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REPORT ON

Phase I Environmental Site Assessment Part of Northeast Half and Southwest Half of Lot 25, Concession 10 Geographic Township of Goulbourn City of Ottawa, Ontario

Submitted to:

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REPORT



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Report Number: 10-1121-0176 (1000/2000)

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Executive Summary

Golder Associates Ltd. (hereafter referred to as “Golder Associates”) was retained by Tartan Land Corporation (hereafter referred to as “Tartan”) to conduct a Phase I Environmental Site Assessment (hereafter referred to as “Phase I ESA”) of the property located as part of the northeast half and the southwest half of Lot 25 Concession 10 in Geographic Township of Goulbourn, within City of Ottawa, Ontario (hereafter referred to as the “Site”). The Site is currently occupied by vacant lands in the east portion and densely covered by trees at the west end. The Site is proposed to be used for future residential development.

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 general accordance with the November 2001 Canadian Standards Association document entitled Phase I Environmental Site Assessment, Z768 01 (R2006). The scope of work was described in the Golder Associates Proposal No. P0-1121-0176 dated July 15, 2010.

Based on the information obtained during the Phase I ESA, there are no issues of potential environmental concern identified related to potential subsurface impacts on soil and/or groundwater.



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1.0 INTRODUCTION AND BACKGROUND

1.1 General

Golder Associates Ltd. (hereafter referred to as “Golder Associates”) was retained by Tartan Land Corporation (hereafter referred to as “Tartan”) to conduct a Phase I Environmental Site Assessment (hereafter referred to as “Phase I ESA”) of the property located as part of the northeast half and the southwest half of Lot 25 Concession 10 in Geographic Township of Goulbourn, within City of Ottawa, Ontario (hereafter referred to as the “Site”), as shown on Figures 1 and 2. The Site is currently occupied by vacant lands on the east portion and densely covered by trees at the west side. The Site is proposed to be used for future residential development.

The Phase I ESA was completed in general accordance with the November 2001 Canadian Standards Association document entitled Phase I Environmental Site Assessment, Z768 01 (R2006). The objective of the Phase I ESA is to document current Site conditions and to identify existing and former operations/activities in the site and its vicinity that could potentially impact on construction planning and costs in terms of their potential environmental condition as it pertains to contaminants.

Appendix A includes resumes of Golder Associates staff involved with this Phase I ESA.

1.2 Scope of Work

The Phase I ESA was completed based on the scope of work described in the Golder Associates Proposal No. P0-1121-0176 dated July 15, 2010. The Phase I ESA consisted of the following components:

- A records review;
- Review of a previous Phase I ESA report for the Site;
- Requests to the regulatory bodies (City of Ottawa, MOE and the Technical Standards and Safety Authority);
- A site visit;
- 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 strictly 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.

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.

A “designated substance”, as defined in The Occupational Health and Safety Act (hereafter referred to as “OHSA”) 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.



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 Associates Site visit carried out on November 11, 2010 are as follows:

Site Characteristics	
Use	Currently undeveloped occupied by vacant lands in the east half portion and thick tree coverage in the west half portion.
Address or Location	north of Fernbank Road and west of Shea Road in Ottawa, Ontario
Setting	<p>The Site is bounded by Shea Road to the east and Fernbank Road to the south;</p> <p>The Site's north boundary is defined by the easterly extension of Evelyn Street followed by the parking lot of Goulbourn Recreation Complex;</p> <p>The Site is adjoining residential lands in the west;</p> <p>Two small parcels of land on the south side of the Site are not included in the development; and,</p> <p>Site access is via Shea Road in the east and via the dead end of Evelyn Street or Samuel Mann Avenue in the west.</p>
Legal Description	Part of the northeast half and the southwest half of Lot 25, Concession 10, Geographic Township of Goulbourn, City of Ottawa, Ontario.
Configuration	Irregular shaped, refer to Figure 1 for details.
Services	The Site is currently not developed, therefore, is currently not serviced.
Presence of Fill Material	Several piles of top soil were observed on Site during the Site visit on November 12, 2010.
Other Comments	None
Exterior Areas	
Gravel Areas	None
Landscaped/Grassed Areas	Natural wooded areas are present in the west half of the Site.
Paved Areas	None
Treed Areas	Naturally treed areas are present in the west half of the Site.
Exterior Storage Tanks	None
Other Exterior Observations	The Site is generally flat. The east half of the Site is at grade with Shea Road; it is approximately 1 – 2 m lower along the west Site boundary compared to the residential area to the west.

There are no buildings on Site.



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, 2009);
- 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 within the Site [200 metres (m)], based on the above, is as follows:

Geological Information	
Native Subsurface Soils (expected)	<ul style="list-style-type: none">■ Bedrock (limestone, dolomite and sandstone) in the central part of the Site along the diagonal line from north to south;■ Near shore sediments (fine to medium grained sand) in the east corner of the Site;■ Till, plain with local relief (<5 m) in the east portion of the Site; and,■ Organic Deposits (muck and peat) in the west portion of the Site
Depth to Bedrock (approximately)	<ul style="list-style-type: none">■ 0 – 1 m along the Site diagonal line from north to south;■ 3 – 5 m in the west and east corners of the Site; and,■ 2 – 3 m at other parts of the Site.
Type of Bedrock (expected)	Gull River Formation (interbedded silty dolomite, lithographic to fine crystalline limestone, oolitic limestone, shale, and fine-grained calceous quartz sandstone)
Topography (expected)	The Site is generally flat. The east half of the Site is at grade with Shea Road; it is approximately 1 – 2 m lower along the west Site boundary compared to the residential development to the west.
Regional Groundwater Flow (inferred)	Northwest, towards a creek with unknown name
Nearest Open Water Body	A creek with unknown name approximately 1.6 km northwest of the Site
Prominent Physical Features	None

It should be noted that local groundwater flow may be influenced by underground utilities (i.e., service trenches) and building structures. For example, the gravel pack used around utilities, such as water lines, can act as interceptors and redirect groundwater flow along the direction of the pipe. If a more accurate description of geology, groundwater flow and groundwater quality is required, a subsurface investigation would be necessary.



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3.0 RECORDS REVIEW

3.1 Historical Information Review

Historical information for the Site was obtained from the following sources:

Summary of Historical Information Sources

Aerial Photograph Review

Year	1945	1959	1976	1984	1996	2002	2005	2008
No.	A9558-39	A16525-11	A24332-62	A26459-221	A31734-75	--	--	--
Scale	1:20,000	1:17,000	1:12,000	1:12,000	1:15,000	1:9,700	1:13,600	1:9,700
Source	National Air Photo Library (NAPL)					City of Ottawa eMap website		

Chain of Title Search

Not included in the scope of work

Review of Fire Insurance Plan Records

Source	National Archives, Ottawa
Year(s)	None available for the Site

Review of Street Directories

1999/2000, 2004/2005, 2009/2010

Previous Environmental Report

Report # 03-1120-407 entitled "Phase I ESA, Part of Northeast Half and Southwest Half of Lot 25, Concession 10, Goulbourn, Ottawa, Ontario", prepared for Tartan Development Corporation by Golder Associates, dated February 2003.

3.1.1 Aerial Photograph Review

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

Year Scale	Site	Surrounding Property Direction			
		North	East	South	West
1945 1:20,000	The Site is primarily occupied by agriculture lands with some tree coverage in the northeast and west portions. The two off-site parcels of land are present on the north side of Fernbank Road. A farm and associated building are	Treed land.	Agriculture lands.	Fernbank Road followed by agriculture lands.	Agriculture lands.



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Year Scale	Site	Surrounding Property Direction			
		North	East	South	West
	present in the eastern of the two southern off-site parcels.				
1958 1:30,000	As per 1945.	As per 1945.	As per 1945.	As per 1945.	As per 1945.
1976 1:12,000	As per 1958.	As per 1958.	As per 1958.	As per 1958.	As per 1958.
1984 1:12,000	The Site is occupied by farm lands in the south and thick treed area in the north. The two off-site cut-out parcels of land are visible on the north side of Fernbank Road. A farm and associated buildings are present in the eastern of the two southern off-site parcels.	Densely treed area followed by residential houses.	Agriculture lands and treed area.	As per 1976.	Residential houses.
1996 1:15,000	The Site is primarily occupied by treed lands. A farm and associated building are present in the eastern of the two southern off-site cut-out parcels.	As per 1984.	Densely treed areas and a hydro corridor.	As per 1984.	As per 1984.
2002 1:9,700	As per 1996.	An institution with sports fields is present immediately north of the Site.	As per 1996.	As per 1996.	As per 1996.
2005 1:13,600	As per 2002.	As per 2002.	As per 2002.	As per 2002.	As per 2002.
2008 1:9,700	As per 2005, except that the trees on eastern half of the Site are cleared and that parcel of land is now vacant.	As per 2005.	As per 2005.	As per 2005.	As per 2005.

The review of aerial photographs of the Site indicates that the Site has never been developed. Properties west adjacent to the Site were developed in the 1980's as residential area and land immediately northeast of the Site was developed in early 2000's as institutional area. Trees in the eastern portion of the Site were cleared between 2005 and 2008. The aerial photographs review did not indicate issues of potential environmental concern.



3.1.2 Chain of Title Search

A chain of title search was not included in the scope of work.

3.1.3 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. No fire insurance plans are available for the Site.

3.1.4 Review of Street Directories

Golder conducted a review of relevant and available City Directories available at the National Archives to assess the occupancy history of the Site. There is no civic address registered for the Site. Based on the review of street directories there are no issues of potential environmental concern with regard to the historical occupancy of the surrounding lands.

Street directory listings are based on voluntary responses from property owners and/or occupants. As such, a non-response or non-listing for an address does not necessarily indicate that the address was vacant or unoccupied at that time. Furthermore, municipal numbers are subject to change over time, particularly when large lots of land are legally severed.

3.1.5 Previous Environmental Reports

A previous Phase I ESA report (03-1120-407) for the same property was prepared by Golder Associates for Tartan Development Corporation, dated February 2003 and was reviewed as part of this Phase I ESA. The review of the above-noted report indicated that a suspect area of surficial fill was presented in the west central portion of the Site, adjacent to the dead end of Samuel Mann Avenue. The presence of the fill was an issue of potential environmental concern related to subsurface impacts on soil and/or groundwater.

3.2 Regulatory Information Review

Regulatory information requests and reviews for the Site 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)

MOE 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; and,
- MOE Database on Registered Waste Generators 2001*.

*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.

A formal response from the MOE was received on December 6, 2010. Given that the Site does not have a civic address, the request was made based on the Site's legal description. The response indicated that no Active Orders have been issued for Lot 25 Concession 10, Township of Goulbourn and no Approvals (for air emissions, Waste Management, Water and Municipal/Private/Industrial Sewage) have been issued for Lot 25 Concession 10, Township of Goulbourn.

3.2.2 Technical Standards and Safety Authority Correspondence

The Technical Standards Safety Authority (TSSA) was contacted (refer to copy of correspondence in Appendix B) to determine if any bulk fuel underground storage tanks (USTs) were registered for the Site and for addresses adjacent to the Site where existence of USTs were suspected. In addition, inquiries were made to determine if there are records of fuel spills, accidents or incidents on or near those addresses. 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.

The TSSA responded that there is no record in the database of any fuel storage tanks on the Site and for addresses adjacent to the Site except for a record of an incident report for 1500 Shea Road, the property north of the Site. The incident report was ordered from the TSSA and received by Golder Associates on December 8, 2010. The review of the incident report indicated that a natural gas leak caused by valves not being closed properly occurred at 1500 Shea Road and TSSA was called to scene on April 6, 2001. Based on email correspondence from TSSA, *Class 02* in the incident report refers to "investigation"; *Reason 06* refers to "vapour release" and *Trigger 01* refers to "Fuels Safety Branch". This incident report was made into the TSSA database on July 10, 2004. Details on the incident report is provided in Appendix B.

The occurrence of the natural gas leak does not constitute a potential environmental concern to the Site as natural gas is a vapour and would have been released to the atmosphere and not have impacted the soil or groundwater.

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;



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- 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.

Response from the City was received by Golder Associates on December 7, 2010. Based on the review of the response the following was noted:

- The information obtained from the Internal Department Circulation indicated that there is a waste management facility located at 2301 Carp Road.
- According to the information obtained from the City of Ottawa Historical Land Use Inventory ("HLUI") there are three activities associated with properties located within 50 m of the Site as follows:
 - Emeritus Engraving (stamped, pressed and coated metal products), from 1998 to 1999, at 25 Caribou Avenue, Goulbourn, approximately 15 m west of the Site
 - Ruiter Construction Limited (residential building and development), in 2005, at 5870 Abbott Street East, less than 50 m north of the Site
 - OCCSB – Sacred Heart High School (elementary and secondary education), in years 2000, 2001, 2003 and 2005, at 5870 Abbott Street, Stittsville, less than 50 m north of the Site

The waste management facility is approximately 4.8 kilometres (km) northwest (down-gradient) of the Site and is buffered by various streets, parking lots and underground utilities. Therefore, it is not considered an issue of potential environmental concern to the Site.

Review of the air photos indicated that 25 Caribou Avenue has been a residential house since 1996. It is inferred that Emeritus Engraving is a small scale family business. There is no waste generator number associated with this address. Any waste generated at this location would be in small quantities. In addition, Emeritus Engraving was located down-gradient of the Site. Therefore, it is not considered an issue of potential environmental concern.

The Ruiter Construction Limited in 2005 is located down-gradient of the Site. As such, the likelihood of impacts to the Site is considered low.

There is an Ontario waste generator number (ON0426425) associated with Sacred Heart High School. A search in the MOE Database on Registered Waste Generators (2001) indicated that there is 136 kilograms (kg) of petroleum distillates – ignitable at Sacred Heart High School. This type of waste is commonly found in elementary and secondary education facilities. In Ontario, registered waste generators have recognized hauler and proper means of waste disposal. In addition, Sacred High School is located down-gradient of the Site. Therefore, there is not enough evidence that the identified waste at Sacred Heart High School is potential environmental concern to the Site.

3.2.4 Ontario Ministry of Environment Document Review

MOE Database on PCB Storage Sites, 2000

Based on a search of the MOE database of PCB Storage Sites, there are no registered PCB Storage Sites known to be located within approximately 200 m of the Site.



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Waste Disposal Site Inventory, June 1991

Based on a review of the waste disposal site inventory, there is no active or closed waste disposal site located within 200 m of the Site.

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

A review of the (*Inventory of Coal Gasification Plant Waste Sites in Ontario*) (200 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 200 m of the subject Site.

MOE Database on Registered Waste Generators, 2001

A review of the MOE database on registered waste generators (within 200 m of the Site), indicated that the Site was not registered (using “Shea” and “Fernbank” as the search criteria). Sacred High School (5870 Abbott Street) is a registered waste generator with generator number of ON0426425. Discussion on this facility is provided in detail in Section 3.2.3. It is concluded that this waste generator is not considered an issue of potential environmental concern.

MOE Database on Brownfields Environmental Site Registry – Records of Site Condition October 2004

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



4.0 SITE VISIT

A site visit was carried out by Golder staff on November 12, 2010. Golder was not accompanied during the site visit.

The visit was documented with 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 are noted on Figure 2. Refer to the Site Characteristics table in Section 2.1 for a general description of the Site.

Photographs taken during the site visit are included in Appendix A.

4.1 General Site Observations

The Site is generally flat and at grade with adjacent property in the north, with Shea Road in the east and with Fernbank Road in the south. However, it is approximately 1 – 2 m lower than the residential area to the west. The site is thickly wooded in the western half (Photograph 10) and its eastern half is now cleared of trees with piles of topsoil in preparation for the residential development (Photograph 9). Concern of the source of the topsoil was raised to Mr. Pierre Dufresne at Tartan, who forwarded the message to Mr. Mark Purchase at Thomas Cavanagh Construction. According to Mr. Mark Purchase, the piles observed during the site visit are screened topsoil from on-site. No materials have been brought to Site from outside sources.

Walking trails in a north-south orientation and east-west orientation were observed in the western portion of the Site (Photographs 5 and 6).

In the previous Phase I ESA report, an area of suspect surficial fill was observed in the west central portion of the Site at the dead end of the Samuel Mann roadway and was suspected to be associated with the westerly adjacent residential subdivision. During the site visit on November 12, 2010, no fill pile was observed in that area. There is an approximately 8 m by 3 m gravel area east of the dead end of Samuel Mann Avenue followed by natural slope with thick grass/weeds coverage from Samuel Mann Avenue into the wooded area (Photograph 11). No obvious issues of potential environmental concern (i.e., stains, sheens, or stressed vegetation) were observed at the time of the site visit.

The historical presence of the surficial fill may indicate an issue of potential environmental concern.

4.2 Building

No buildings are currently present on the Site.

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 materials (ACM) in the form of exterior window caulking, roofing materials, fire-stop 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. Subsequent to November 1, 2007 a written asbestos management plan will be required for every 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.

The Site has no buildings. ACMs are generally associated with building functions/material and, as such, ACM is not considered to be an issue of potential environmental concern.

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.

No electrical transformers were observed on the Site. The Site has no buildings. Therefore, the presence of building-related PCBs (switches, capacitors, fluorescent light ballasts, transformers) is not considered to be an issue of potential environmental concern.

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.

The Site has no buildings. UFFI is generally associated with building functions/material and, as such, UFFI is not considered to be an issue of potential environmental concern.

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).

The Site has no buildings. Lead is generally associated with building functions/material and, as such, lead is not considered to be an issue of potential environmental concern.



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.

Since 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. It is understood from several air conditioning companies, that there is a sufficient supply of CFCs and HCFC-22 in Canada for at least the next several years. The federal 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.

The Site has no buildings. ODSs are generally associated with building functions/material and, as such, ODSs are not considered to be an issue of potential environmental concern.

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 (e.g., basements) it can concentrate and become a health hazard.

Given that there are no buildings on the Site; radon is not a current issue of potential environmental concern for the Site. However, the underlying rock type (interbedded silty dolomite, lithographic to fine crystalline limestone, oolitic limestone, shale, and fine-grained calceous quartz sandstone) contains a unit that is associated with the presence of radon gas. Only actual testing of radon gas concentrations in built structures could determine if it is an actual health concern. Radon gas can be managed through appropriate air exchange.

4.2.7 Mercury

The Site has no buildings. Mercury is generally associated with building functions/material (thermostats) and, as such, mercury is not considered to be an issue of potential environmental concern.

4.2.8 Air Emissions

The Site has no buildings. Air emissions are generally associated with building functions and, as such, air emissions are not considered to be an issue of potential environmental concern.

4.2.9 Mould

The Site has no buildings. The presence of mould is not considered to be an issue of potential environmental concern.

4.2.10 Radioactive Materials

The Site has no buildings. The presence of radioactive material would generally be related to building use, and as such, is not considered to be an issue of potential environmental concern.



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 the visit and do not include operational or management systems compliance.

No waste is generated at the Site and no areas of solid waste storage were observed during the site visit.

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 an agreement between the municipality and the facility/company to correct the non-compliant sewer discharges.

The Site is not developed. No water discharge concerns (stains, sheens) were identified or reported at the time of the site visit.

4.5 Odour, Noise and Vibration

Other than the nearby roadways (Shea Road and Fernbank Road), no major sources of odour, noise or vibration were noted during the site visit.

4.6 Electromagnetic Radiation (EMF)

Electromagnetic radiation is generally associated with high voltage power lines. High voltage power lines were observed easterly adjacent to the southern portion of the Site and within approximately 200 m of the central and northern portion of the Site.

4.7 Storage Tanks

4.7.1 Aboveground Storage Tanks (AST)

No aboveground storage tanks were observed on the Site. No evidence of piping associates with former ASTs was observed during the site visit. No spill records on or within 200 m of the Site were found in the TSSA correspondence.

4.7.2 Underground Storage Tanks (UST)

No petroleum or chemical USTs are suspected to be present within the Site. No evidence (filler/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 within the Site. Also, No spill records on or within 200 m of the Site were found in the TSSA correspondence.



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 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.

No issues of potential environmental concern were noted during the site visit with respect to the storage, handling and disposal of hazardous waste within the Site.

4.9 Adjacent Land Use

Based on visual observations during the site visit, adjacent property use is for residential, institutional and recreational purposes. No industrial complexes are present in the immediate vicinity of the Site.

A summary of adjacent land use is as follows:

North

- Sacred Heart High School and Goulbourn Recreation Centre

South

- Fernbank Road followed by agricultural land with a hydro corridor in a northeast-southwest orientation. There are two off-site properties cut out from the site north of Fernbank Road, both surrounded by the southern portion of the Site.

East

- Shea Road followed by undeveloped land and a hydro corridor in the northeast-southwest orientation

West

- Residential area (single houses)



5.0 SUMMARY AND RECOMMENDATIONS

Based on the information obtained during the Phase I ESA, there are no issues of potential environmental concern identified related to potential subsurface impacts on soil and/or groundwater.



6.0 LIMITATIONS AND USE OF REPORT

This report was prepared for the exclusive use of Tartan Land Corporation, and is intended to provide an assessment of the current environmental conditions for the lands in the northeast half and southwest half of Lot 25, Concession 10 in Geographic Township of Goulbourn within City of 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 conditions of the Site encountered at the time of the site visit on November 12, 2010, supplemented by a review of historical information and data obtained by Golder Associates Ltd. as described in this report. 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 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.

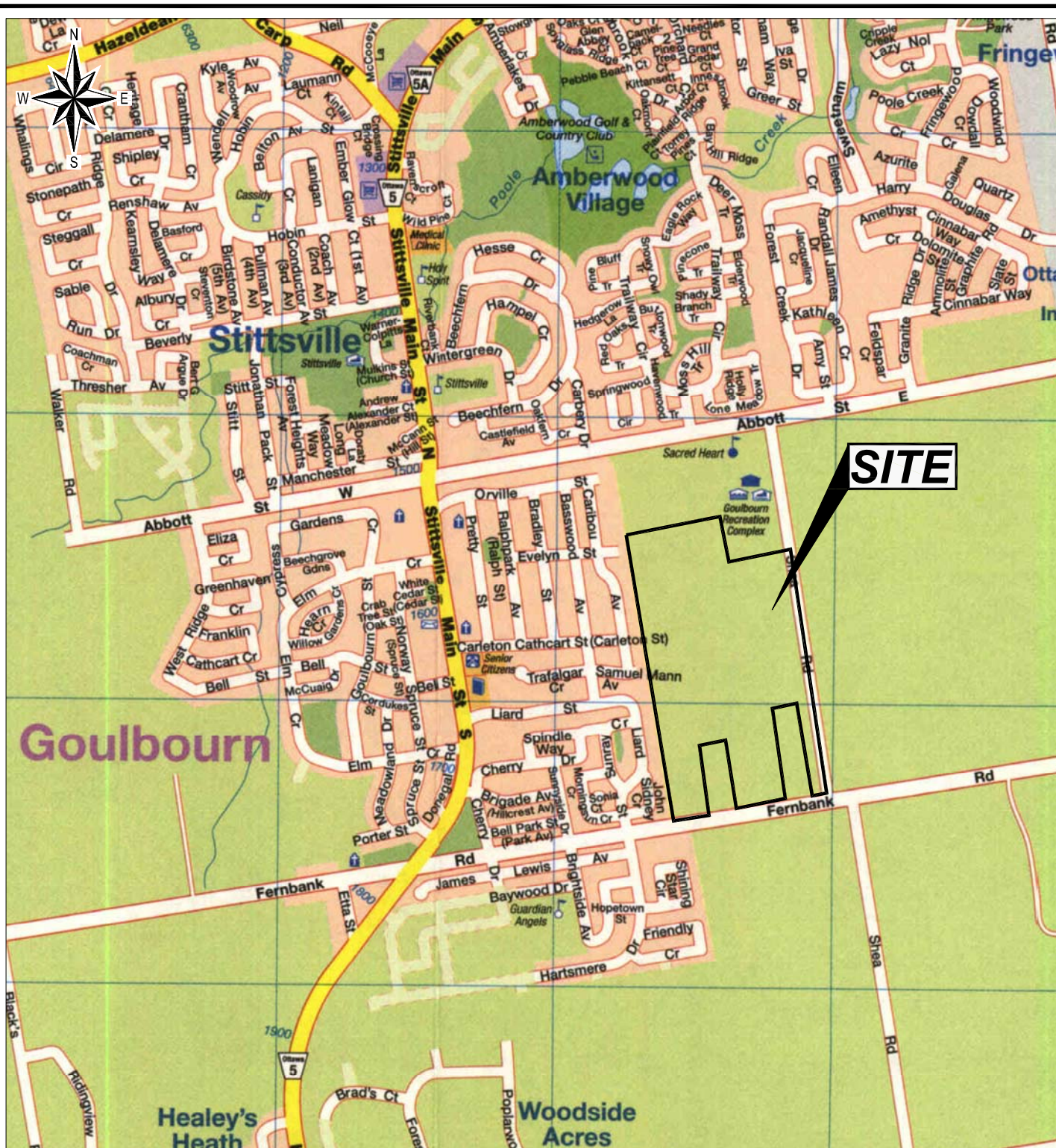
GOLDER ASSOCIATES LTD.

Tian Gou, B.Eng., E.I.T.
Environmental Consultant

Don Plenderleith, M.Sc., P.Eng.
Associate

TG//DHP/am/ca

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NOTE

THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE
ACCOMPANYING GOLDER ASSOCIATES LTD.
REPORT No. 10-1121-0176



SCALE	1:20,000
DATE	24 NOV.2010
DESIGN	
CADD	A.B.D.
CHECK	T.G.
REVIEW	D.H.P.

TITLE

KEY PLAN

FILE No. 1011210176-01.dwg

PROJECT No. 10-1121-0176

REV. 0


PHASE 1 ESA-
PART OF NORTHEAST HALF AND SOUTHWEST HALF OF LOT 25, CONCESSION 10
OTTAWA, ONTARIO

FIGURE

1



NOTE
THIS FIGURE IS TO BE READ IN CONJUNCTION WITH THE
ACCOMPANYING GOLDER ASSOCIATES LTD.
REPORT No. 10-1122-0176

FIGURE 2	TITLE			PROJECT			
	SITE PLAN			PHASE 1 ESA- PART OF NORTHEAST HALF AND SOUTHWEST HALF OF LOT 25, CONCESSION 10 OTTAWA, ONTARIO			
PROJECT No. 10-1122-0176	FILE No. 1011210176-01.dwg	REV.	SCALE	N.T.S.			
DESIGN	T.G.	24 NOV.'10					
CADD	A.B.D.	24 NOV.'10					
CHECK	T.G.	22 DEC.'10					
REVIEW	D.H.P.	22 DEC.'10					



APPENDIX A

Site Photographs



APPENDIX A Site Photographs



Photograph 1: View of Shea Road and high voltage power lines, looking southeast.



Photograph 2: View of the high voltage power lines across Shea Road from the Site's eastern boundary, looking southeast.



APPENDIX A Site Photographs



Photograph 3: View of the northern portion of the Site with Sacred Heart High School and Goulbourn Recreation Complex in the background, looking south.



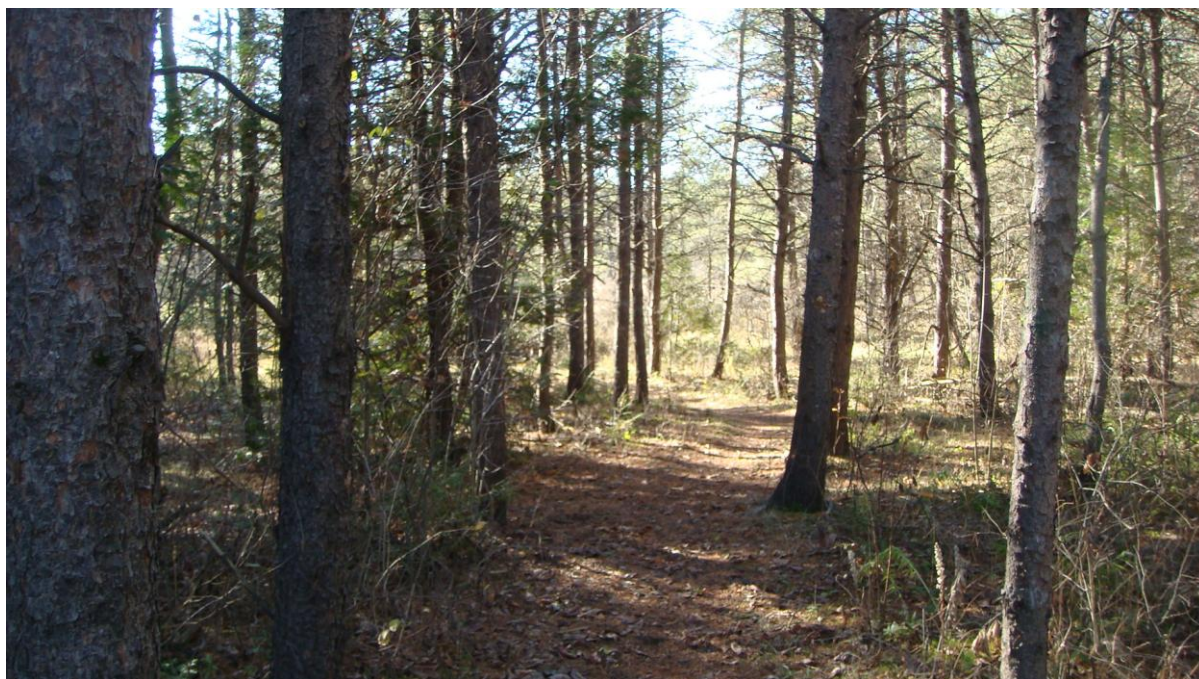
Photograph 4: View across the eastern portion of the Site at the wooded area on the western portion of the site, looking west.



APPENDIX A Site Photographs



Photograph 5: View of the north-south orientated walking trail located in the western portion of the Site, looking north.



Photograph 6: View of the east-west orientated walking trail located in the western portion of the Site, looking west.



APPENDIX A Site Photographs



Photograph 7: View of the eastern off-site portions of land across from the western portion of the Site, looking east.



Photograph 8: View of the south boundary of the Site with Fernbak Road in the background, looking south.



APPENDIX A Site Photographs



Photograph 9: View of the screened topsoil piles on the eastern portion of the Site, looking northeast.



Photograph 10: View of Site's north-western corner from the dead end of Evelyn Street, looking east.



APPENDIX A Site Photographs



Photograph 11: View of the dead end of Samuel Mann Avenue with Site's western portion in the background, looking east.



Photograph 12: Looking south along Fernbank Road.



APPENDIX A Site Photographs



Photograph 13: Looking north along Fernbank Road.

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APPENDIX B

Regulatory Documentation

MODE = MEMORY TRANSMISSION

START=NOV-08 16:28

END=NOV-08 16:29

FILE NO.=388

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-GOLDER ASSOCIATES LTD. -

***** UF-8000 ***** -OTTAWA OFFICE - ***** 613 592 9601- *****



FACSIMILE

DATE November 8, 2010
TO Ministry of the Environment

PROJECT No. 10-1121-0176
FAX No. 613-521-5437

TOTAL PAGES 2 (including cover sheet)

EMAIL tgon@golder.com

FROM Tian Gou
RE: INFORMATION REQUEST
PHASE I ENVIRONMENTAL SITE ASSESSMENT
FERNBANK ROAD AT SHEA ROAD, OTTAWA, ONTARIO

We are in the process of preparing a Phase I Environmental Site Assessment for the property noted above. The subject property is part of northeast half and southwest half of lot 25, concession 10 in the geographic Township of Goulbourn, City of Ottawa. For your reference we have included a site plan showing the location of the site.

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.

Tian Gou, B.Eng., E.I.T.
Environmental Consultant

TG

Hard copy to follow by mail: ☐ Yes ☒ No

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FACSIMILE

DATE November 8, 2010

TO Ministry of the Environment

PROJECT No. 10-1121-0176

FAX No. 613-521-5437

TOTAL PAGES 2 (Including cover sheet)

FROM Tian Gou

EMAIL tgou@golder.com

RE: INFORMATION REQUEST

PHASE I ENVIRONMENTAL SITE ASSESSMENT

FERNBANK ROAD AT SHEA ROAD, OTTAWA, ONTARIO

We are in the process of preparing a Phase I Environmental Site Assessment for the property noted above. The subject property is part of northeast half and southwest half of lot 25, concession 10 in the geographic Township of Goulbourn, City of Ottawa. For your reference we have included a site plan showing the location of the site.

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GOLDER ASSOCIATES LTD.

Tian Gou, B.Eng., E.I.T.
Environmental Consultant

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Golder Associates Ltd.

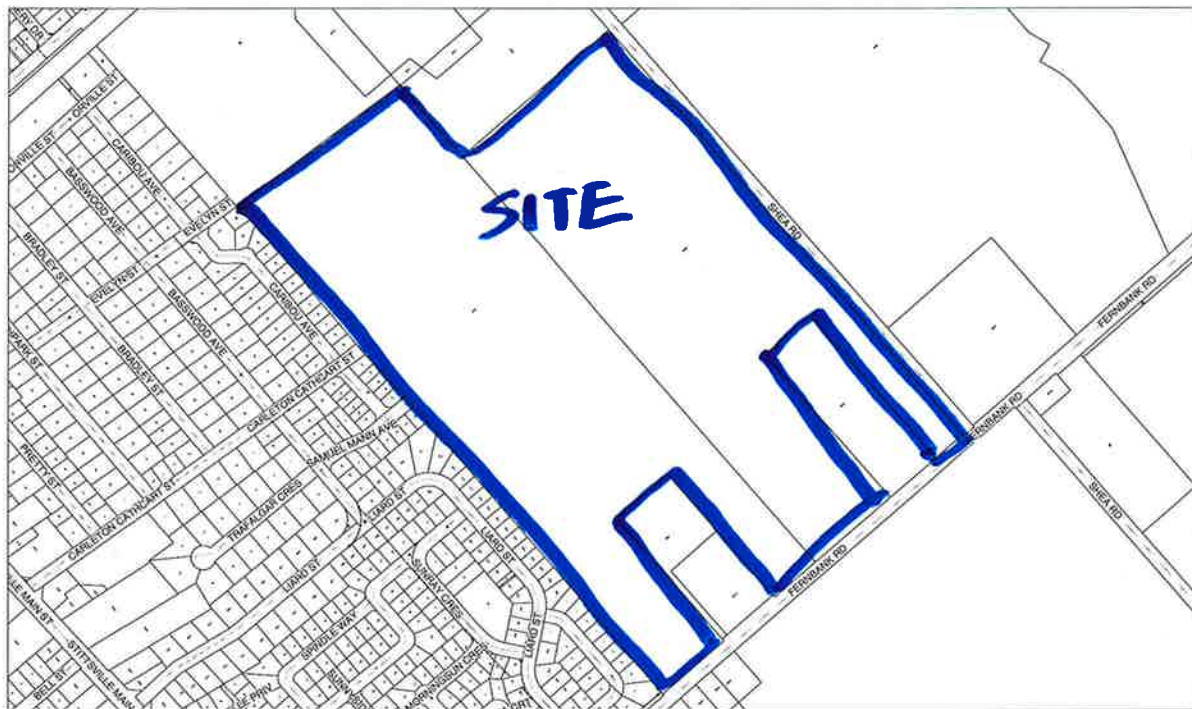
32 Steacie Drive, Kanata, Ontario, Canada K2K 2A9
Tel: +1 (613) 592 9600 Fax: +1 (613) 592 9601 www.golder.com

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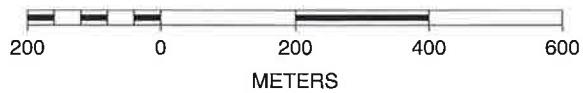
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Ottawa

Roads
Transportation
Property
Property Parcels
Surface Water
Boundaries



SCALE 1 : 11,324



Ministry of the Environment

2430 Don Reid Drive
Ottawa ON K1H 1E1

Tel: (613) 521-3450
Fax: (613) 521-5437

Ministère de l'Environnement

2430, promenade Don Reid
Ottawa (Ontario) K1H 1E1

Tél. : (613) 521-3450
Télec. : (613) 521-5437



OTT File No: **137**

**INDEX REVIEW REPORT
COMMERCIAL/INDUSTRIAL/AGRICULTURAL**

Attention: Tian Gou Golder Associates	Your File: 10-1121-0276 Date Received: November 8, 2010
--------------------------------------------------------	------------------------------------------------------------

PROPERTY OWNER AND LOCATION

Present Owner:	
Past Owners:	
Location:	Municipality: Ottawa
Address:	Lot 25 Concession 10, Township of Goulbourn

INDEX OF NAMES FOR ORDERS

We have searched the <i>Ottawa</i> District Index Record of Active Orders under the Environmental Protection Act (EPA), Ontario Water Resources Act (OWRA) and the Pesticides Act (PA) issued to: and the following information has been found:	
<input checked="checked" type="checkbox"/>	Check here if no Active Orders are outstanding
Date of Search: November 30, 2010	

INDEX OF NAMES FOR APPROVALS

We have requested a search of the Index Record of names of all persons to whom approvals have been issued, maintained by the Director, Approvals Branch and the Regional Director, *Eastern Region*, and the District Manager, *Ottawa District*, under Section 19 EPA and Section 13 OWRA and the following information has been provided :

<u>Type</u>	<u>Number</u>	<u>Issued To</u>	<u>Issue Date</u>
Section 9 EPA (Air)			
Section 39 EPA (Waste Management)			
Section 52 OWRA (Water)			
Section 53 OWRA (Municipal/Private/ Industrial Sewage)			
Other			

☒ Check here if no Approvals have been issued.

Date of Search: November 23, 2010

Please Note:

- 1) The information provided above is based solely on the name(s) of the present and past owners provided by you.
- 2) The Index Record of Names to whom approvals have been issued, maintained by the Regional Director and District Manager, has been searched back to 1993.
- 3) The Index Record of Names to whom approvals have been issued, maintained by the Director of Environmental Assessment and Approvals, has been searched back to 1985.
- 4) If an inspection of the Orders and/or Approvals identified is required please contact this office.
- 5) A search of our records does **NOT** indicate whether there are:
 - other uses for which an approval may have been required, **nor**
 - other uses on the property or in the vicinity that may affect the suitability of the property, for the use proposed to be made of it.If a comprehensive knowledge of the property and the nearby lands and their environmental condition is required, you must examine them and other relevant records yourself, with the aid of a qualified person, if needed.
- 6) **Please advise your colleagues that responses to requests for searches always take some time. As a result MOE may not be able to meet deadlines imposed by other parties on real estate and other transactions.**

Signature: 
Contact Name: Johanne Veilleux
Title: Administrative Assistant

Address: Ministry of the Environment
2430 Don Reid Drive
Ottawa, ON K1H 1E1

Phone: (613) 521-3450 Ext 221

Date: November 30, 2010

***** -COMM. JOURNAL- ***** DATE NOV-09-2010 ***** TIME 14:12 *****

MODE = MEMORY TRANSMISSION

START=NOV-09 14:10

END=NOV-09 14:12

FILE NO.=396

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-GOLDER ASSOCIATES LTD. -

***** UF-8000 ***** -OTTAWA OFFICE - ***** 613 592 9601- *****



FACSIMILE

DATE November 9, 2010

PROJECT No. 10-1121-0176

TO City of Ottawa
Development Approvals Division

FAX No. 613-560-6006

TOTAL PAGES 6 (including cover sheet)

FROM Tian Gou

EMAIL tgou@golder.com

RE: PHASE I ENVIRONMENTAL SITE ASSESSMENT

Part of the Northeast Half and the Southwest Half of Lot 25 Concession 10, Geographic Township of
Goulbourn, City of Ottawa, Ontario.

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

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



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

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DATE November 9, 2010**PROJECT No.** 10-1121-0176**TO** City of Ottawa
Development Approvals Division**FAX No.** 613-560-6006**TOTAL PAGES** 6 (Including cover sheet)**FROM** Tian Gou**EMAIL** tgou@golder.com**RE: PHASE I ENVIRONMENTAL SITE ASSESSMENT****Part of the Northeast Half and the Southwest Half of Lot 25 Concession 10, Geographic Township of
Goulbourn, City of Ottawa, Ontario.**

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

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.

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- Approvals
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- 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.

Tian Gou, B.Eng., E.I.T.
Environmental Consultant

TG

Hard copy to follow by mail: ☐ Yes ☒ No

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n:\active\2010\1121 - geotechnical\10-1121-0176 tartan fernbank ottawa\phase i esa\reg request\city of ottawa request.docx

CONFIDENTIAL

File No.: _____
Deadline for Response: _____

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- see attached Concession: see attached
Street: _____ City/Town: Ottawa
Postal Code: _____
- e) Legal Plan Attached: Yes () No (X)
- f) Site Owner: see attached
- g) Adjacent Property Owners: _____

- h) Date of Ownership: _____
Previous Owner(s): _____

- i) Type of Site: (X) vacant, () residential, () commercial,
() other (specify) _____
- j) Requestors relationship to Site: Consultant
- k) Date of Previous Request: _____
- l) Date of Previous ESA: _____
- m) Information Requested: Refer to first sheet

2. CONFIDENTIALITY

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

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 ASSOCIATES ("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: _____

Per: Tian Gou
(Please print name)

Title:

Company: Golder Associates

Dated: _____

November 9, 2010

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 Not assigned

Legal Description Part of the North East Half and
the South East Half of Lot 25,
conc. 10, geographic twp. of Goulbourn,
City of Ottawa.


Property Contact Information:

Owner 1578051 Ontario Inc and 1384341 Ontario Ltd.

Phone Number 238-2040x240

Fax Number 236-9325

Owner Representative Pierre Dufrene

Owner Representative Signature 

Date 11/9/10

Ottawa





File Number: C10-01-10-0151

December 3, 2010

Tian Gou
Golder Associates
32 Steacie Drive
Ottawa, ON K2K 2A9

Dear Mr. Gou,

**Re: Information Request
5969 & 6041 Fernbank Road, Ottawa, Ontario ("Subject Properties")**

Internal Department Circulation

The Infrastructure Services and Community Sustainability Department has the following information in response to your request for information regarding the Subject Properties:

- The Waste Diversion Branch notes that there is a waste management facility located at 2301 Carp Road, which is less than 5 km from the site.

Search of Historical Land Use Inventory

This acknowledges receipt of the signed Disclaimer regarding your request for information from the City's Historical Land Use Inventory (HLUI 2005) database for the Subject Properties.

A search of the HLUI database revealed the following information:

- There are no activities associated with the Subject Properties.

The HLUI database was also searched for activity associated with properties located within 50m of the Subject Properties. The following information was revealed:

- There are three activities associated with properties located within 50m of the Subject Properties: Activity Number 4503, 11825 and 9695.

A site map has been included to show the location of the Subject Properties as well as the location of all the activities noted above.

*Shaping our future together
Ensemble, formons notre avenir*

City of Ottawa
Infrastructure Services and Community
Sustainability Department
Planning and Growth Management Branch

110 Laurier Avenue West, 4th Floor
Ottawa, ON K1P 1J1
Tel: (613) 580-2424 ext. 14743
Fax: (613) 560-6006
www.ottawa.ca

Ville d'Ottawa
Services d'infrastructure et Viabilité des
collectivités
Direction de l'approbation des demandes
d'aménagement et d'infrastructure

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Télé.: (613) 560-6006
www.ottawa.ca

Please note, as per the HLUI Disclaimer, that the information contained in the HLUI database has been compiled from publicly available records and other sources of information. The HLUI may contain erroneous information given that the records used as sources of information may be flawed. For instance, changes in municipal addresses over time may introduce error. Accordingly, all information from the HLUI database is provided on an “as is” basis with no representation or warranty by the City with respect to the information’s accuracy or exhaustiveness in responding to the request.

Furthermore, the HLUI database and the results of this search in no way confirm the presence or absence of contamination or pollution of any kind. This information is provided on the assumption that it will not be relied upon by any person for any purpose whatsoever. The City of Ottawa denies all liability to any persons attempting to rely on any information provided from the HLUI database.

Please note that in responding to your request, the City of Ottawa does not guarantee or comment on the environmental condition of the Subject Properties. You may wish to contact the Ontario Ministry of Environment for additional information.

If you have any further questions or comments, please contact Kate Goslett at 613-580-2424 ext. 14743 or HLUI@ottawa.ca.

Sincerely,



Michael J. Boughton, MCIP, RPP
Acting Program Manager
Development Review (Suburban Services) - West
Infrastructure Services and Community Sustainability

MB/KG

Attach: 4

cc: File no. C10-01-10-0151

**CITY OF OTTAWA**

HLUI ID: __679E8D

AREA (Square Metres): 755.041

Report: RPTC_OT_DEV0122

Run On: 15 Nov 2010 at: 14:34:03

Study Year
1998**PIN**
044500288**Multi-NAIC**
Y**Multiple Activities**
N

Activity ID: 4503 **Multiple PINS:** N
PIN Certainty: 1 **Previous Activity ID(s) :** 6368
Related PINS: 044500288
Name: EMERITUS ENGRAVING
Address: 25 CARIBOU AVENUE, GOULBOURN
Facility Type: Stamped, Pressed and Coated Metal Products Industries
Comments 1:
Comments 2:
Generator Number:
Storage Tanks:
HL References 1: GGTBD 1998/99
HL References 2:
HL References 3:

NAICS	SIC
332720	304
331490	392
332431	304
332118	304
332210	304
339910	304
332439	304

Company Name

Emeritus Engraving

Year of Operation

c. 1998-1999

**CITY OF OTTAWA**

HLUI ID: __679A4C

AREA (Square Metres): 855.046

Report: RPTC_OT_DEV0122

Run On: 15 Nov 2010 at: 14:35:22

Study Year
2005**PIN**
044500660**Multi-NAIC**
N**Multiple Activities**
N**Activity ID:** 11825 **Multiple PINS:** Y**PIN Certainty:** 1 **Previous Activity ID(s) :****Related PINS:** 044500660**Name:** RUITER CONSTRUCTION LIMITED**Address:** 5870 ABBOTT STREET EAST,**Facility Type:** Residential Building and Development**Comments 1:****Comments 2:****Generator Number:****Storage Tanks:****HL References 1:****HL References 2:****HL References 3:** 2005 Select Phone**NAICS** **SIC**

236110 0

Company Name

RUITER CONSTRUCTION LIMITED

Year of Operation

c. 2005



CITY OF OTTAWA
HLUI ID: __679A4C
AREA (Square Metres): 855.046

Report: RPTC_OT_DEV0122
Run On: 15 Nov 2010 at: 14:35:22

Study Year
2005

PIN
044500660

Multi-NAIC
N

Multiple Activities
N

Activity ID: 9695 Multiple PINS: Y

PIN Certainty: 1 Previous Activity ID(s) :

Related PINS: 044500660

Name: OCCSB - SACRED HEART HIGH SCHOOL

Address: 5870 ABBOTT STREET, STITTSVILLE

Facility Type: Elementary and Secondary Education

Comments 1: SACRED HEART HIGH SCHOOL

Comments 2:

Generator Number: ON0426425

Storage Tanks:

HL References 1:

HL References 2:

HL References 3: 2000 PID

NAICS SIC

611110 0

Company Name

Year of Operation

OCCSB - SACRED HEART HIGH SCHOOL

c. 2000

OCCSB - SACRED HEART HIGH SCHOOL

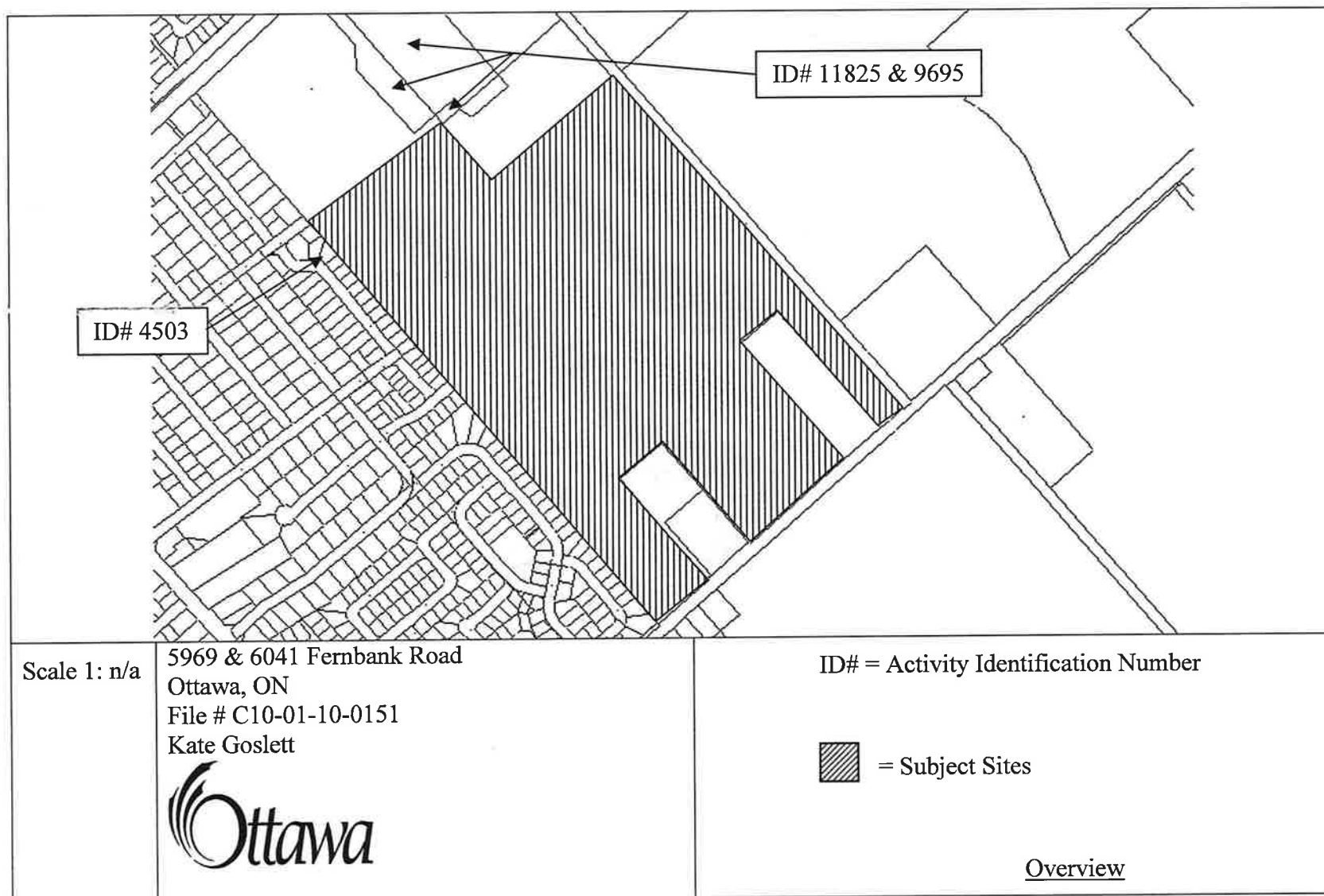
c. 2001

OCCSB - SACRED HEART HIGH SCHOOL

c. 2003

OCCSB - SACRED HEART HIGH SCHOOL

c. 2005



Gou, Tian

From: Gou, Tian
Sent: November 8, 2010 4:40 PM
To: 'publicinformationsservices@tssa.org'
Subject: Lot 25 Concession 10, Goulborun, City of Ottawa

Hello,

We are completing a Phase I Environmental Site Assessment for a site that is part of northeast half and southwest half of lot 25, concession 10 in the Geographic Township of Goulbourn, City of Ottawa. Could you please review your records to determine if any bulk fuel underground storage tanks (USTs) were registered on or near that parcel of land? Also could you check if there are records of fuel spills, accidents or incidents on these addresses.

Thanks very much,

Tian

Tian Gou (B.Eng., EIT) | Environmental Consultant | **Golder Associates Ltd.**
32 Steacie Drive, Kanata, Ontario, Canada K2K 2A9
T: [+1] (613) 592 9600 | **F:** [+1] (613) 592 9601 | **E:** tgou@golder.com | www.golder.com

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Gou, Tian

From: spng@tssa.org on behalf of publicinformationsservices@tssa.org
Sent: November 8, 2010 4:45 PM
To: Gou, Tian
Subject: Re: Lot 25 Concession 10, Goulborun, City of Ottawa

Hi Tian,

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 (publicinformationsservices@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.

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Thank you and have a great day!

Sarah
Public Information Services

"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: publicinformationsservices@tssa.org
Web Site: www.tssa.org

"Gou, Tian" <Tian_Gou@golder.com>

11/08/2010 04:39 PM

To "publicinformationsservices@tssa.org" <publicinformationsservices@tssa.org>

cc

Subject Lot 25 Concession 10, Goulborun, City of Ottawa

Hello,

We are completing a Phase I Environmental Site Assessment for a site that is part of northeast half and southwest half of lot 25, concession10 in the Geographic Township of Goulbourn, City of Ottawa. Could you please review your records to determine if any bulk fuel underground storage tanks (USTs) were registered on or near that parcel of land? Also could you check if there are records of fuel spills, accidents or incidents on these addresses.

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Thank you.

Gou, Tian

From: spng@tssa.org on behalf of publicinformationsservices@tssa.org
Sent: December 1, 2010 5:16 PM
To: Gou, Tian
Subject: Re: 1500 Shea Road and 5870 Abbott Street East, Ottawa, Ontario

Hi Tian,

Thank you for your inquiry.

I have searched the below noted address (addresses) and I have located the following record.

1500 Shea Road, Ottawa has record of an incident report.

For a more detailed report including underground fuel storage tank details and copies of all inspection reports, please submit your request in writing to Public Information Services via e-mail (publicinformationsservices@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.

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Toronto, ON M8X 2X4

Toll-Free: 1-877-682-8772
Email: publicinformationsservices@tssa.org
Web Site: www.tssa.org

"Gou, Tian" <Tian_Gou@golder.com>

12/01/2010 04:59 PM

To "publicinformationsservices@tssa.org" <publicinformationsservices@tssa.org>
cc
Subject 1500 Shea Road and 5870 Abbott Street East, Ottawa, Ontario

Hello,

We are completing a Phase I Environmental Site Assessment for a site with neighbouring properties listed as 1500 Shea Road and 5870 Abbott Street East, City of Ottawa. Could you please review your records to determine if any bulk fuel underground storage tanks (USTs) were registered on these two parcels of land? Also could you check if there are records of fuel spills, accidents or incidents on these addresses.

Thanks very much,

Tian

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Thank you.

Gou, Tian

From: Gou, Tian
Sent: December 1, 2010 5:32 PM
To: 'publicinformationsservices@tssa.org'
Subject: RE: 1500 Shea Road and 5870 Abbott Street East, Ottawa, Ontario

Could you please also check for the following addresses:

5897, 5957, 6015 and 6021 Fernbank Road, Ottawa, Ontario.

Thanks very much,
Tian

Tian Gou (B.Eng., EIT) | Environmental Consultant | **Golder Associates Ltd.**
32 Steacie Drive, Kanata, Ontario, Canada K2K 2A9
T: [+1] (613) 592 9600 | **F:** [+1] (613) 592 9601 | **E:** tgou@golder.com | www.golder.com

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From: spng@tssa.org [<mailto:spng@tssa.org>] **On Behalf Of** publicinformationsservices@tssa.org
Sent: December 1, 2010 5:16 PM
To: Gou, Tian
Subject: Re: 1500 Shea Road and 5870 Abbott Street East, Ottawa, Ontario

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Toll-Free: 1-877-682-8772
Email: publicinformationsservices@tssa.org
Web Site: www.tssa.org

"Gou, Tian" <Tian_Gou@golder.com>

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

12/01/2010 04:59 PM

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Thank you.

Gou, Tian

From: spng@tssa.org on behalf of publicinformationsservices@tssa.org
Sent: December 2, 2010 9:23 AM
To: Gou, Tian
Subject: RE: 1500 Shea Road and 5870 Abbott Street East, Ottawa, Ontario

Hi Tian,

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 (publicinformationsservices@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.

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"Gou, Tian" <Tian_Gou@golder.com>

12/01/2010 05:32 PM

To "publicinformationsservices@tssa.org" <publicinformationsservices@tssa.org>
cc
Subject RE: 1500 Shea Road and 5870 Abbott Street East, Ottawa, Ontario

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Please consider the environment before printing this email.

From: spng@tssa.org [mailto:spng@tssa.org] **On Behalf Of** publicinformationsservices@tssa.org

Sent: December 1, 2010 5:16 PM

To: Gou, Tian

Subject: Re: 1500 Shea Road and 5870 Abbott Street East, Ottawa, Ontario

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Toll-Free: 1-877-682-8772
Email: publicinformationsservices@tssa.org

Web Site: www.tssa.org

"Gou, Tian" <Tian_Gou@golder.com>

12/01/2010 04:59 PM

To "publicinformationsservices@tssa.org" <publicinformationsservices@tssa.org>
cc
Subject 1500 Shea Road and 5870 Abbott Street East, Ottawa, Ontario

Hello,

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Thanks very much,

Tian

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T: [+1] (613) 592 9600 | **F:** [+1] (613) 592 9601 | **E:** tgou@golder.com | www.golder.com

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3300 Bloor Street West
Toronto, Ontario
Canada M8X 2X4
Tel.: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772
www.tssa.org

**Administration and
Customer Services**

**Tel: (416) 734-3570
Fax: (416) 734-3568**

**December 6, 2010
File No: FS 33606**

Tian Gou
GOLDER ASSOCIATES LTD
32 Steacie Drive
KANATA ON K2K 2A9

Dear Tian:


RE: 1500 Shea Road, Ottawa, Ontario – Your Project No: 10-1121-0176

This is with reference to your request and fee of \$50.00 + HST, regarding the above location.

I have attached a copy of TSSA report E095293 pertaining to an incident at the above-mentioned property.

This is all the information we have on this location at the present time.

Yours truly,


Prem Lal
Coordinator Public Information Services

Job Description:	INVESTIGATION- LEAK- E095293- WAYNE PILON		
Job Type:	Incident/Complaint (FS)	Date Created:	Jul 10, 2004
Status:	Complete	Created By:	PILONW
Parent Job:		Date Completed:	Jul 10, 2004
Specific Location:	1500 SHEA RD. OTTAWA		

Details	Processes	Client	Deficiencies	Ranger Client	Facility/Location	Equipment	Fees
---------	-----------	--------	--------------	---------------	-------------------	-----------	------

☒ Show Resolved?

Description	Found By	Date	Resolved By	Date
-------------	----------	------	-------------	------



Technical Standards and Safety Authority

Issued under Ontario's Technical Standards and Safety Act, Fuels Safety Regulations

FS 2004-00 11506

FS 2004-00 145 ON Inspector's Report - Part A

Report No.

E095293

FS INC. 0407.01445

PLEASE PRINT

Location Inspected	
COULBOEN REC. CENTRE	
Address	
1500 SHEA RD.	
City/Town	
OTTAWA	
Postal Code	Tel. No.
Operator's Name	
Licence No.	

Owner's Name	
ENBRIDGE GAS DISTRIBUTION	
Address	
3401 SCHMIDT PARKWAY	
City/Town	
THOROLD, ONTARIO	
Postal Code	Tel. No.
L2V 4Y6	905 641 4856
Fuel Supplier	City
EGS	OTTAWA

Contractor	Registration No.
------------	------------------

OPERATION/SUB	LOC TYPE	POP DEN	FUEL	CLASS	REASON	TRIGGER	ACTION
95	02	01	NATG	02	06	01	---
ACT	REG	DURATION	TRAVEL	BILLABLE	BILL	OCC RATE	CA JSE
TSS act 3000	212/01	2.75	.75	2.75	1 (2) 3	01	01
CON FACT	OCC DATE	OCC TIME	FIELD 1	SITE REM	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	COMPLETED?	<input type="checkbox"/> Yes <input type="checkbox"/> No
04	04/06/01	10:00					

Investigation/Audit Occurrence Summary
INVESTIGATION OF GAS LEAK CALLED TO SPILL RETURN.
2 THE METER SET WITH PILOT REGULATOR NOT SEATING. UTILITY AT SITE CHANGING REGULATOR. NON EMERGENCY. INTERVIEWED EMPLOYEES OF REC. CENTRE. NO TRIP TO SCHOOL. REGULATOR FUNCTIONED BUT COULD NOT CLOSE 100% SALVAGE AMOUNT OF GAS PASSING

Equipment/Appliance/Component	Equipment/Appliance/Component
Type	Type
Description	Description
Manufacturer	Manufacturer
Model	Model
Serial No.	Serial No.
Material	Material
Fuel Input Rating	Fuel Input Rating
Date of Manufacture	Date of Manufacture
Installation Date	Installation Date
Supply Pressure	Supply Pressure
Manifold Pressure	Manifold Pressure

As a not-for-profit regulatory authority, the Technical Standards and Safety Authority operates on a cost recovery basis. An invoice will be issued for this activity.

Client's Signature	Inspector's Name	Badge #	Date of Inspection
REGISTERED 04/06/01	LAWYER PILON	345	04/06/01

Gou, Tian

From: tjenkins@tssa.org on behalf of Fuels_Technical_Services@tssa.org
Sent: December 21, 2010 8:10 AM
To: Gou, Tian
Subject: Re: FW: 1500 Shea Rd, Ottawa
Attachments: 4736_001.pdf

Technical Service Advisor
TSSA, Fuels Safety Program, Technical Services
tel. 416 734-3351 | fax. 416 231-7366 | fuels_technical_services@tssa.org | www.tssa.org

"Gou, Tian" <Tian_Gou@golder.com>

To "Fuels_Technical_Services@tssa.org" <Fuels_Technical_Services@tssa.org>

cc

12/10/2010 03:43 PM

Subject FW: 1500 Shea Rd, Ottawa

Hello,

I have been directed to ask some questions that I had regarding the Inspection Report E095293 (attached).

I would like to confirm the date of occurrence. Based on the form, the OCC DATE is "04/06/01". There is no date format specified in the report. Is it in 2001? **-OCC stands for Occurrence therefore the occurrence date is listed on the report as OCC DATE.**

Secondly, could you please provide details on the class, reason and trigger of the incident (circled in blue in the attached file). **-Class 02 refers to "investigation". Reason 06 refers to "vapour release" and Trigger 01 refers to "Fuels Safety Branch".**

Thank you very much and have a nice weekend,

Tian

Tian Gou (B.Eng., EIT) | Environmental Consultant | **Golder Associates Ltd.**
32 Steacie Drive, Kanata, Ontario, Canada K2K 2A9
T: [+1] (613) 592 9600 | **F:** [+1] (613) 592 9601 | **E:** tgou@golder.com | www.golder.com

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From: spng@tssa.org [<mailto:spng@tssa.org>] **On Behalf Of** publicinformationservices@tssa.org
Sent: December 10, 2010 10:23 AM
To: Gou, Tian
Subject: RE: 1500 Shea Rd, Ottawa

Hi Tian,

Thank you for your message that you left on Prem's voicemail yesterday.

I recommend that you direct any technical-related questions about our reports to Fuels_Technical_Services@tssa.org

If you can scan the inspection report, and list out your questions, they will be more than happy to help.

Hope this helps Tian!

Thank you and have a great day!

Sarah Png
Public Information Services

"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: publicinformationsservices@tssa.org

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Thank you.



APPENDIX C

Qualifications of Environmental Assessors



Education

*Bachelor of Engineering
Environmental with High
Distinction, Carleton
University, Ottawa, Ontario,
2008*

Certifications

*Engineer-in-Training,
Association of Professional
Engineers of Ontario*

*First Aid and CPR Level A,
2008*

Languages

English – Fluent

*Chinese (Mandarin) –
Fluent*

Golder Associates Ltd. – Ottawa

Career Summary

Ms. Tian Gou is an Environmental Professional with Golder in Ottawa. She holds a B.Eng. degree with High Distinction from the Department of Civil and Environmental Engineering at Carleton University. She is a registered Engineer-in-Training with Professional Engineers Ontario. Tian has been involved in various waste management and other environmental projects. Tian has been responsible in managing data sets for waste management and geochemical projects. Her duties also include laboratory coordination, data analysis/interpretation and report writing. In addition to waste management and geochemical work, Tian has experience in Phase I and Phase II environmental site assessments, and her experience includes assisting borehole drilling, groundwater monitoring well installation and soil, and groundwater sampling.

Employment History

Golder Associates Ltd. – Ottawa, Ontario

*Environmental Office and Field Assistant then Junior Environmental Consultant
(2006 to Present)*

Responsibilities include: providing technical support to senior project managers for completion of waste management and other environmental/hydrogeological projects, including Phase I and Phase II Environmental Site Assessment (ESAs), groundwater monitoring, and monitoring compliance of landfills; field work coordination, report writing and report assembly; assisting field activities including oil-water separator investigations and groundwater investigations, monitoring and pumping tests; data management and interpretation for mining, waste management and risk assessment projects; performing data management and interpretation including tabulating data, screening data against relevant standards, verifying data and preparing figures; performing bench-scale laboratory tests on wastewater treatment; and, interpretation and application of Provincial and Federal environmental regulations.

Carleton University – Ottawa, Ontario

Research Assistant (2008)

Worked individually to construct a database structure for a Light-duty Vehicle Emission project. Utilized MS Access to develop the database and calculated descriptive statistics. Practiced research skills and database management skills.



PROJECT EXPERIENCE – GEOCHEMISTRY

**Canadian Royalties
Inc.**
Québec, Canada

Assisted in data compilation and analysis to assess acid generation and metal leaching of mine waste materials from static testing for nickel and copper mine project in northern Quebec. Project work included assisting in sample selection, management of chemistry data, and reporting of data in support of mine waste management plan development.

**Orezone Resources
Inc.**
Esskane, Burkina Faso

Assisted in laboratory coordination, chemical data compilation and analysis, and report writing for a gold mine project in Burkina Faso. Duties included tabulating data and assessing acid generation and metal leaching of mine waste materials from static testing drafting of static analysis report in support of mine waste management plan development and water quality predictions.

**Les Mines Opinaca
Ltée / GoldCorp Inc.**
Québec, Canada

Assisted in characterization program for assessing acid generation and metal leaching of mine waste materials including static and kinetic tests (on-going) for a proposed gold project in the eastern part of the Opinaca Reservoir of the James Bay area of Québec. Compiled mine waste chemistry data and compared against Québec Directive 019 based on the classification of the mine waste products determined from their chemical characteristics. Assisted in final static test report preparation.

Iamgold Corporation
Ecuador

Participated in mine waste characterization program for a gold-copper-silver underground mine located in south-central Ecuador. Project work included management of laboratory testing and data, prediction of waste geochemical behaviour, selection of samples for kinetic testing and preparation of static report in support of mine waste management plan development and water quality predictions.

**Comaplex Minerals
Corporation**
Nunavut, Canada

Participated in mine waste characterization program for gold mine project. Duties included laboratory coordination, data management, sample selection for kinetic testing, mineralogy test and NAG test, prediction of geochemical behaviour of wastes, and preparation of static test report (on-going).

PROJECT EXPERIENCE – ENVIRONMENTAL

**Phase I/II
Environmental Site
Assessments**
Various Locations

Specific duties have included historical reviews, site visits, project co-ordination and report writing, assisting in groundwater and surface water sampling and monitoring and data management and interpretation.

**Hydrogeological
Monitoring, Leitrim
Wetland**
Ottawa, Canada

Conducted the on-going bi-weekly groundwater monitoring of the Leitrim Wetland in Ottawa during the construction of a nearby residential subdivision. The groundwater data is analyzed on a bi-weekly basis and compared with the precipitation and groundwater pumping records in the construction area to determine the impacts of the construction on the wetland.



**Central Frontenac
Landfill Monitoring**

Township of Central
Frontenac, Canada

Specific duties included laboratory coordination, data compilation and management, and reporting on groundwater and surface water monitoring results and environmental compliance for three closed landfill sites in the Township of Central Frontenac.

**Eastern Ontario
Landfill**

Township of North
Stormont, Canada

Monitoring data management including compiling data from more than 60 groundwater monitoring wells and 6 leachate monitors, site compliance assessment, preparation of annual report on monitoring and operations, including coordination of efforts from various 3rd parties and overall project management.

WSI Navan Landfill

Ottawa, Canada

Compilation of quarterly groundwater and surface water monitoring data from more than 50 groundwater monitoring wells and 14 surface water monitoring wells, as well as quarterly landfill gas measurements, water quality interpretation and assessment of site compliance with applicable MOE guidelines and standards.

Springhill Landfill

Gloucester, Canada

Compilation of quarterly monitoring data from a large network of groundwater and surface water monitors, water quality interpretation and assessment of site compliance, report writing.

TRAINING

WorkSmart Campus Health & Safety Modules 1,2,3

2008

Workplace Hazardous Materials Information System (WHMIS)

2006

Health and Safety Training Module 1, 2 and 3

Golder U, 2006, 2007 and 2010

EQuIS training

Golder U, 2008

Transportation of Dangerous Goods

2006

City of Ottawa Planning Primer

2007-2009

PROFESSIONAL AFFILIATIONS

Member, Air and Waste Management Association, Ottawa Valley Chapter



Education

B.Eng. Geological Engineering, Ecole Polytechnique de Montreal, Montreal, Quebec, 1990

M.Sc. Geophysics, Specialization in Earth Electrical Resistivity, University of British Columbia, Vancouver, British Columbia, 1983

B.Sc. Geophysics, Honours, University of British Columbia, Vancouver, British Columbia, 1980

Certifications

Registered as ing. with l'Ordre des ingénieurs du Québec (OIQ)

Registered as P.Eng. with the Professional Engineers of Ontario (PEO)

Languages

English – Fluent

French – Fluent

Golder Associates Ltd. – Ottawa

Career Summary

Mr. Don Plenderleith, is an Associate and senior project manager at Golder, Ottawa with 16 years of experience in conducting assessment and remediation of contaminated sites. He is a geological engineer with a M.Sc. in geophysics. He has worked extensively on federal sites throughout his career, and manages approximately 10 environmental projects per year under Golder's Standing Offer Agreement with PWGSC-Environmental Services in the National Capital Region. His experience related to drinking water includes preparing a manual for use at the Department of Foreign Affairs' diplomatic properties that treat their own potable water. The manual includes drinking water sampling procedures, water lab set-up, procedures for using a Hach Portable Water Test Lab, and appropriate actions to take when various parameters exceed their limits. Mr. Plenderleith leads Golder's national client service team for the federal government. Mr. Plenderleith has his Secret Security Clearance.

Employment History

Golder Associates Ltd. – Ottawa, Ontario

Associate, Senior Project Manager and Federal Client Service Team Leader (2000 to Present)

Responsible for: federal government client development, project management and technical direction of a variety of environmental projects from the Ottawa office. Mr. Plenderleith's key expertise includes: contaminated site assessment and remediation, peer-reviews of contaminated site work, environmental compliance audits, and providing advice to property managers regarding property acquisition and divestitures. Mr. Plenderleith is Golder Associates' Ottawa coordinator for projects with the Canadian federal government. Contaminated site experience includes: Phase I and II ESAs and site remediation projects at military bases, power generating facilities, petroleum sites, residential properties, railway lands, and other industrial and commercial properties.

Conor Pacific Environmental Technologies Inc. – Ottawa, Ontario

Project Manager (1995 to 2000)

Responsibilities included managing personnel on environmental assessments, managing several key client accounts and developing new business in the National Capital Region, performing environmental compliance audits and Certificate of Approval related work at a variety of industrial facilities in Ontario and Québec, providing technical review of projects (hydrogeology, site assessment, and remediation).

Lupien, Rosenberg & Associates Inc. – Montreal & Ottawa

Branch Manager/Project Manager (1993 to 1995)

Responsibilities included new business development, and participating in environmental investigations at major rail yards in North Bay, Sudbury, Hamilton,



and Montreal. Also performed a mercury vapour survey and formulated a mercury remediation and decommissioning program at a dental alloys plant.

Hydrosult Inc. – Montreal, Canada & Jakarta, Indonesia

Project Engineer (1991 to 1992)

Worked on international development projects for Canadian International Development Agency (CIDA) in a building within the Ministry of Public Works capacity - Water Resources Sector, Government of Indonesia. Responsibilities included analyzing precipitation, stream flow, and water use data to develop the water balance for two Indonesian provinces. Throughout the project Mr. Plenderleith was partnered with an Indonesian engineer.



PROJECT EXPERIENCE – MANAGEMENT EXPERIENCE

**Contaminated Site
Reporting and Review
for DND**
Ottawa, Ontario, Canada

Managed multiple projects for DND's Director General Environment, related to the financial reporting of DND's contaminated sites. He managed the EcoNet validation project in 2006, in which the systems and procedures by which site cost and liability information is input to DND's Contaminated Site database, Econet. The 5 Wing Goose Bay remediation project was reviewed in that exercise. In 2008 he assisted DND in producing the 2008 update of their Contaminated Sites Management Plan (CSMP) for Treasury Board submission. Nine divisional CSMPs, including one covering Goose Bay, were reviewed, summarized and incorporated into the departmental CSMP.

**Project Management
Tool for Contaminated
Sites - PWGSC**
Ottawa, Ontario, Canada

Conducted the R&D for two of the tools (Status Reporting and Risk Management), and is one of the facilitators who present these tools to federal project manager country-wide.

**Environmental
Standing Offer
Management - PWGSC**
Ottawa, Ontario

Managed Golder's Environmental Standing Offer with PWGSC in the National Capital from 2001 to present. He is the first point of contact, forms project teams, performs senior review, and is accountable for Golder's performance to PWGSC.

**Contaminated Site
Management Plans -
DFAIT**
Ottawa, Ontario, Canada

Prepared 5-year CSMPs for the Department of Foreign Affairs' in 2003 and 2008. The work involved reviewing environmental site investigation reports, selecting and prioritizing sites for follow-up work, and preparing the portfolio-wide five-year budgets and schedules for their contaminated sites program.

**Contaminated Site
Reviews - Office of
Auditor General**
Ottawa, Ontario, Canada

As Project Manager and head reviewer for annual reviews of liability estimates on selected federal contaminated sites for the OAG for the past 7 years, Mr. Plenderleith has reviewed the liability estimates of many of the largest federal contaminated sites, including the Survival Tank Farm at 5 Wing Goose Bay.

PROJECT EXPERIENCE – GOVERNMENTAL TECHNICAL ASSISTANCE

**Technical Assistance
to Foreign Affairs
(2002-2003)**
Ottawa, Ontario, Canada

Mr. Plenderleith was out-sourced from Golder to the Canadian Department of Foreign Affairs and International Trade (through Golder's Standing Offer with PWGSC) for a period of 7 months to develop their Contaminated Sites Management Plan for use at Canadian diplomatic properties worldwide, and to serve as an in-house technical resource regional maintenance officer for resolving environmental issues at these properties.



PROJECT EXPERIENCE – AUDITS/PROGRAM REVIEWS

**Contaminated Site
Reviews for the Office
of the Auditor General
(2002-present)**
Ottawa, Ontario, Canada

Mr. Plenderleith leads a team that performs annual reviews of the quality of liability estimates at federal contaminated sites and the degree of compliance with federal environmental policies. Proprietary audit criteria have been developed by Golder for these reviews. The Office of the Auditor General uses this information to gauge the degree of uncertainty in environmental liabilities estimates.

PROJECT EXPERIENCE – ENVIRONMENTAL SITE ASSESSMENT AND REMEDIATION

**Phase I and II
Environmental Site
Investigation and
Designated
Substances
Assessment**
Kabul, Afghanistan

Project Manager and on-site engineer for a complete environmental investigation of a 0.8 ha property in central Kabul that the Canadian Government was considering for their new diplomatic mission. The Phase I included meeting and gathering information from Afghan government officials, academic personnel and local contractors. For the Phase II component, Afghan contractors were hired to perform test pits across the property from which soil was sampled and analyzed, existing on-site water wells were also sampled. A detailed sampling of building materials was performed to test for lead based paint, and asbestos in the on-site structures for the Designated Substances Assessment.

**Phase II, and III
Environmental Site
Assessment**
Connaught Ranges,
Ottawa, Canada

Project Manager for a Phase II-III environmental site investigation of a former landfill at DND's Connaught Ranges. Golder worked very closely with DND's demilitarization specialists who co-monitored all of the intrusive investigations. Due to anecdotal evidence of this landfill possibly containing chemical or biological weapons or ordnance, all soil samples were pre-screened for military contaminants before they were screened for environmental contaminants. A quantitative human and ecological risk assessment was performed. A remedial options analysis was performed, and a remedial action plan was developed for the selected option.

**Supplemental Phase I
and Phase II
Environmental Site
Assessments**
CFB Uplands, Ottawa,
Canada

Project Manager for a set of Phase II environmental site investigations of former military lands at Uplands, near to Ottawa's airport. These environmental investigations were of a former pipeline corridor for jet fuel from a tank farm to a fuel dispensing area, and of a suspected construction waste landfill at the end of one of the runways.

**Phase II, and III
Environmental Site
Assessment**
Fitzroy Harbour, Ontario,
Canada

Project Manager for a multi-phase multi-year environmental program at Ontario Power Generation's Chats Falls Generating Station. The project involves Phase II ESAs at i) a transformer yard and former insulating oil tank rack; ii) a former rail spur and oil pit; iii) a former landfill; and, iv) various areas where a mine waste rock had been used as fill. The individual zones were characterized, and remedial options were reviewed for each one. Certain impacted soil areas were remediated via the dig and haul method, others were addressed via a Level I or Level II Site Specific Risk Assessment.



**Phase II Environmental
Site Assessments**
Hull, Québec, Canada

Project Manager for Phase II ESAs of Brewery Creek Lands in Hull in 1998 for PWGSC, Environmental Services. Four sectors of land bordering Brewery Creek were investigated by drilling and/or test pits and sediment sampling in the creek. Suspected contaminants were related to the former industrial land use along Brewery Creek in the early 20th century and two more recent fuel handling and storage facilities. Each area was investigated for contaminants consistent with its former vocation. At the former fuel storage area, soil and groundwater impact was discovered. Further assessment and screening of remediation and risk assessment/management was recommended at this area. The other areas had minor on-shore impacts likely attributable to industrial fill.

**Sets of Phase I
Environmental Site
Assessments**
Ottawa, Ontario & Hull,
Québec, Canada

Project Manager for sets of multi-site Phase I ESAs in 1998, 2000 and 2001 for the National Capital Commission (NCC). These three portfolios of 6 to 10 sites each consisted of a diverse grouping of sites from the NCC's land holdings. Sites ranged from historic properties in the Byward Market area, to farmland in the greenbelt. The Phase I ESAs included the standard CSA Z768-94 elements plus designated substances assessments and environmental compliance reviews.

**Site Assessment –
1999-2000 for CP Rail**
Ottawa, Ontario, Canada

Project Manager of a multi-phase environmental site assessment of light petroleum hydrocarbon-impacted land in the Hurdman Yard, adjacent to a former heating oil distribution terminal. The project involved intensive field sampling program that was co-monitored by two other consultants and representing CP Rail in lawyer-mediated negotiation sessions.

**Emergency Response -
2000 for CP Rail**
Tichborne, Ontario,
Canada

Project Manager of an emergency response at the site of a fire on a track maintenance vehicle. Responsible for ensuring that all of the required authorities were contacted, and for testing soil surrounding the site of the fire and making recommendations on soil management.

PROJECT EXPERIENCE – ENVIRONMENTAL ASSESSMENTS, PHASE I & II

**Phase I ESA - 1990 to
Present**
Eastern Ontario,
Western Québec,
Canada

Project Manager for in excess of 100 Phase I Environmental Site Assessments. Assessments included building inspections for asbestos, PCB and UFFI, review of fire insurance plus airphotos and historic reports. Clients included GE Capital, National Capital Commission, O&Y Enterprise Properties, CBC, General Motors, and Ottawa-Carleton Mortgage.

**Phase II ESA - 1989 to
Present**
Eastern Ontario,
Western Québec,
Canada

Project engineer for in excess of 50 Phase II Environmental Site Assessments including former service stations, garages and industrial facilities. Phase II ESAs were valued from \$5,000 to \$30,000.



TRAINING

Project Management Professional (PMP) Exam Preparation

PMI, 2004

OSHA 40-hr Contaminated Sites Operations Health and Safety Training

2001

Workshop: Environmental Management System Issues in Government, Pitfalls in Contaminated Site Assessment & Remediation

Ministry of the Environment, 2000

Ontario's 3Rs Regulations, Waste Audits and Work Plans

Ministry of the Environment, 1995

Ontario's Environmental Protection Act (EPA) Training

Ministry of the Environment, 1994

Remediation Techniques for Contaminated Sites, Continuing Education

Ecole Polytechnique de Montreal, 1992

PROFESSIONAL AFFILIATIONS

Board Member, Air & Waste Management Association, Ottawa Valley Chapter

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. 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 now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

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