hayley
Subject: RE: TSSA Request for information, 101 Wurtemberg

Hi Hayley:

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please submit your request in writing to Public Information Services via e-mail (publicinformationservices@tssa.org) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Thank you and have a great day!

Prem

"Putting Public Safety First"

Technical Standards and Safety Authority
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, ON M8X 2X4

Toll-Free: 1-877-682-8772

Email: publicinformationservices@tssa.org

Web Site: www.tssa.org

"Roach, Hayley" <Hayley_Roach@golder.com>

01/31/2011 08:55 AM

To "publicinformationservices@tssa.org" <publicinformationservices@tssa.org>
cc

Subject RE: TSSA Request for information, 101 Wurtemberg

From: Roach, Hayley
Sent: January 31, 2011 8:43 AM
To: 'publicinformationservices@tssa.org'
Subject: RE: TSSA Request for information, 101 Wurtemberg

Hi Prem,

Could you please review your records to determine if any bulk fuel underground storage tanks (USTs) were registered on or near the 101 Wurtemberg Street in Ottawa, ON. Also could you check if there are records of fuel spills, accidents or incidents on these addresses.

95 Wurtemberg
101 Wurtemberg
105 Wurtemberg
197 Wurtemberg
201 Wurtemberg

Thank you,

Hayley Roach (B.Sc) | Junior Environmental Scientist | Golder Associates Ltd.
32 Steacie Drive, Kanata, Ontario, Canada K2K 2A9
T: +1 (613) 592 9600 | F: +1 (613) 592 9601 | E: Hayley_Roach@golder.com | www.golder.com

Work Safe, Home Safe

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Thank you.



APPENDIX C

Qualifications of Environmental Assessors



Education

B.Sc. (Honours)
Environmental Science,
University of Ottawa,
Ottawa, Ontario, 2010

Golder Associates Ltd. – Ottawa

Employment History

Golder Associates Ltd. – Ottawa, Ontario

Junior Environmental Scientist (2010 to Present)

Responsible for assisting project managers with Phase I/II ESAs and Risk Assessments. Field activities include groundwater level measurement, groundwater sampling, and office duties include data management, analysis and interpretation and contribution to writing proposals and reports.

Golder Associates Ltd. – Ottawa, Ontario

Environmental Office/Field Assistant (Co-op) (2009)

Assisted project managers with data management, analysis and interpretation, contributed to proposals and report preparation for consulting business, assisted with field duties such as groundwater level measurement, groundwater sampling, searched air photos and street directories for various Environmental Site Assessments and became familiar with various government soil and water quality criteria.

Natural Resources Canada – Ottawa, Ontario

Research Assistant (Co-op) (2008)

Updated print Material Safety Data Sheet inventory on workplace hazards of 500 chemicals used in the laboratory, developed a method for stripping metals from saltwater solution using ion exchange, researched metals and metal compounds in transformation/dissolution studies, performed monthly 7-day toxicity tests with aquatic invertebrate Ceriodaphnia dubia, maintained cultures of freshwater toxicity test species Daphnia magna and C. dubia, measured daily pH, dissolved oxygen, and conductivity of laboratory water samples and gained insight into sustainable development practices in the mining industry.

Environment Canada – Ottawa, Ontario

Research Assistant (Co-op) (2007)

Ensured standard operating procedures and up-to-date quality control documents in support of accreditation, developed standard culture and testing practices for new species Orthonychiurus folsomi, including four 7-day reference toxicity tests, and one 28-day toxicity test, performed monthly 7-day toxicity tests with soil invertebrates Folsomia candida, maintained cultures of soil toxicity test species Eisenia andrei and F. candida, supported maintenance of equipment, including incubators, thermometers, etc.



PROJECT EXPERIENCE – MONITORING PROGRAMS

**Hydrogeological
Monitoring, Leitrim
Wetland**

Ottawa, Ontario, Canada

Duties included: the on-going groundwater level monitoring and fish habitat compensation associated with the Findlay Creek Development.

**Annual Landfill
Monitoring Reports,
Various Clients**
Ontario, Canada

Duties included: groundwater and surface water data management, analysis, interpretation and quality assurance/quality control, contribution to reports and coordination of appendices.

PROJECT EXPERIENCE – ENVIRONMENTAL ASSESSMENT

**PWGSC Phase I/II
Environmental Site
Assessments and Risk
Assessments**

Various Locations,
Canada

Duties included: historical information review, evaluation of information, completing Contaminated Site Modules (CSM), preparing appendices for report submission and project follow-up.

**Phase I/II
Environmental Site
Assessments**

Various Locations,
Canada

Duties included: historical information review, assisting in groundwater sampling and monitoring, analytical data management and interpretation, and contributing to writing reports.

**Stage I Environmental
Assessment, Cataraqui
Crossing**

Kingston, Ontario,
Canada

Duties included: desktop review of available environmental information to identify areas of potential environmental concern in the downtown city of Kingston. Assisted in writing the technical memorandum and presenting findings graphically.

TRAINING

Health and Safety Modules 1 and 2

Golder U, 2009

PUBLICATIONS

**Conference
Proceedings**

Huntsman-Mapila, P., J. Skeaff, M. Pawlak, H. Roach and D. Hardy. 2009. *Adaptation of the OECD T/DP for Metals and Metal Compounds to Marine Systems*. 24th International Applied Geochemistry Symposium, June. Fredericton, Canada.



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TRAINING

Beyond Data: Conceptual Site Models in Environmental Site Assessments

Golder U, 2010

40-Hour Hazwoper

Golder U, 2010

Health and Safety Modules 1 and 2

Golder U, 2009

At Golder Associates we strive to be the most respected global company providing consulting, design, and construction services in earth, environment, and related areas of energy. Employee owned since our formation in 1960, our focus, unique culture and operating environment offer opportunities and the freedom to excel, which attracts the leading specialists in our fields. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees who operate from offices located throughout Africa, Asia, Australasia, Europe, North America, and South America.

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