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FINAL

Phase I Environmental Site Assessment

Perth and Ottawa Streets Development Village of Richmond Ottawa, ON

MATTAMY HOMES

PROJECT NO. 1026950

Jacques Whitford

An Environment of Exceptional Solutions

Des solutions exceptionnelles Un environnement de qualité

PROJECT NO. 1026950

REPORT TO Mattamy Homes

123 Huntmar Drive Ottawa, ON K2S 1B9

FOR Phase I Environmental Site Assessment

ON Perth and Ottawa Streets Development

Village of Richmond

Ottawa, ON

06/29/2007

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Table of Contents

Executive Summary	1
Executive Summary	2
Site Description and Current Operations	2
Records Review	2
Site Visit/Interviews	2
Conclusions	2
Phase I Environmental Site Assessment	4
1.0 General Information	5
2.0 Introduction	6
2.1 Objectives	6
2.2 Scope of Work	6
2.3 Regulatory Framework	7
3.0 Records Review	8
3.1 Information Sources	8
3.2 Previous Reports	
3.3 Regulatory Information	9
3.4 Physical Setting	. 10
3.4.1 Surficial Geology	10
3.4.2 Surface Water Drainage	10
3.4.3 Topography and Regional Drainage	10
3.4.4 Bedrock Geology	
4.0 Site Description	
4.1 Property Information	
4.2 On-Site Buildings and Structures	11
4.3 Historical Land Use	11
5.0 Site Visit Findings	
5.1 Current Site Operations	12
5.2 Waste Generation and Storage	
5.2.1 Solid and Liquid Wastes	
5.2.2 Drains, Sumps, Septic Systems and Oil Water Separators	
5.2.3 Air Discharges and Odours	
5.3 Fuel and Chemical Storage	. 12
5.3.1 Underground Storage Tanks (USTs)	
5.3.2 Aboveground Storage Tanks (ASTs)	12
5.3.3 Other Storage Containers	12



Table of Contents

	5.4 Building Systems/Equipment	. 12
	5.4.1 Heating and Cooling Systems	.12
	5.4.2 Hydraulic Equipment	. 13
	5.5 Exterior Site Observations	. 13
	5.5.1 Surface Features	.13
	5.5.2 Fill Materials	. 13
	5.5.3 Wells	.13
	5.6 Hazardous Building Materials	. 13
	5.6.1 Asbestos-Containing Materials (ACMs)	. 13
	5.6.2 Polychlorinated Biphenyls (PCBs)	.14
	5.6.3 Lead-Based Materials	. 14
	5.6.4 Urea Formaldehyde Foam Insulation (UFFI)	.14
	5.6.5 Ozone-Depleting Substances (ODSs)	.14
	5.7 Special Attention Items	. 15
	5.7.1 Radon Gas	. 15
	5.7.2 Microbial Contamination (Mold) and Indoor Air Quality	.15
	5.7.3 Electromagnetic Frequencies (EMFs)	. 15
	5.7.4 Noise and Vibration	. 15
	5.8 Adjoining Property Information	15
	5.9 Client-Specific Items	. 17
6	.0 Conclusions and Recommendations	. 18
7	0 Closure	19

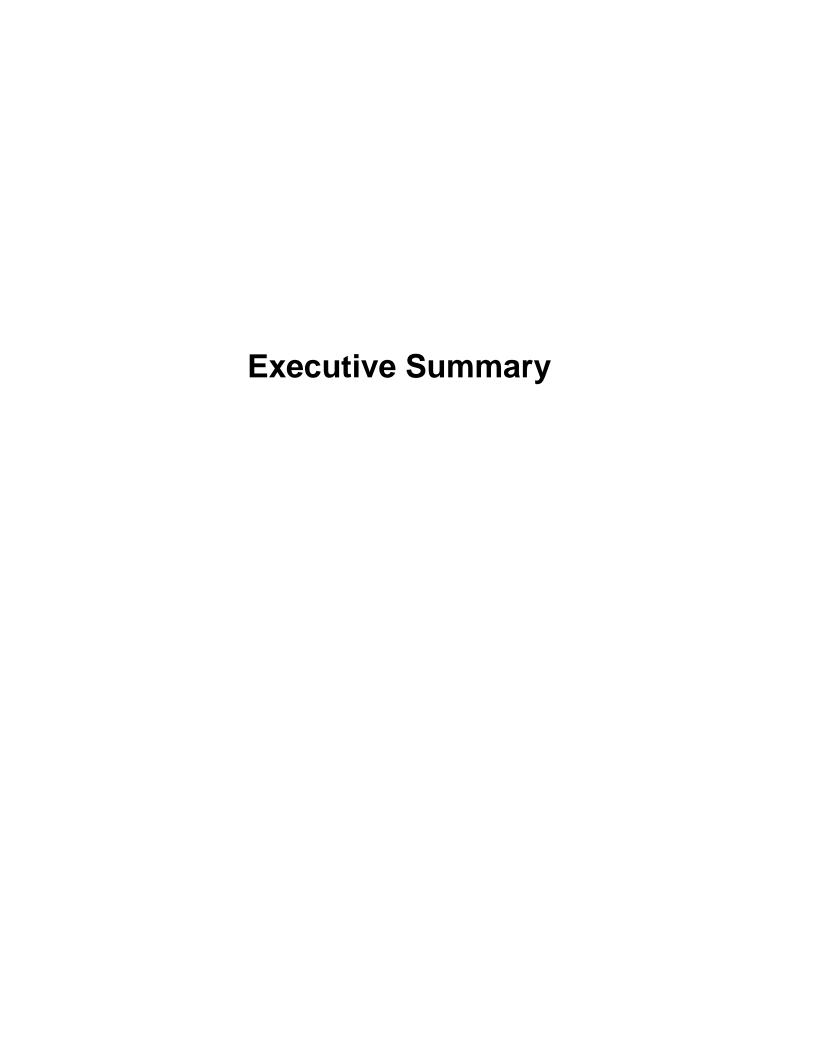


Table of Contents

Appendices

Appendix A Site Plans	20
Appendix B Photographs	23
Appendix C Assessor Qualifications	37
Appendix D Supporting Documentation	40





Executive Summary

Site Description and Current Operations

Jacques Whitford Limited (Jacques Whitford) conducted a Phase I Environmental Site Assessment (Phase I ESA) of the property located north of Perth Street, between Perth and Ottawa Streets, and south of Ottawa Street in Richmond (now City of Ottawa), Ontario, herein referred to as the "Site". The Phase I ESA was conducted for Mattamy Homes in support of acquisition and development of the Site. The purpose of the Phase I ESA was to determine if evidence of potential or actual environmental contamination exists in connection with the Site, which may be on the Site or neighbouring properties as a result of current or past activities.

The Site is approximately three km long, by 0.75 kilometres wide and is bound by Queen Charlotte Street to the east, and Joy's Road to the west. The Jock River flows across the Site along the southern and northern boundaries. The majority of the Site is currently being used for agricultural purposes, some is forested, and the rest is occupied by overgrown fields.

Records Review

Based on the historical information gathered during the Phase I ESA, portions of the Site have been forested while the remainder has been used for agricultural purposes since at least 1963.

Site Visit/Interviews

No interviews were conducted with persons associated with the Site during the Phase I ESA. Telephone messages with the current owners which were returned did not reveal any environmental concerns.

Conclusions

The Phase I ESA has revealed evidence of potential environmental contamination associated with the Site. The following potential sources of environmental concern were identified:

- 1) Three separate dump sites were observed along the northern, eastern, and southern boundaries of the Site. Two cars, car batteries, tires, metal drums, domestic debris, and other materials were found within the dump sites. Based on the presence of overgrown vegetation and brush, the debris appears to have been dumped several years ago. Jacques Whitford recommends that the debris and any surficial stained soil be removed for appropriate disposal at an Ontario Ministry of Environment (MOE) approved landfill. Confirmatory soil samples should be collected following removal of the debris and stained soil (if present) for laboratory analysis of the contaminants of concern typically associated with dump sites to document the absence of any residual impacts. In addition, it may be appropriate to assess the shallow groundwater quality through the installation of a groundwater monitoring well and the collection of a shallow groundwater sample for laboratory analysis of the contaminants of concern typically associated with dump sites if substantial surficial soil staining was observed and/or if one or more confirmatory soil samples exceeded the residential land use standards. Each dump site would need to be assessed separately with respect to soil and groundwater quality.
- 2) The Site is bound by CN rail lines along its southern boundary and has been since at least 1963. The possible and historical presence of petroleum hydrocarbon-based lubricants, herbicides, creosote-preserved wood products and rail ballast materials in the immediate vicinity of the rail line may represent an environmental concern to the Site. If this portion of the Site will be developed, Jacques Whitford recommends collecting at least soil samples for laboratory analysis of the contaminants of concern typically associated with rail lines.



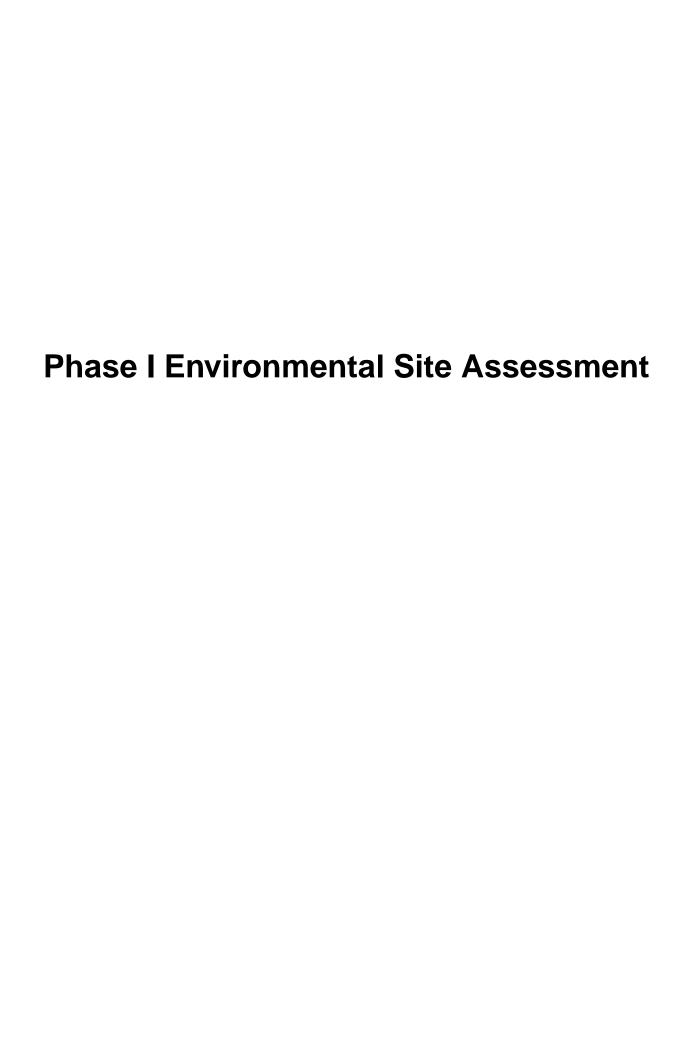
Executive Summary (continued) Conclusions (continued)

3) Three separate piles or ridges of fill were observed on the Site. This material can likely be reused on-site as backfill material if geotechnically suitable. However, should any of this fill material need to be removed from the Site during development, Jacques Whitford recommends that a fill quality assessment be completed to confirm whether the excess fill material is inert (i.e., meets background soil quality standards provided in O.Reg. 153/04) and can be used off-site as clean fill, or whether it requires off-site disposal at a MOE-approved landfill.

Please note that our conclusions and recommendations may be amended based on information from the MOE that has not yet been received. Jacques Whitford will forward this information upon receipt.

The statements made in this Executive Summary are subject to the same limitations included in the Closure (Section 7.0) and are to be read in conjunction with the remainder of this report.





1.0 General Information

Client Information:

Mattamy Homes Mr. Matthew Kingston 123 Huntmar Drive Ottawa, ON K2S 1B9

Project Information:

1026950 phase 100 - Mattamy Homes - Perth and Ottawa Street Developments, Richmond, Ontario

1026950

Site Information:

Perth and Ottawa Streets Development Village of Richmond Ottawa, ON **Consultant Information:**

Jacques Whitford Limited 2781 Lancaster Road, Suite 200

Ottawa, ON K1B 1A7

Phone: (613) 738-0708 **Fax:** (613) 738-0721

E-mail Address:

Site Visit Date: 06/15/2007 **Report Date:** 06/29/2007

Site Assessor: Sarah R. Montesano Report Preparer: Sarah R. Montesano

Senior Reviewer: Jane A. Yaraskavitch, M.Eng.,

P.Eng.

Site Assessor:

Sarah R. Montesano Engineer in Training

Report Preparer:

Sarah R. Montesano Engineer in Training

Senior Reviewer:

Jane A. Yaraskavitch, M.Eng.,

P.Eng.

Senior Project Manager



2.0 Introduction

2.1 Objectives

Jacques Whitford Limited conducted a Phase I Environmental Site Assessment (Phase I ESA) of the property located north of Perth Street, between Perth and Ottawa Streets, and south of Ottawa Street in Richmond (now City of Ottawa), Ontario, herein referred to as the "Site". The Phase I ESA was conducted for Mattamy Homes in support of acquisition and development of the Site. The purpose of the Phase I ESA was to assess if evidence of potential or actual environmental contamination exists in connection with the Site, as a result of current or past activities on the Site or neighbouring properties.

A site plan is included in Appendix A and selected photographs of the Site are included in Appendix B.

2.2 Scope of Work

The Phase I ESA carried out by Jacques Whitford on this property was conducted in general accordance with Jacques Whitford Proposal Number 1026824 dated June 7, 2007, and the Canadian Standards Association's (CSA) Phase I Environmental Site Assessment Standard Z768-01 (updated April 2003) and consisted of the following:

- records review including, but not limited to, publicly available city directories, aerial photographs, fire insurance plans, geological and topographic maps
- provincial government regulatory search
- review of available environmental databases and records
- review of previous environmental reports and existing title searches, if made available
- interviews with persons having knowledge of the Site
- a site visit
- evaluation of information and preparation of the report provided herein

A Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water or building materials. For this Phase I ESA, no enhancements to the CSA standard were made.

This assessment did not include a review or audit of operational environmental compliance issues, or of any environmental management systems, which may exist for the Site.

The assessment of the Site for the potential presence of hazardous building materials was based on the age of the building(s) and components, and a non-intrusive visual review of the Site. No sampling of materials was conducted. A Phase I ESA does not constitute a Hazardous Materials Survey or Designated Substances Survey.

The assessment of the Site for microbial contamination and moisture damage was made during the walk through of the building(s). This assessment was visual only and not every area was assessed. No sampling or intrusive investigation was conducted.

The professional qualifications of the project team are provided in Appendix C.

The Site visit was conducted by Sarah Montesano, B.Sc.Eng, of Jacques Whitford, on June 15, 2007. The Site and readily visible and publicly accessible portions of adjoining and neighbouring properties were observed for the presence of potential sources of environmental contamination. Jacques Whitford was not accompanied by any persons associated with the Site during the Site visit.

Telephone interviews with the owners of the Site were carried out to obtain or confirm information on the historic operations and activities on the Site.



2.0 Introduction (continued)

2.3 Regulatory Framework

In Ontario, the roles and powers of the Ministry of the Environment (MOE) when dealing with contaminated sites are outlined primarily in the Environmental Protection Act (R.S.O. 1990). The MOE has a mandate to address conditions where there is an adverse effect, or the likelihood of an adverse effect, associated with the presence or discharge of a contaminant. Ontario Regulation 153/04 - Records of Site Conditions, effective October 1, 2004, provides advice and information to property owners and consultants to use when assessing the environmental condition of a property, when determining whether or not restoration is required, and in determining the kind of restoration needed to allow continued use or reuse of a site. The regulation includes generic numerical standards for soil and groundwater quality for specific land and groundwater uses. A Phase I ESA is an initial step in the site assessment process, which may lead to the requirement for restoration work if actual or potential sources of environmental contamination are identified.

During a Phase I ESA samples are not collected, however, if there are previous soil or groundwater sample results available, the results are compared to applicable federal and provincial regulations and guidelines.

A Phase I ESA involves a review of any Site buildings for the potential presence of hazardous materials related to building components and materials. Specific federal or provincial regulations, guidelines or codes of practice exist for these individual hazardous materials. Where required, this documentation was utilized to determine appropriate conclusions and formulate appropriate recommendations.



3.0 Records Review

3.1 Information Sources

The applicable search distance for the records review included the Site, properties immediately adjoining the Site and other neighbouring properties where activities considered to be potential sources of environmental contamination were apparent. Information sources obtained and reviewed as part of the records review are listed below.

SOURCE INFORMATION/CONTACT

Aerial Photographs 1963, 1968, 1975, 1980, 1985, 1993, 1999, 2002

Fire Insurance Plans

None available for the Site.

City Directories 1970, 2003/03, 2007/08

Previous Environmental Reports None provided

Company Records None provided

Geological and Geotechnical Reports

None provided. A geotechnical investigation is currently

underway by Jacques Whitford and will be reported

under separate cover.

Regulatory Infractions Ontario Ministry of Environment (MOE), Freedom of

Information and Privacy Protection Office

Reportable Spill Occurrences MOE's Spills Action Centre

EcoLog ERIS search of the Occurrence Reporting

Information System (1988-2002)

Contaminated Sites MOE's Brownfield Environmental Site Registry

EcoLog ERIS search of the MOE's RSC database

(1997-2001)

Hazardous Waste Generator Registration MOE Hazardous Waste Information Network (HWIN)

(June 14, 2007)

EcoLog ERIS search of Ontario Regulation 347 Waste

Generators Summary (1986-2005)

PCB Storage Sites National PCB Inventory (1988-June 2004)

EcoLog ERIS search of Ontario Inventory of PCB

Storage Sites (1987-Oct 2004)

Landfill Records City of Ottawa Landfill Report (October 2004)

Waste Disposal Site Inventory Database (1990)

EcoLog ERIS search of the MOE Ontario Waste

Disposal Site Inventory (1970-Sept 2002), and the MOE



3.0 Records Review (continued)

3.1 Information Sources (continued)

SOURCE INFORMATION/CONTACT

Landfill Records Waste Disposal Sites (1990)

(1989-1996), Commercial Fuel Oil Tanks (1948-Sept 2006), and Retail Fuel Storage Tanks (1989-Feb 2007)

Other Available Information MOE's Coal Gasification Plant's inventory (1987-1988)

EcoLog ERIS search of the Coal Gasification Plant

Inventory (1987, 1988).

A full list of databases searched by EcoLog ERIS can be

found in Appendix D.

Water Well Records The Water Well Information System (1955 and 2005)

Geological Survey of Canada "The Urban Geology of the National Capital Region" Subsurface database (Jan

2006)

3.2 Previous Reports

No previous environmental reports were provided to Jacques Whitford.

3.3 Regulatory Information

Available environmental databases and records were searched to determine if the Site, adjacent or neighbouring properties are listed. A list of the databases and records searched can be found in Section 3.1 of this report. A search conducted by EcoLog ERIS of the Occurrence Reporting Information System (1988 to 2002) indicated that a 450 litre furnace oil spill was reported at 55 Fortune Drive in October of 2000 by Shell Canada Products. The spill reportedly flowed into the residential sump located on the property, and then into the ditch, where environmental impacts were confirmed. The report indicates that the spill was contained. This spill occurred approximately 100 metres to the east of the Site. Based on the distance from the Site, and as Queen Charlotte Road and other residential properties lay between the Site and the reported spill, it is not anticipated that this reported spill has adversely impacted the Site.

A search of the Ontario Waste Generator registry indicated that Rabb Construction Ltd. at the corner of Fortune Street and Ottawa Street was registered to produce waste oils and lubricants between the years of 1993 and 2001. Based on the distance from the Site (approximately 200 metres to the south) and the expected shallow groundwater flow direction, it is not anticipated that this waste generator has adversely impacted the Site.

A search of the City of Ottawa Landfill Report (October 2004) and the Waste Disposal Site Inventory Database (1990) indicate that there are two former landfills located to the west of the Site.



3.0 Records Review (continued)

3.3 Regulatory Information (continued)

- MOE landfill X 9006 was closed in 1973, located approximately 1.2 kilometres to the west of the Site.
- MOE landfill A460803 was closed in 1971, located approximately 2.2 kilometres southwest of the Site.

Based on the shallow groundwater flow direction to the south, and their distances from the Site, it is not anticipated that these two former landfill sites have adversely impacted the Site.

At the time this report was issued, we had not received the regulatory response from the Ontario Ministry of Environment (MOE) through the Freedom of Information and Privacy Protection Office to our inquiry for the Site. Upon receipt of this information, Jacques Whitford will contact Mattamy Homes and comment on any findings of environmental significance. A copy of the request is included in Appendix D.

3.4 Physical Setting

3.4.1 Surficial Geology

Based on the Geological Survey of Canada website, "The Urban Geology of the National Capital Region", the native surficial soils of the Site vary throughout the Site between offshore marine sediments consisting of silts and clays, till, organic deposits, and Paleozoic rocks. The permeability of till is more controlled by the presence or absence of gravel and boulders within the till than by the compactness of the till itself, and the permeability of silt, clay and rock is low. A site-specific determination would be required to obtain a detailed soil profile and permeability information. More information about the surficial geology will be provided in the geotechnical investigation report currently being completed by Jacques Whitford.

3.4.2 Surface Water Drainage

The surfaces of the Site consist of cultivated farm fields, forested areas, and overgrown fields. Stormwater is anticipated to drain by infiltration and/or overland flow.

3.4.3 Topography and Regional Drainage

Based on Geological Survey of Canada Topographic Map 31G/4, and the observed site topography, the regional surface drainage and the anticipated shallow groundwater flow direction appear to be as follows:

northern corner of the Site: northerly towards a branch of the Jock River that is located in the northern corner of the Site.

reminder of the Site: southernly towards the Jock River that is located in the southern corner of the Site.

It should be noted that the direction of the shallow groundwater flow in limited areas can also be influenced by the presence of underground utility corridors and is not necessarily a reflection of regional or local groundwater flow or a replica of the Site or area topography.

3.4.4 Bedrock Geology

Based on the Geological Survey of Canada website, "The Urban Geology of the National Capital Region", bedrock in the area of the Site is dolomite of the Lower Ordovician Oxford Formation. According to the website, the depth to bedrock ranges across the Site from 0-1, 1-2, 2-3 and 3-5 metres below grade surface. A search of the same website for surficial boreholes confirms that the depth to bedrock varies at the Site, as the depths to bedrock within the three on-site groundwater monitoring wells ranged from 1.52 to 7.6 m below grade surface.



4.0 Site Description

4.1 Property Information

The Site is located to the north of Perth Street, between Perth and Ottawa Streets, and south of Ottawa Street in Richmond, now the City of Ottawa, Ontario. It is approximately three km long, by 0.75 kilometres wide and is bound by Queen Charlotte Street to the east, and Joy's Road to the West. The Jock River flows across the Site along the southern and northern boundaries. The majority of the Site is currently being used for agricultural purposes, some is forested, and the rest is occupied by overgrown fields.

Current Site Owner:	Arbuckle, Moore,	
	Moore, and Laffin	
Legal Description:	Multiple, see MOE	
	requests	
Property Area:	Approximately 260	
	acres.	
Utility Providers:		
Water:	N/A	
Storm and Sanitary Sewers:	N/A	
Electricity:	N/A	
Natural Gas:	N/A	

4.2 On-Site Buildings and Structures

There are no on-site buildings or structures as the Site is undeveloped.

4.3 Historical Land Use

Historical land use for the Site was determined through historical records listed in Section 3.0. A summary of the historical information is presented below.

Period/Date:	Land Use:		
1963 to 2002	Aerial photographs indicate that the Site was used for agricultural purposes		
	between these dates. The Site visit confirmed that the Site is still either		
	undeveloped or being used for agricultural purposes.		



5.0 Site Visit Findings

5.1 Current Site Operations

The Site is currently owned by Brian Arbuckle, Peter Moore, Barry Laffin, and Glendon Moore. There are no structures located on-site. Farm equipment was observed on-site just north of the Jock River.

5.2 Waste Generation and Storage

5.2.1 Solid and Liquid Wastes

No wastewater discharges were identified to be produced on the Site at the time of the site visit. No hazardous waste generation was identified to be conducted on the Site. Hazardous waste storage such as old automobiles and batteries were identified to be stored on-site (see Section 5.5.1 and photos in Appendix B for more details).

5.2.2 Drains, Sumps, Septic Systems and Oil Water Separators

No floor drains, sumps, septic systems, interceptors, or separators were identified on the Site property.

5.2.3 Air Discharges and Odours

No sources of air emissions that are suspected to result in residual contamination to the property were identified on the Site. Further, no strong, pungent, or unusual odours were identified during the site visit.

5.3 Fuel and Chemical Storage

5.3.1 Underground Storage Tanks (USTs)

No chemical or fuel storage USTs were identified on the Site. Further, no vent or fill pipes indicating the potential presence of an abandoned or decommissioned UST were observed.

5.3.2 Aboveground Storage Tanks (ASTs)

Multiple metal drums were observed to be on-site at the time of the Site visit. The drums and other storage containers are located within the forested sections of the Site: to the south along Jock River, to the north along a branch of the Jock River, and along the eastern property boundary between Perth and Ottawa Streets. The drums and other storage containers appear to have been dumped some time ago.

5.3.3 Other Storage Containers

Various storage containers were observed within the forested areas of the Site. They appear to have been dumped on-site quite some time ago and for an indefinite time, as vegetation and other foliage had grown around the dump areas of the Site. These areas are located just north of the Jock River, along the northern boundary of the Site, and along the eastern boundary of the Site.

5.4 Building Systems/Equipment

5.4.1 Heating and Cooling Systems

No heating or cooling systems are on the Site, as the Site is undeveloped.



5.4 Building Systems/Equipment (continued)

5.4.2 Hydraulic Equipment

No hydraulic equipment is on the Site, as the Site is undeveloped.

5.5 Exterior Site Observations

5.5.1 Surface Features

No stained surficial materials or stressed vegetation was observed on the Site. The Jock River flows across the Site along the northern, southern and eastern boundaries. A dewatering trench was observed on-site south of Ottawa Street which was observed to discharge into the Jock River. Ditches run along the portions of the Site adjacent to Perth and Ottawa Streets, as well as along the eastern and western property boundaries. Barbed wire fences, cedar rail fences and chain link fences were also observed along the property boundaries. No standing water was observed on-site.

Three dump sites were observed within the forested areas of the northern, eastern and southern property boundaries. Materials such as two cars, car batteries, tires, metal bed frames and head boards, concrete and metal culverts, metal drums, metal sheets, domestic debris, and other materials were observed within the dump areas of the Site. No staining was observed within these areas; however, the vegetation was quite high and thick, indicating that the materials have been on-site for quite some time.

No other evidence of spills was observed at the Site during the site visit, and no previous spills were reported.

5.5.2 Fill Materials

Earth ridges and raised sections of the Site were observed along the eastern property boundary within the forested section, along the southern property boundary adjacent to the Jock River, and just south of Ottawa Street within the eastern portion of that section of the Site. It is unknown whether the raised sections of the Site were constructed using imported fill materials, or whether soils from the Site were used to create the raised sections. The source of any fill which may have been used on the Site is unknown.

5.5.3 Wells

No abandoned or existing wells (water, oil, gas or disposal) were identified on the Site at the time of the Site visit. Three water well records exist for the Site based on a search conducted of the surficial boreholes within the Urban Geology of the National Capital Region website. One well is located just south of Ottawa Street, and the other two are within the portion of the Site that is located between Perth and Ottawa Streets.

5.6 Hazardous Building Materials

5.6.1 Asbestos-Containing Materials (ACMs)

The common use of friable (crumbles easily by hand pressure) asbestos-containing materials (ACMs) in construction generally ceased voluntarily in the mid 1970s but was only banned through legislation in the mid-late 1980's. Asbestos was used in thousands of building products and the common uses of friable ACMs included boiler and pipe insulation, and spray-on fireproofing. Asbestos was also used in many manufactured products such as floor tiles, ceiling tiles, transite cement products and various other construction materials. Some cement drain piping currently used in the construction of buildings still contains asbestos (non-friable). Vermiculite used as insulation may be contaminated with asbestos fibres.



5.6 Hazardous Building Materials (continued)

5.6.1 Asbestos-Containing Materials (ACMs) (continued)

As of November 1, 2005, a new asbestos regulation (Ontario Regulation 278/05 made under the Occupational Health and Safety Act) came into effect. Asbestos surveys undertaken prior to November 1, 2005 that were not conducted in accordance to Ont. Reg. 278/05, should be reviewed and reassessed to determine if they meet the requirements of the new regulation. In addition, asbestos management plans need to be implemented at properties by 2007.

As the Site is undeveloped, no suspected ACMs were identified on the Site during the site visit.

5.6.2 Polychlorinated Biphenyls (PCBs)

From the 1930s to the 1970s, PCBs were widely used as coolants and lubricants for electrical equipment, including transformers and capacitors, and in a number of industrial materials, including sealing and caulking compounds, inks and paint additives. The use of PCBs was prohibited in heat transfer and electrical equipment installed after September 1, 1977, and in transformers and capacitors installed after July 1, 1980.

As the Site is undeveloped, no electrical equipment with the potential to contain PCBs was identified on the Site, and no transformers were identified to be located on-site.

5.6.3 Lead-Based Materials

In 1976, the lead content in interior paint was limited to 0.5% by weight under the federal Hazardous Products Act. Lead based water supply pipes were used greater than 50 years ago. Between 1930 and 1986, most buildings used copper pipe with lead-solder joints. Other lead-based products include wall shielding (x-ray rooms).

As the Site is undeveloped, no lead-based materials were identified on the Site.

5.6.4 Urea Formaldehyde Foam Insulation (UFFI)

Urea Formaldehyde Foam Insulation (UFFI) was used as an insulation product for existing houses between the mid-1970s and its ban in Canada in 1980. It was not commonly used for commercial or industrial buildings.

As the Site is undeveloped, no UFFI was identified on the Site.

5.6.5 Ozone-Depleting Substances (ODSs)

Refrigeration and air conditioning equipment in place before 1998 may contain refrigerants containing Ozone-depleting Substances. Non-ODS refrigerants have been developed and are available to replace these materials in newer equipment.

As the Site is undeveloped, no equipment containing ozone-depleting substances (ODSs) was identified the Site.



5.7 Special Attention Items

5.7.1 Radon Gas

Radon is a radioactive gas associated with uranium rich black shale and/or granite bedrock. Radon emits alpha particles and produces several solid radioactive products called radon daughters. Harmful levels of radon and radon daughters can accumulate in confined air spaces, such as basements and crawl spaces.

Based on the geology of the area and the lack of on-site structures, radon gas accumulation is not expected to be an environmental concern at the Site.

5.7.2 Microbial Contamination (Mold) and Indoor Air Quality

The growth of mold in indoor environments is typically due to a moisture problem related to building envelope or mechanical systems deficiencies or design, and can produce adverse health effects. There is no practical way to eliminate all mold and mold spores in the indoor environment. The way to control mold is to control moisture.

No visual evidence of suspected indoor mold growth was observed on the Site, at the time of the Site visit, as no buildings or structures exist.

5.7.3 Electromagnetic Frequencies (EMFs)

Electrical currents induce electromagnetic fields. No scientific data supports definitive answers to questions about the existence or non-existence of health risks related to electromagnetic fields.

No high-voltage transmission lines or electrical substations, which could generate significant electromagnetic fields, were identified on the Site. Transmission lines run along the southern and western portions of the property at distances between 200 metres and 1.2 kilometres from the Site. A hydro electric power corridor easement runs along the northern portion of the Site, although no transmission lines were observed at the time of the Site visit.

5.7.4 Noise and Vibration

The effects of noise and vibration on human health vary according to the susceptibility of the individual exposed, the nature of the noise/vibration and whether exposure occurs in the working environment or in the home.

No major or persistent sources of noise and vibration were identified on the Site at the time of the site visit.

5.8 Adjoining Property Information

The current activities on neighbouring properties observed at the time of the Site visit and a summary of historic information gathered through the records review are presented in the following sections.

Direction From Site:	Relation to Property:	Current Use:	Across What
North	Neighbouring	Agricultural	N/A
Occupant Name:		Address:	
Unknown		Unknown	
Current Activities:			
The property to the north of the Site is currently being used for agricultural purposes.			



5.8 Adjoining Property Information (continued)

Historical Activities

Aerial photographs between 1963 and 2005 indicate that the property to the north of the Site has been used for agricultural purposes between these years.

Potential Environmental Concerns:

No potential environmental concerns relating to the property to the north of the Site were identified.

Direction From Site:	Relation to Property:	Current Use:	Across What
East	Neighbouring	Agricultural/Residential/Ins	Queen Charlotte Street
		titutional/Vacant	
Occupant Name:		Address:	
Church, and unknown residents		6260, 6264, 6267 and 6305 Perth Street, 6291 to 6301	
		and 6280 to 6300 Ottawa Street, and 7 to 17 and 87 to	
		117 Queen Charlotte Street.	

Current Activities:

The property to the east of the Site north of Perth Street is being used for residential purposes. A church is located south of Perth Street along the eastern boundary of the Site, and residential homes line the southern half of the eastern property boundary along Queen Charlotte Street. Agricultural fields are adjacent to the most northern and southern eastern property boundaries.

Historical Activities

Aerial photographs indicate that the majority of the residential development along Queen Charlotte Street was complete by 1975. The Church located just south of Perth Street along the eastern boundary of the Site was built by 1999 according to the 1999 photo.

Potential Environmental Concerns:

No potential environmental concerns relating to the properties to the east of the Site were identified.

Direction From Site:	Relation to Property:	Current Use:	Across What
South	Neighbouring	Residential/Forested/Rail	N/A
		way	
Occupant Name:		Address:	
CP Rail, and unknown residents		Richard Drive	

Current Activities:

The property to the south of the Site is occupied by railway tracks, residential homes, and forested areas.

Historical Activities

Aerial photographs indicate that the railway system in Richmond was constructed by 1963, and the residential development of Richard Drive was complete by at least 1985.

Potential Environmental Concerns:

The railway tracks to the south of the Site have been constructed since at least 1963. Typically railway tracks have been sprayed with herbicides, oil, and grease to keep vegetation from growing on and around the tracks, and to keep the tracks maintained.

Direction From Site:	Relation to Property:		Across What
West	Neighbouring	Institutional/Commercial/A	N/A
		gricultural/Residential	
Occupant Name:		Address:	
Canadian Legion, and unknown residents		6430 Ottawa Street and 6430 Perth Street	
Current Activities:			

The property to the west of the Site is mainly occupied by agricultural fields. A Legion is located just south of Ottawa Street along the western boundary of the Site, and residential structures occupy the properties to the north and south of Perth Street along the western boundary of the Site.



5.8 Adjoining Property Information (continued)

Historical Activities

The Legion to the west of the Site appears within the 1985 aerial photographs. The property remainder of the property to the west of the Site has been used for agricultural purposes since at least 1963.

Potential Environmental Concerns:

No potential environmental concerns relating to the properties to the west of the Site were identified.

5.9 Client-Specific Items

No specific client requests were made with respect to this Phase I ESA.



6.0 Conclusions and Recommendations

The Phase I ESA has revealed evidence of potential environmental contamination associated with the Site. The following potential sources of environmental concern were identified:

- 1) Three separate dump sites were observed along the northern, eastern, and southern boundaries of the Site. Two cars, car batteries, tires, metal drums, domestic debris, and other materials were found within the dump sites. Based on the presence of overgrown vegetation and brush, the debris appears to have been dumped several years ago. Jacques Whitford recommends that the debris and any surficial stained soil be removed for appropriate disposal at an Ontario Ministry of Environment (MOE) approved landfill. Confirmatory soil samples should be collected following removal of the debris and stained soil (if present) for laboratory analysis of the contaminants of concern typically associated with dump sites to document the absence of any residual impacts. In addition, it may be appropriate to assess the shallow groundwater quality through the installation of a groundwater monitoring well and the collection of a shallow groundwater sample for laboratory analysis of the contaminants of concern typically associated with dump sites if substantial surficial soil staining was observed and/or if one or more confirmatory soil samples exceeded the residential land use standards. Each dump site would need to be assessed separately with respect to soil and groundwater quality.
- 2) The Site is bound by CN rail lines along its southern boundary and has been since at least 1963. The possible and historical presence of petroleum hydrocarbon-based lubricants, herbicides, creosote-preserved wood products and rail ballast materials in the immediate vicinity of the rail line may represent an environmental concern to the Site. If this portion of the Site will be developed, Jacques Whitford recommends collecting at least soil samples for laboratory analysis of the contaminants of concern typically associated with rail lines.
- 3) Three separate piles or ridges of fill were observed on the Site. This material can likely be reused on-site as backfill material if geotechnically suitable. However, should any of this fill material need to be removed from the Site during development, Jacques Whitford recommends that a fill quality assessment be completed to confirm whether the excess fill material is inert (i.e., meets background soil quality standards provided in O.Reg. 153/04) and can be used off-site as clean fill, or whether it requires off-site disposal at a MOE-approved landfill.

Please note that our conclusions and recommendations may be amended based on information from the MOE that has not yet been received. Jacques Whitford will forward this information upon receipt.



7.0 Closure

This report has been prepared for the sole benefit of Mattamy Homes. The report may not be used by any other person or entity without the express written consent of Mattamy Homes and Jacques Whitford. All parties are subject to the same limit of liability as agreed to in the Jacques Whitford Limited Standard Terms and Conditions. Any use which a third party makes of this report, or any reliance on decisions made based on it, are the responsibility of such third parties. Jacques Whitford accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, Jacques Whitford in certain instances has been required to assume that the information provided is accurate.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Jacques Whitford based on the data obtained during the assessment. Due to the nature of assessment and the limited data available, Jacques Whitford cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be construed as legal advice.

Since the purpose of a Phase I ESA is to identify evidence of potential or actual contamination, the identification of site conditions which may pose a non-environmental risk to buildings or people on the Site is beyond the scope of this assessment. (Examples include but are not limited to underground mine workings, volcanic or earthquake activities, severe weather, and/or flood plains in the area.) Jacques Whitford accepts no responsibility for damages, if any, suffered as a result of any non-environmental risk.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

This report was prepared by Sarah Montesano, Environmental Assessor and reviewed by Jane Yaraskavitch, M.Eng., P.Eng.

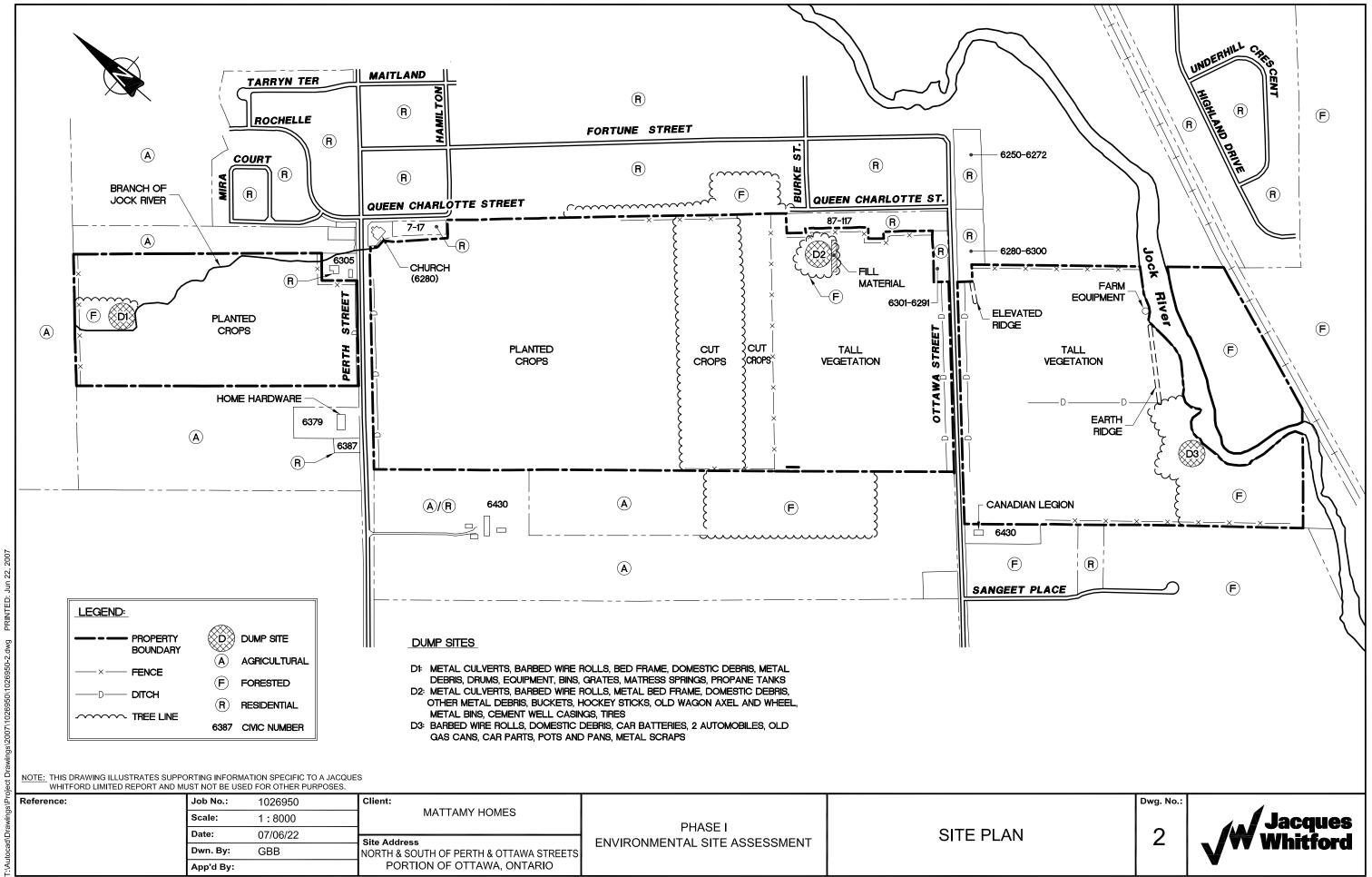


Appendix A Site Plans

Dwn. By: Date: Scale App'd By GBB 07/06/22 1:20 000

Client PHASE I ENVIRONMENTAL SITE ASSESSMENT NORTH & SOUTH OF PERTH & OTTAWA STREETS, PORTION OF OTTAWA, ON. NOTE THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A JACQUES WHITFORD LIMITED REPORT AND MUST NOT BE USED FOR OTHER PURPOSES. Goulbourn MATTAMY HOMES KEY PLAN Job No Dallaire 1026950 II REFERENCE: MAPART Site Dwg No Boundary

mond



Appendix B
Photographs



View of Jock River, farm equipment located on-site, and forested area south of the Jock River.



View of dewatering ditch located within the portion of the Site south of Ottawa Street.





View of battery located within the southern dump site.



View of two cars located within the southern dump site.





View of debris within the northern dump site.

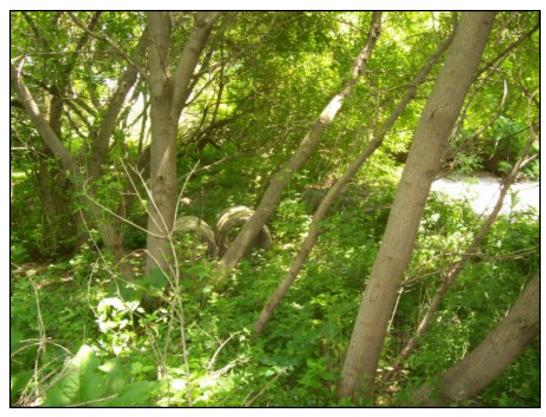


View of old wagon axel and wheel within the eastern dump site.





View of metal debris within the eastern dump site.



View of concrete casings within the eastern dump site.





View of metal debris within the eastern dump site.



View of metal culverts and debris located within the northern dump site.





View of drums, metal bed frame, and other metal debris within the northern dump site.



View of debris within the northern dump site.





View of metal drums within the northern dump site.



View of barbed wire roll within the northern dump site.





View of tire located along the branch of the Jock River adjacent to the northern dump site.



View of the Site facing south from Ottawa Street.





View of the elevated section of the Site just south of Ottawa Street.



View of the Site facing north from Ottawa Street.





View of agricultural lands between Perth and Ottawa Streets.



View of the Site facing south from Perth Street.





View of the Site facing north from Perth Street.



View of residential structures to the east of the Site off of Ottawa Street.





View of church and residential structures to the east of the Site off of Perth and Queen Charlotte Streets.



View of agricultural land to the west of the Site.





View of agricultural land to the north of the Site.



Appendix C Assessor Qualifications



Engineering, Scientific, Planning and Wanagement Consultants

www.jacqueswhitford.com

PHASE I ENVIRONMENTAL SITE ASSESSMENT ASSESSOR QUALIFICATIONS – Sarah R. Montesano

Sarah R. Montesano, B.Sc.

Environmental Engineer

Profile

Sarah R. Montesano has been working in the environmental assessment and remediation fields since 2004. Upon joining Jacques Whitford, Miss Montesano has completed Phase I and II Environmental Site Assessments (ESAs) of residential and commercial properties for financial institutions, property developers, real estate investment trusts, and other clients.

Education B.Sc. - University of Guelph

Environmental Engineering, 2006

Competencies Site Visit

Report Writer

Jacques Whitford

An Environment of Excellent Solutions



Engineering, Scientific, Planning and Management Consultants

www.jacqueswhitford.com

PHASE I ENVIRONMENTAL SITE ASSESSMENT ASSESSOR QUALIFICATIONS – Jane Yaraskavitch

Jane A. Yaraskavitch, M.Eng., P.Eng. Senior Project Manager

Profile

Jane Yaraskavitch has been working in the area of Phase I Environmental Site Assessments (ESAs) since 1994. She is the Practice Leader for Phase I and II ESA services for Jacques Whitford's Ottawa office. Ms. Yaraskavitch has completed and managed Phase I, II and III ESAs of residential, commercial, institutional, and industrial properties for financial institutions, property developers, insurance firms, real estate investments trusts, municipal/provincial/federal government agencies, and others.

Education M.Eng. – University of Toronto –

Environmental Engineering, 1993

B.A.Sc. – University of Waterloo –

Chemical Engineering, 1990

Competencies Site Visit

Report Writer

Senior Review

Professional Registration Professional Engineer, Professional Engineers of

Ontario, 1994

Professional Engineer, Maine State Board of Registration for Professional Engineers, 2001

Jacques Whitford

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Appendix D Supporting Documentation

Freedom of Information Request

This form is for requesting documents which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on the completion and use of this form. Our fax no. is (416) 314-4285.

Re	quester Data	For Ministry Use Only				
Name, Title, Company Name and Mail	ing Address of Requester	FOI Request No.		Date Request Received		
Annie Conlin						
Jacques Whitford Limite	d	Fee Paid \$	<u> </u>			
2781 Lancaster Road						
Ottawa, Ontario, K1B 1A	7	- ACCT				
Email Address: aconlin@jacqu	ueswhitford.com	☐ ACCT				
Telephone/Fax Nos.	Your Project/Reference Signature of Requester	□ CNR □ E	R [□ NOR □ SWR		
Tel: 613-738-0708	1026950 - GM	□ WCR				
ext. 223	Phase 100	☐ SAC ☐ IE	R	□ EAA □ EMR		
Fax: 613-738-0721		SWA				
Request Parar						
Municipal Address / Lot, Concess	sion, Geographic Township (Municipal address e	ssential for cities, towns	or regi	ons)		
No civic address - See leg	al description attached – South of Ottaw	a Street in Richmond,	ON			
Present Property Owner(s) and D	Date(s) of Ownership					
Glen Moore						
Previous Property Owner(s) and	Date(s) of Ownership					
Present/Previous Tenant(s),(if ap	pplicable)					
Search Param				Specify Year(s)		
	ds responsive to your request will be located.			Requested		
Environmental concerns	(General correspondence, occurren	ce reports, abatem	ent)	All		
Orders				All		
Spills				All		
Investigations/prosecutions	ons • Owner and tenant informati	on must be provid	led	All		
Waste Generator number	er/classes			All		
Certificates of	Approval → Proponent informati	on must be provid	led			
	earched manually. Search fees in excess o			epending on the types and		
years to be searched. Specif	fy Certificates of Approval number (s) (if know	vn). If supporting doc	uments	s are also required, mark		
SD box and specify type e.g.	maps, plans, reports, etc.			·		
			SD	Specify Year(s) Requested		
air - emissions						
	rel, standpipes & elevated storage, pumping stations (lo					
	stormwater, leachate & leachate treatment & sewage	pump stations				
waste water - industrial discharge	transfer stations, processing sites, incinerator sites					
	transier stations, processing sites, incinerator sites sewage, non-hazardous & hazardous waste, mobile wa	este processina units PCR				
destruction		ioto processing anits, r OD				
pesticides - licenses						

Ministry of Environment

Freedom of Information Request

This form is for requesting documents which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on the completion and use of this form. Our fax no. is (416) 314-4285.

Re	quester Data	For Minis	try U	se Only	
Name, Title, Company Name and Mai	ling Address of Requester	FOI Request No.		Date Request Received	
Annie Conlin					
Jacques Whitford Limite	d	Fee Paid \$			
2781 Lancaster Road					
Ottawa, Ontario, K1B 1A	7	□ ACCT			
Email Address: aconlin@jacq	ueswhitford.com	ACCI			
Telephone/Fax Nos.	Your Project/Reference Signature of Requester	☐ CNR ☐ EI	₹ [□ NOR □ SWR	
Tel : 613-738-0708	1026950 - PM	□ WCR			
ext. 223	Phase 100	□ SAC □ IE	R [□ EAA □ EMR	
Fax: 613-738-0721		SWA			
Request Parar	neters				
Municipal Address / Lot, Conces	sion, Geographic Township (Municipal address e	ssential for cities, towns	or regi	ons)	
No civic address – See leg	gal description attached – between Perth	& Ottawa Streets in R	ichmo	nd, ON	
Present Property Owner(s) and I	Date(s) of Ownership				
Peter Moore					
Previous Property Owner(s) and	Date(s) of Ownership				
Present/Previous Tenant(s),(if ap	oplicable)				
Search Param	eters			Specify Year(s)	
Files older than 2 years may requ	uire \$60.00 retrieval cost.			Requested	
	ds responsive to your request will be located.	ac reporte chatam	t\	•	
Orders	s (General correspondence, occurrer	ice reports, abatem	ent)	All	
				All	
Spills				All	
	ons • Owner and tenant informati	on must be provid	ed	All	
Waste Generator numb	er/classes	,		All	
	Approval > Proponent informati				
	earched manually. Search fees in excess of				
SD box and specify type e.g.	fy Certificates of Approval number (s) (if know	wn). If supporting docu	uments	s are also required, mark	
box and specify type e.g.	. maps, plans, reports, etc.		SD	Specify Year(s) Requested	
air - emissions					
water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)					
sewage - sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations					
waste water - industrial discharge		** · · · · · · · · · · · · · · · · · ·			
waste sites - disposal, landfill sites,	transfer stations, processing sites, incinerator sites				
waste systems - haulers: destruction	sewage, non-hazardous & hazardous waste, mobile wa	aste processing units, PCB			
pesticides - licenses					

Freedom of Information Request

This form is for requesting documents which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on the completion and use of this form. Our fax no. is (416) 314-4285.

Re	For Ministry Use Only					
Name, Title, Company Name and Ma	iling Address of Requester		FOI Request No.		Date Request Received	
Annie Conlin				1		
Jacques Whitford Limite	d		Fee Paid \$			
2781 Lancaster Road						
Ottawa, Ontario, K1B 1A	1		□ACCT			
Email Address: aconlin@jacq	ueswhitford.com		ACCI			
Telephone/Fax Nos.	Your Project/Reference	Signature of Requester	□ CNR □ E	R [□ NOR □ SWR	
Tel : 613-738-0708	1026950 - BA		□ WCR			
ext. 223	Phase 100	1	□ SAC □ II	ΞB [□ EAA □ EMR	
Fax : 613-738-0721			□ SWA			
Request Parai	meters				. ***	
Municipal Address / Lot, Conces	sion, Geographic Towns	hip (Municipal address e	ssential for cities, towns	or regi	ons)	
Unknown – Between 6379	and 6305 Perth Str	eet in Richmond (nov	v City of Ottawa) Onta	ario. S	straddles Perth St. to the	
North (approx. 640 m) & S	outh (approx 850 n	<u>n)</u>				
Present Property Owner(s) and I	Date(s) of Ownership					
Brian Arbuckle	5 . () ()					
Previous Property Owner(s) and	Date(s) of Ownership					
Present/Previous Tenant(s),(if ap	oplicable)					
Search Param	eters				Specify Year(s)	
Files older than 2 years may require the record that record that record the record that record the record that record that record the record that record that record the record that re	uire \$60.00 retrieval cost ds responsive to your re	t. quest will be located.			Requested	
Environmental concerns	(General corresp	ondence, occurren	ce reports, abatem	ent)	All	
Orders					All	
Spills					All	
Investigations/prosecuti	ons • Owner an	d tenant informati	on must be provid	led	All	
Waste Generator numb					All	
Certificates of	Approval ▶ Pr	oponent informati	on must be provid	lad	/ W	
1987 and prior records are se	earched manually. Se	earch fees in excess o	f \$300.00 could be incu	irred. de	epending on the types and	
years to be searched. Specif	fy Certificates of Appr	oval number (s) (if knov	n). If supporting doc	uments	s are also required, mark	
SD box and specify type e.g.	maps, plans, reports	, etc.				
				SD	Specify Year(s) Requested	
air - emissions	rol standaines 9 slave 1					
water - mains, treatment, ground lev sewage - sanitary, storm, treatment,						
waste water - industrial discharge	Stormwater, leadinate & le	аснае пеаннет а sewage р	эйтр stations			
waste sites - disposal, landfill sites,	transfer stations, processir	ng sites, incinerator sites				
	sewage, non-hazardous &	hazardous waste, mobile wa	ste processing units, PCB			
pesticides - licenses						



Freedom of Information Request

This form is for requesting documents which are in the Ministry's files on environmental concerns related to properties. Please refer to the guide on the completion and use of this form. Our fax no. is (416) 314-4285.

Re	For I	Ministry L	Jse Only			
Name, Title, Company Name and Mai	ling Address of Requester		FOI Request No.		Date Request Rece	eived
Annie Conlin						
Jacques Whitford Limite	d		Fee Paid \$			
2781 Lancaster Road						
Ottawa, Ontario, K1B 1A	7		- ACCT			
Email Address: aconlin@jacqueswhitford.com			☐ ACCT			
Telephone/Fax Nos.	Your Project/Reference	Signature of Requester	□ CNR □	□ ER [□ NOR	□ SWR
Tel: 613-738-0708	1026950 - BL		□ WCR			
ext. 223	Phase 100			□ IEB I	□ EAA	□ EMR
Fax : 613-738-0721		A	□ SWA		L L AA	LIVIIX
Request Parar	meters	,				
Municipal Address / Lot, Concess	sion, Geographic Towns	hip (Municipal address e	ssential for cities,	towns or regi	ons)	
No civic address – See leg Present Property Owner(s) and D	gal description attach	hed – between Perth	& Ottawa Stree	ts in Richmo	ond, ON	
	oute(a) of Ownership					
Barry Laffin Previous Property Owner(s) and	Date(s) of Ownership					
, , , ,	()					
Present/Previous Tenant(s),(if ap	oplicable)					
Connel Down	-4				T	
Search Param					Specify Y	
Files older than 2 years may request. There is no guarantee that record	ds responsive to your red	uest will be located.			Requeste	d
Environmental concerns			ice reports, ab	atement)	All	
Orders					All	
Spills					All	
Investigations/prosecutions	ons → Owner and	d tenant informati	on must be p	rovided	All	
Waste Generator numb	er/classes				All	
Certificates of	Approval → Pro	oponent informati	ion must be p	rovided	1	
1987 and prior records are se	earched manually. Se	earch fees in excess o	f \$300.00 could b	oe incurred, d	epending on the	e types and
years to be searched. Specif			vn). If supportin	g document	s are also requ	ired, mark
SD box and specify type e.g.	maps, plans, reports,	, etc.			Т	
				SD	Specify Year(s	s) Requested
air - emissions	rol atandainas P alausta d	otorogo numnia-statia //	2001 9 400-41			
water - mains, treatment, ground lev sewage - sanitary, storm, treatment,						
waste water - industrial discharge	, storriwater, leatifiate & le	аспате пеаннеть & sewage	ритр ѕтанопѕ		 	
waste water - industrial discharge waste sites - disposal, landfill sites,	transfer stations processing	na sites incinerator sites				
		hazardous waste, mobile wa	aste processina units.	PCB		
destruction			,			
pesticides - licenses						



Pinpointing Your Environmental Risks

Environmental Risk Information Service



Project Site: Mattamy Homes

6295-6409 Perth St & 6430 Franktown Road,

Richmond, ON

Client: Sarah Montesano

Jacques Whitford Limited

2781 Lancaster Road Ottawa, ON K1B 1A7

ERIS Project No: 20070612004

Report Type: Custom Report - 0.25km Search Radius

Prepared By: Matt Thompson

mthompson@ecologeris.com

Date: June 15, 2007

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Table of Contents

Order Number: 20070612004 Site Name: Mattamy Homes

Site Address: 6295-6409 Perth St & 6430 Franktown Road, Richmond, ON

Report Type: Custom Report, 0.25 km Search Radius

	<u>Section</u>
Report Summary	i
This outlines the number of records from each database that fall on the site, and within various distances from the site.	
Site Diagram	ii
The records that were found within a specified distance from the project property (the primary search radius) have been plotted on a diagram to provide you with a visual representation of the information available. Sites will be plotted on the diagram if there is sufficient information from the database source to determine accurate geographic coordinates. Each plotted site is marked with an acronym identifying the database in which the record was found (i.e., WDS for Waste Disposal Sites). These are referred to as "Map Keys". A variety of problems are inherent when attempting to associate various government or private source records with locations. EcoLog ERIS has attempted to make the best fit possible between the available data and their positions on the site diagram.	
Site Profile	iii
This table describes the records that relate directly to the property that is being researched.	
Detail Report	iv
This section represents information, by database, for the records found within the primary search radius. Listed at the end of each database are the sites that could not be plotted on the locator diagram because of insufficient address information. These records will not have map keys. They have been included because they may be found to be relevant during a more detailed investigation.	
	<u>Page</u>
Certificates of Approval	1
Ontario Regulation 347 Waste Generators Summary	3

5

Appendix: Database Descriptions

Pesticide Register

Occurrence Reporting Information System

Report Summary

Order Number: 20070612004 Site Name: Mattamy Homes

Site Address 6295-6409 Perth St & 6430 Franktown Road, Richmond, ON

Report Type: Custom Report, 0.25 km Search Radius

Number of Mappable Records Surrounding the Site

Database		Selected	On-site	Within 0.25	0.25km to 2.00km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0	0
AGR	Aggregate Inventory	Υ	0	0	0	0
AMIS	Abandoned Mine Information System	Υ	0	0	0	0
ANDR	Anderson's Waste Disposal Sites	Υ	0	0	0	0
AUWR	Automobile Wrecking & Supplies	Υ	0	0	0	0
CA	Certificates of Approval	Υ	0	3	0	3
CFOT	Commercial Fuel Oil Tanks	Υ	0	0	0	0
CHEM	Chemical Register	Υ	0	0	0	0
COAL	Coal Gasification Plants	Υ	0	0	0	0
CONV	Compliance and Convictions	Υ	0	0	0	0
DRL	Drill Hole Database	Υ	0	0	0	0
EBR	Environmental Registry	Υ	0	0	0	0
EEM	Environmental Effects Monitoring	Υ	0	0	0	0
EHS	ERIS Historical Searches	Υ	0	0	0	0
EIIS	Environmental Issues Information System	Υ	0	0	0	0
FCON	Federal Convictions	Υ	0	0	0	0
FCS	Contaminated Sites on Federal Land	Υ	0	0	0	0
FOFT	Fisheries & Oceans Fuel Storage Tanks	Υ	0	0	0	0
GEN	Ontario Regulation 347 Waste Generators Summary	Υ	0	1	0	1
IAFT	Indian & Northern Affairs Fuel Tanks	Υ	0	0	0	0
MINE	Canadian Mine Locations	Υ	0	0	0	0
MNR	Mineral Occurrences	Υ	0	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Υ	0	0	0	0
NCPL	Non-Compliance Reports	Υ	0	0	0	0
NDFT	National Defence & Canadian Forces Fuel Storage Tanks	Υ	0	0	0	0
NDSP	National Defence & Canadian Forces Spills	Υ	0	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Υ	0	0	0	0
NEES	National Environmental Emergencies System (NEES)	Υ	0	0	0	0
NPCB	National PCB Inventory	Υ	0	0	0	0
NPRI	National Pollutant Release Inventory	Υ	0	0	0	0
OGW	Oil and Gas Wells	Υ	0	0	0	0
OOGW	Ontario Oil and Gas Wells	Υ	0	0	0	0
OPCB	Inventory of PCB Storage Sites	Υ	0	0	0	0
ORD	Orders	Υ	0	0	0	0
ORIS	Occurrence Reporting Information System	Υ	0	1	0	1
PAP	Canadian Pulp and Paper	Υ	0	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Υ	0	0	0	0
PES	Pesticide Register	Υ	0	0	0	0
PST	Private Fuel Storage Tanks	Υ	0	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Υ	0	0	0	0
RSC	Record of Site Condition	Υ	0	0	0	0
RST	Retail Fuel Storage Tanks	Υ	0	0	0	0

Report Summary

Order Number: 20070612004 Site Name: Mattamy Homes

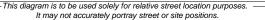
Site Address 6295-6409 Perth St & 6430 Franktown Road, Richmond, ON

Report Type: Custom Report, 0.25 km Search Radius

Database		Selected	On-site	Within 0.25	0.25km to 2.00km	Total
SCT	Scott's Manufacturing Directory	Y	0	0	0	0
SRDS	Wastewater Discharger Registration Database	Υ	0	0	0	0
TANK	Anderson's Storage Tanks	Υ	0	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Υ	0	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Υ	0	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Υ	0	0	0	0
WWIS	Water Well Information System	N	0	0	0	0
		TOTAL	0	5	0	5

The databases chosen by the client as per the submitted order form are denoted in the 'Selected' column in the above table. Counts have been provided outside the primary buffer area for cursory examination only. These records have not been examined or verified, therefore, they are subject to change.

SITE DIAGRAM **ECOLOG** 0.564 Kilometers Pinpointing Your Environmental Risks 12 Concorde PI, Suite 800 North York, ON M3C 4J2 416-510-5204 Project Property: Mattamy Homes 6295, 6363, 6409, and others - Perth Street and 6430 Franktown Road, Richmond, ON ERIS Project #: 20070612004 Date: JUN-15-2007 **LEGEND Landuse Classifications** Project Property Open Area **Database Location** Residential Points of Interest Commercial Chimney CA 1 to 2, Resource and Industrial 0 Silo Government and Institutional Parks and Recreational **Pipe & Transmission Lines** ---- Pipeline Waterbody --- Transmission Line Recreation Transmission Tower GEN-1 Golf Course/Driving Range Transformer Station Park/Sports Field Rail Other Recreation Area Railway - Main Sports/Race Track Railway - Sidetrack Cemetery Railway - Abandoned Campground Bridge Tunnel Vegetation Wooded Area Transportation - Other Embankment Orchard Vineyard Trail ___ Runway **Industrial Resources** Conveyor **Hydrographic Features** Permanent Waterway Crane: Moveable Intermittent Waterway Crane: Stationary Open Reservoir Tank Dyke/Levee Rock Cut



Auto Wrecker

Lumber Yard

Dam

Breakwall

Wetland

Site Report

Order Number: 20070612004 Site Name: Mattamy Homes

Site Address 6295-6409 Perth St & 6430 Franktown Road, Richmond, ON

Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

A search has been conducted for this site (address) and company name. No records were found, within the database(s) selected, that meet either of these criteria.

Environmental Risk Information Services Ltd.

Detail Report

Order Number: 20070612004 Site Name: Mattamy Homes

Site Address: 6295-6409 Perth St & 6430 Franktown Road, Richmond ON

Report Type: Custom Report, 0.25 km Search Radius

If information is required for sites located beyond the selected address, please contact your ERIS representative.

Certificates of Approval

Ontario Regulation 347 Waste Generators Summary

Occurrence Reporting Information System

Pesticide Register

Environmental Risk Information Services Ltd.

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-1	BRIAN ARBUCKLE	FORTUNE ST/YORK ST. GOULBOURN TWP.	3-0110-95- Client Name: Client Addres Client City: Client Postal Project Descr Contaminants Emission Con	Code: ription: s:	2/17/1995	Municipal sewage	Approved	
CA-2	MARK RABB	FORTUNE ST./YORK ST. GOULBOURN TWP.	3-1480-94- Client Name: Client Addres Client City: Client Postal Project Descr Contaminants Emission Con	ss: Code: ription: s:	11/16/1994	Municipal sewage	Approved	
CA-3	ALAN MATTHEWS	FORTUNE ST/BURKE ST.(RICHMOND) GOULBOURN TWP.	3-1791-97- Client Name: Client Addres Client City: Client Postal Project Desci Contaminant: Emission Con	code: ription: s:	12/22/1997	Municipal sewage	Approved	
n/a	A.E.A. ELECTRONICS LTD.	VILLAGE OF RICHMOND QUEEN ST. GOULBOURN TWP.	3-0755-86- Client Name: Client Addres Client City: Client Postal Project Desci Contaminants Emission Coi	ss: Code: ription: s:	7/30/1986	Municipal sewage	Cancelled	

Certificates of Approval

Мар Кеу	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	A.E.A. ELECTRONICS LTD.	PRIVATE ENTRANCE QUEEN ST. GOULBOURN TWP.	3-0754-86- Client Name: Client Addres Client City: Client Postal Project Desci Contaminant: Emission Con	ss: Code: ription: s:	8/1/1986	Municipal sewage	Approved	
n/a	BRIAN ARBUCKLE	QUEEN ST. GOULBOURN TWP.	3-0851-89- Client Name: Client Addres Client City: Client Postal Project Desci Contaminant: Emission Col	ss: Code: ription: s:	5/9/1989	Municipal sewage	Approved	
n/a	REG.MUN.OF OTTAWA- CARLETON	QUEENSWAY N. OTTAWA	3-0468-85- 006 Client Name: Client Addres Client City: Client Postal Project Desci Contaminant: Emission Con	ss: Code: ription: s:	6/4/85	Municipal sewage	Approved	

Ontario Regulation 347 Waste Generators Summary

Мар Кеу	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-1	RABB CONSTRUCTION LTD.	CORNER OF FORTUNE STREET AND OTTAWA STREET	4214	EXCAVAT. & GRADING	252	WASTE OILS & LUBRICANTS
		GOULBOURN TWP.	Generator #: Approval Yrs:	ON1791700 93,94,95,96,97,98,99,00,0 1		

Occurrence Reporting Information System

Map Key	Company	Address	Spill ID	Medium	Environmental Impact	Date of Occurrence	Nature of Impact
ORIS-1	SHELL CANADA PRODUCTS LTD.	55 FORTUNE DR, RICHMOND TANK TRUCK (CARGO)	179396	LAND	CONFIRMED	4/10/2000	Multi Media Pollution
		GOULBOURN TOWNSHIP	Synopsis: Cause:	(THERMOSHELL-450 L FURNAC CONTAINER OVERFLOW ERROR	EOIL TO SUMP, SOME PUMP	PED TO DITCH. CONTAINED.

Pesticide Register

Map Key	Company	Address	Licence No.	Licence Type
n/a	LAWN WIZARD INC.	89 QUEEN STREET 1253 RICHMOND K0A 2Z0		
n/a	LAWN WIZARD INC.	89 QUEEN STREET BOX 1253 RICHMOND K0A 2Z0		Operator

Appendix: Ontario Database Descriptions

EcoLog Environmental Risk Information Services Ltd can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to EcoLog ERIS at the time of update. **Note:** Databases denoted with "*" indicates that the database will no longer be updated. See the individual database descriptions for more information.

Federal Government Source Databases:

Diagram Identifier:

Environmental Effects Monitoring 1992-2004

EEM

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Environmental Issues Inventory System 1992-2001

EIIS

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Federal Convictions 1988-Jan 2002

FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Contaminated Sites on Federal Land June 2000-2005

FCS

The Treasury Board of Canada Secretariat maintains an inventory of all known contaminated sites held by various Federal departments and agencies. This inventory does not include properties owned by Crown corporations, but does contain non-federal sites for which the Government of Canada has accepted some or all financial responsibility. All sites have been classified through a system developed by the Canadian Council of Ministers of the Environment. The database provides information on company name, location, site ID #, property use, classification, current status, contaminant type and plan of action for site remediation.

Fisheries & Oceans Fuel Tanks 1964-Sept 2003

FOFT

Fisheries & Oceans Canada maintains an inventory of all aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Indian & Northern Affairs Fuel Tanks 1950-Aug 2003

IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

National Analysis of Trends in Emergencies System (NATES) 1974-1994*

NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

National Defence & Canadian Forces Fuel Tanks Up to May 2001

NDFT

The Department of National Defence and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. Please note that due to the September 2001 terrorist attack, new National Security protocols have prohibited any release of updates to this database.

National Defence & Canadian Forces Spills March 1999-Feb 2005

NDSP

The Department of National Defence and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

National Defence & Canadian Forces Waste Disposal Sites 2001, 2003

NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

National Environmental Emergencies System (NEES) 1974-2003

NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for all previous Environment Canada spill datasets. NEES is composed of the historic datasets – or Trends – which dates from approximately 1974 to present. **NEES Trends** is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

National PCB Inventory 1988-June 2004

NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites.

National Pollutant Release Inventory 1993-2005

NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers of 178 specified substances.

Parks Canada Fuel Storage Tanks 1920-Jan 2005

PCFT

Canadian Heritage maintains an inventory of all known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Transport Canada Fuel Storage Tanks 1970- May 2003

TCFT

Within the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

Provincial Government Source Databases:

Abandoned Aggregate Inventory Up to Sept 2002

AAGR

The MAAP Program maintains a database of all abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.

Aggregate Inventory Up to May 2005

AGR

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. Please note that the database is only referenced by lot\concession and city/town location. The databases provides information regarding the registered owner/operator, location, status, licence type, and maximum tonnage.

Abandoned Mines Information System 1800-2005

AMIS

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Certificates of Approval 1985-Sept 2002

 $\mathbf{C}\mathbf{A}$

This database contains the following types of approvals: Certificates of Approval (Air) issued under Section 9 of the Ontario EPA; Certificates of Approval (Industrial Wastewater) issued under Section 53 of the Ontario Water Resources Act ("OWRA"); and Certificates of Approval (Municipal/Provincial Sewage and Waterworks) issued under Sections 52 and 53 of the OWRA.

Coal Gasification Plants 1987, 1988*

COAL

This inventory of all known and historical coal gasification plants was collected by the Ministry of Environment. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, landuse, soil condition, site operators/occupants, site description, and potential environmental impacts. This information is effective to 1988, but the program has since been discontinued.

Compliance and Convictions 1989-2003

CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

<u>Drill Holes</u> 1886-2005 DRL

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Environmental Registry 1994-July 2003*

EBR

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, licence, or certificate of approval to release substances into the air or water; these are notified on the registry.

Ontario Regulation 347 Waste Generators Summary 1986-2005

GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

Mineral Occurrences 1846-Oct 2004

MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the planimetric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Non-Compliance Reports 1992(water only), 1994-2005

NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Ontario Oil and Gas Wells 1800-Oct 2006

OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. Information available for all wells in the ERIS database include well owner/operator, location, permit start date, well cap date, licence number, status, depth and the primary target (rock unit) of the well being drilled.

Ontario Inventory of PCB Storage Sites 1987-Oct 2004

OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Ministry Orders 1995-1996

ORD

Control Orders/Documents are enforcement actions issued by the Ministry of the Environment to deal with environmental violations. They clarify and allocate individual/joint liability when issuing clean-up orders for contaminated sites.

Occurrence Reporting Information System 1988-2002

ORIS

This database identifies sources, effects/actions and approximate locations of spills and occurrences within Ontario. The locations identified on the locator diagram refer to the facility responsible for the spill. The actual location of the spill can be derived from the descriptions provided in the detailed report.

Pesticide Register 1988-Oct 2006

PES

The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

Private Fuel Storage Tanks 1989-1996*

PST

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks. Public records of private fuel storage tanks are only available since the registration became effective in September 1989. This information is now collected by the Technical Standards and Safety Authority.

Ontario Regulation 347 Waste Receivers Summary 1986-2005

REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address. This information is a summary of all years from 1986 including the most currently available data.

Record of Site Condition 1997-Sept 2001

RSC

The Record of Site Condition (RSC) provides a summary of the final environmental condition of a site, once an environmental site assessment and/or restoration approach has been undertaken. The database provides information on the site restoration approach used (Background, Generic, Site Specific Risk Assessment), location of contaminated site, whether contamination extends past 1.5m from the surface thereby requiring "stratified restoration", soil type, and the date when RSC was submitted/acknowledged/ responded to by the Ministry of the Environment. A site restoration approach involves the use of soil and groundwater quality criteria, which have been developed to provide protection against adverse effects to human/ecological health and the natural environment. These criteria may be applied to agricultural, residential/parkland, industrial/commercial land uses; as well as potable (source of drinking water) and nonpotable groundwater use.

Wastewater Discharger Registration Database 1990-1998

SRDS

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Waste Disposal Sites - MOE CA Inventory 1970-Sept 2002

WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Waste Disposal Sites - MOE 1991 Historical Approval Inventory Up to Oct 1990*

WDSH

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Water Well Information System 1955-2006

WWIS

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. Geographic coordinates are reliable according to the given percentage. Wells that are identified with lot and concession <u>only</u> are available upon request and would be provided as a separate report.

Private Source Databases:

Anderson's Waste Disposal Sites 1930-2004

ANDR

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the *Ontario MOE Waste Disposal Site Inventory*, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. *Please note that the data is not warranted to be complete, exhaustive or authoritive. The information was collected for research purposes only.*

Automobile Wrecking & Supplies 2001-Feb 2007

AUWR

This database provides an inventory of all known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Commercial Fuel Oil Tanks 1948-Sept 2006

CFOT

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with TSSA. This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

Chemical Register 1992, 1999-Feb 2007

CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

ERIS Historical Searches 1999-2006

EHS

EcoLog ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Canadian Mine Locations 1998-2006

MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Oil and Gas Wells Oct 2001-May 2007

OGW

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickles' database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Canadian Pulp and Paper 1999, 2002, 2004, 2005

PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Retail Fuel Storage Tanks 1989-Feb 2007

RST

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of licensed retail fuel outlets. The MCCR no longer collects this information. Current information is now collected from private sources. This database includes an inventory of retail fuel outlet locations that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Scott's Manufacturing Directory 1992-Jan 2007

SCT

Scott's Directories is a data bank containing information on over 70,000 manufacturers in Ontario. Even though Scott's listings are voluntary, it is the most comprehensive database of Ontario manufacturers available. Information concerning a company's address, plant size, and main products are included in this database. This database begins with 1992 information and is updated annually.

Anderson's Storage Tanks 1915-1953*

TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.