



REPORT

A world of
capabilities
delivered locally

February 18, 2010

CELEBRATING
50
YEARS
in 2010

PHASE I ENVIRONMENTAL SITE ASSESSMENT - FINAL REPORT

Allandale Station Lands, Barrie, Ontario

Submitted to:

City of Barrie
70 Collier Street
P.O. Box 400
Barrie, Ontario
L4M 4T5



Report Number: 09-1170-6024

Distribution:

1 electronic copy - City of Barrie
5 copies - City of Barrie
2 copies - Golder Associates Ltd.





Executive Summary

Golder Associates Ltd. ("Golder") was retained by The City of Barrie ("the City"), to carry out a Phase I Environmental Site Assessment ("ESA") on the property known as the Allandale Station Lands in Barrie, Ontario (the "Site"). The Site is bounded to the south by Canadian National Railway ("CNR"), with Gowan Street beyond, to the west by Essa Road, to the north by Tiffin Street and Lakeshore Drive, and to the east by GO Train rail lines.

In 1991, the three station buildings present on Site were designated Heritage Status under the Heritage Railway Stations Protection Act, which prohibits the removal, destruction or alteration of the buildings. The Site has been in use as a railway station, with freight storage since 1853.

Based on the information collected during the site reconnaissance and interview, the following are issues of potential environmental concern:

- Former presence of a railway line, including the use of rail ballasts and the placement of fill. Contaminants of concern include metals and inorganics and PAHs relating to the rail ballast and in the surficial fill;
- Previously identified gasoline underground storage tank ("UST") in the vicinity of the south-central portion of the Site, the former fuel oil AST to the southwest of the office building, and the former fuel oil AST on the north side of the former lawn bowling clubhouse (TECL, 1996b). The concrete pad, with ballards, to the west of the office building may have previously housed an AST. Contaminants of concern include petroleum hydrocarbon fractions F1 to F4 ("PHC F1 to F4"), BTEX, and PAHs likely in the vicinity of the water table;
- The potential presence of PCB-containing fluorescent light ballasts, asbestos, mould, and lead-based paint within the buildings. UFFI was not noted within the buildings during the site reconnaissance;
- The previous exceedance of TEH in soil sample BH96-6 SS5, at a depth ranging between 3.1 m to 3.5 m below grade from the vicinity of the former AST, southwest of the office building (TECL, 1996b);
- The presence of metal pipes on the exterior of the office buildings; however, these are likely associated with the former boiler, and to the east of the former passenger depot (use unknown; however, may also be associated with the former boiler); and,
- Vehicle maintenance (metals and inorganics, PHC F1 to F4, VOCs), gas stations (PHC F1 to F4, BTEX), and/or dry cleaners (VOCs) located on properties to the southwest since at least 1961. These properties are upgradient of the Site.

Prior to the removal of material from the buildings, a consultant should be retained to conduct a designated substance survey to ensure appropriate handling and disposal of materials (i.e. PCBs, UFFI, lead-based paint, and asbestos). This has reportedly already been completed by McKnight, Charron, Laurin Inc Architects ("MCL") of Barrie, Ontario; however, Golder had not been provided a copy of this report at the time of publication of this report.

To determine whether actual impacts exist deeper in the subsurface at the Site or in the groundwater, and to better understand the potential risk associated with the above issues, further investigations would be required (i.e. a Phase II ESA).



Table of Contents

1.0 INTRODUCTION.....	1
1.1 Scope of Work.....	1
2.0 RECORDS REVIEW.....	1
2.1 Present and Previous Site Activities	1
2.2 Historical Information Review.....	2
2.2.1 Land Registry Review.....	2
2.2.2 Aerial Photograph Review.....	3
2.2.3 City Directory Review.....	5
2.2.4 Ministry of the Environment – Freedom of Information and Protection of Privacy Office	7
2.2.5 RMS Risk Management Environmental Services and Simcoe County Archives	7
2.2.6 Technical Standards Safety Authority (TSSA) Fuel and Safety Division Records.....	9
2.2.7 The County of Simcoe, Environmental Services.....	9
2.2.8 Canadian National Railway, Real Estate Division.....	10
2.2.9 Cando Contracting Ltd.....	10
2.2.10 The City of Barrie, Environmental Operations Department.....	10
2.2.11 Local News Articles.....	10
2.2.12 Environmental Database Review.....	11
2.3 Previous Reports.....	13
2.4 Interview	15
3.0 PHYSICAL SETTING	15
3.1 Site Location and Setting.....	15
3.2 Regional Geological Setting	16
4.0 SITE RECONNAISSANCE.....	16
4.1 Asbestos, Lead, PCBs and Urea Formaldehyde Foam Insulation.....	17
4.2 Air Emissions.....	17
4.3 Chemical Storage and Waste Management Activities.....	17
4.4 Spills and Staining.....	17
4.5 Underground Storage Tanks	18



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

4.6	Aboveground Storage Tanks (ASTs).....	18
4.7	Adjacent Properties.....	18
5.0	ISSUES OF POTENTIAL ENVIRONMENTAL CONCERN.....	19
6.0	LIMITATIONS AND USE OF REPORT.....	20
7.0	CLOSURE	21
8.0	REFERENCES.....	22

TABLES

Table 2.1: Aerial Photograph Summary	4
Table 2.2: City Directory Search Summary	5
Table 2.3: Simcoe County Archives Information Summary	7
Table 2.4: Database Review Summary	12
Table 4.1: Adjacent Properties	18

FIGURES

Figure 1 – Regional Location Map
Figure 2 – Site Location Map
Figure 3 – Well Location Map

APPENDICES

APPENDIX A
Regulatory Responses

APPENDIX B
Aerial Photographs

APPENDIX C
Historical Fire Insurance Plans and RMS Report

APPENDIX D
EcoLog ERIS Report

APPENDIX E
Site Photographs



1.0 INTRODUCTION

Golder Associates Ltd. ("Golder") was retained by The City of Barrie ("the City") to carry out a Phase I Environmental Site Assessment ("ESA") of the property known as the Allandale Station Lands in Barrie, Ontario (the "Site"). The Site is bounded to the south by Canadian National Railway ("CNR") lands, with Gowan Street beyond, to the west by Essa Road, to the north by Tiffin Street and Lakeshore Drive, and to the east by GO Train rail lines. The location of the Site is shown on Figure 1, following the text of the report. Written authorization to proceed with this investigation was received from the City on December 15, 2009.

The primary objective of this assessment was to document the conditions at the Site on the day of a site reconnaissance and, if possible, to identify former or current practices at the Site that may present issues of potential environmental concern. Golder understands that this Phase I ESA has been requested in support of the sale of the property.

1.1 Scope of Work

Golder's assessment was carried out in general accordance with Canadian Standards Association Z768-01 requirements for Phase I ESAs and consisted of the following scope of work:

- a review of available historical and regulatory records relating to the Site;
- a visual site reconnaissance;
- an interview with the current property owner (Manager of Real Estate, City of Barrie); and,
- the preparation of this Phase I ESA report.

The scope of this Phase I ESA is sufficient only to identify environmental liabilities which are obvious from visual examination of surface features or from available sources of information. No water, soil, liquid, gas, product or chemical sampling and testing on or in the vicinity of the Site was conducted as part of this assessment; however, a Phase II ESA was conducted concurrently with this investigation and is reported under separate cover. This Phase I ESA included a cursory overview of the neighbouring land uses and does not constitute a complete assessment of the adjacent facilities.

Details of the information reviewed, the site reconnaissance and the interview findings are provided in Sections 2.0 to 4.0 of this report. Section 5.0 outlines identified issues of potential environmental concern, Section 6.0 provides conclusions, while study limitations and appropriate uses of this report are given in Section 7.0. References are provided in Section 8.0.

2.0 RECORDS REVIEW

2.1 Present and Previous Site Activities

The Site is located south of the intersection of Tiffin Street and Lakeshore Drive in Barrie, Ontario. Currently, the Site consists of approximately 3.67 ha (9.07 acres) of commercially zoned land. The City, the current owner of the property, purchased the Site from Chum Ltd. in 2007. The property is currently not in use; however, the on-Site buildings are being renovated by McKnight Charron Laurin Inc. Architects ("MCL") of Barrie, Ontario.



The northern portion of the property is developed with the former railway station, restaurant and office buildings. The remainder of the Site is vacant and grassed. In 1991, the three station buildings present on Site were designated Heritage Status under the Heritage Railway Stations Protection Act, which prohibits the removal, destruction or alteration of the buildings. The land use in the area of the Site is parkland to the north, across Lakeshore Drive, railway property to the east (although it is zoned open space), residential to the south, and commercial to the southwest, west and northwest.

2.2 Historical Information Review

In order to assess the historical conditions at the Site, a preliminary review of information from the following sources was conducted:

- Land Registry information obtained from Kathy E. Hewitt, an independent title searcher, on behalf of Golder;
- Aerial photographs for the years 1946, 1955, 1965, 1975, 1981, 1990, and 1995 obtained from EcoLog ERIS; a 2006 aerial photograph obtained from Google Earth™ imagery and a 2008 aerial photograph obtained from the County of Simcoe interactive mapping website (<https://maps.simcoe.ca/>);
- Ontario Ministry of the Environment (“MOE”), Freedom of Information (“FOI”) and Protection of Privacy Office;
- RMS Risk Management Services (“RMS”) and Simcoe County Archives;
- Technical Standards and Safety Authority, Fuels Safety Division;
- The County of Simcoe, Environmental Services;
- Canadian National Railway (“CNR”), Real Estate Division;
- Cando Ltd. (“Cando”);
- City of Barrie, Environmental Operations Department;
- Local News Articles;
- EcoLog ERIS;
- Published geological maps and reports; and,
- Walkover site reconnaissance (see Section 4).

2.2.1 Land Registry Review

An historical chain-of-title search for the Site was requested by Golder from Ms. Kathy Hewitt, in order to determine past ownership of the property. Information provided by Ms. Hewitt on January 27, 2010 indicated that the property is located in Barrie, Ontario and consists of the following parcels:

- Part Block D, south side of Tiffin Street and Part Lane Plan 291;
- Part reserved south side of Tiffin Street, Plan 29;
- Part of the North Half of Lot 8, Concession 14, Former Township of Innisfil;



- Part of the North Half of Lot 9, Concession 14, Former Township of Innisfil;
- Part Lot 10, Concession 14, Former Township of Innisfil;
- Lots 1 to 7, South Side of Gowan Street;
- Part Penetanguishene Road as closed by By-Law IN2461;
- Part Lot 11, Concession 14, Former Township of Innisfil;
- Part Road Allowance between Lot 10 and 11, Concession 14, Former Township of Innisfil, as Closed by By-Law IN8357;
- Part Lot 9, Concession 14, Former Township of Innisfil; and,
- Part Water Lot in Front of Lots 8 and 9, Concession 14, Former Township of Innisfil.

According to the land titles, the north part of Lot 9, Concession 14 was transferred from private individuals to The Ontario, Simcoe, and Huron Railroad Union Company on December 2, 1854. A portion of the north half of Lot 8, Concession 14 was transferred from the Corporation of Innisfil to the Northern Railway in 1864. An additional portion of the north half of Lot 8 was transferred from private individuals to The Ontario Simcoe and Huron Railroad Union Company in 1873. The north Part of Lot 9, as well as the roadway on the east side of the Site, were transferred from private individuals to the Northern Railway Company of Canada in 1872. Block D (i.e. the triangular shaped area on the north side of the former lawn bowling lands), part of Lot 8 (north of Bradford Street extension) were transferred from private individuals to The Grand Trunk Railway of Canada in 1891 and 1894, respectively, with the remainder of the north Part of Lot 8 being transferred in 1906. The water lots in Kempenfelt Bay were transferred from Crown to the Northern Railway Company of Canada in 1981.

In 1999, The City of Barrie and Allandale Community Development Corporation (“ACDC”) quit claims from the Canadian National Railway Company. The ACDC then sold the property to Chum Ltd. in 2003, which subsequently sold the property back to the current owner, the Corporation of the City of Barrie.

Based on the review of the historical ownership information, the Site was in use as a railway station since at least 1854.

2.2.2 Aerial Photograph Review

Aerial photographs of the Site and vicinity for the years 1946, 1955, 1965, 1975, 1981, 1990 and 1995 were obtained by Golder from EcoLog Environmental Risk Information Services Ltd. (“EcoLog ERIS”). A 2006 aerial photograph was obtained from Google Earth™ imagery and a 2008 aerial photograph was obtained from the County of Simcoe interactive mapping website. It should be noted that due to the small scale of the aerial photographs, structure details could not be determined. The presence and absence of noteworthy discernable information within the study area is summarized in Table 2.1 and the aerial photographs, provided by EcoLog ERIS, are provided in Appendix B (see Figures B-1 through B-7).



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

Table 2.1: Aerial Photograph Summary

Year	Scale	Information Summary
1946	1:20,000	The Site is developed with the same building present today. The property is located on the shores of Kempenfelt Bay and railway tracks can be seen coming into the Site from the northwest, southwest, and east. It appears that rail cars are stored on the property to the south (i.e. the CNR property). A roundhouse is noted to the east in the vicinity of the current Southshore Community Centre. The areas to the south, across Gowan Street, and west, across Essa Road are developed and residential dwellings are apparent. Bradford Street is present to the northwest. The commercial buildings on the southeast corner of Tiffin Street and Essa Road are present; however, their uses cannot be determined. The current Water Pollution Control Centre ("WPCC") property has limited development in the southern portion of that property.
1955	1:25,000	Additional rail cars are stored in the south and southeast portions of the station buildings. It appears that the lawn bowling clubhouse is present to the west of the station buildings, along with 2 additional buildings located between the clubhouse and the station buildings. Additional development on the WPCC property is evident. The remainder of the surrounding land use appears similar to the 1946 photograph.
1965	1:12,000	The majority of the stored rail cars to the south and southeast of the station buildings are no longer present. Parking areas can be seen to the west and southwest of the station buildings. The station buildings appear unchanged from 1955. A large rectangular building is now present on the north side of Gowan Street south of the Site, with parking areas along the north side of Gowan Street. The CN turnaround is no longer present. The commercial buildings to the southwest (across Gowan Street), west (across Essa Road), and north (across Tiffin Street) are visible. The Barrie Water Pollution Control Centre ("WPCC") is also visible to the northwest. The remainder of the surrounding land use appears similar to the 1955 photograph.
1966	1:1,500	The Site and surrounding area appears similar to the 1965 photograph (photo not provided in Appendix B).
1975	1:25,000	The area to the east appears to house fewer rail cars. The WPCC property has been expanded again. Substantial residential development is evident south of the Site. The Site and remainder of the surrounding area appear similar to the 1969 photograph.
1981	1:50,000	The Site and property to the east appear vacant. The lawn bowling clubhouse remains. The remainder of the surrounding area appears similar to the 1975 photograph.
1990	1:20,000	The area between the Site and Kempenfelt Bay has been in-filled. Approximately 80 m of additional land is evident, which now houses Lakeshore Drive. The Southshore Community Centre property is now developed and the WPCC has expanded yet again. The Tiffin boat launch is built to the north of the Site. The remainder of the surrounding area appears similar to the 1981 photograph.
1995	1:50,000	The Site and surrounding area appear similar to the 1990 photograph.
2006	interactive	The lawn bowling clubhouse has been removed from the Site. There are no longer any rail tracks to the south or east of the Site. The remainder of the surrounding area appears similar to the 1995 photograph (photo not provided in Appendix B).
2008	interactive	Tracks are again evident to the south and east of the Site. The extreme east end of the Site appears to be in use by the rail line. Debris can be seen in the east and central portions of the Site. Another expansion of the WPCC is underway. The remainder of the Site and surrounding area appears similar to the 2006 photograph (photo not provided in Appendix B).



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

Based on the above aerial photograph review, the Site has been under commercial land use since at least 1946. The surrounding area appears to have been predominantly under residential and commercial land use since at least 1946. The use of the Site as a rail line is an issue of potential environmental concern due to fuel storage and handling and waste management practices typically associated with these types of properties.

2.2.3 City Directory Review

Golder contacted LGI Copy Services Canada ("LGI") and received a written response on January 11, 2010. The following is a summary table of the noteworthy properties located in the vicinity of the Site. A copy of the full set of results is provided in Appendix A.

Based on the city directory search, the Site was listed as a "CNR Depot", "CNR Express", "CNCR Car Controls", "CN-CP Telec" (sic), "CNR Freight Sales", and/or "Via Rail Canada" between 1961 and 1998/1999. The potential contaminants of concern associated with railways include petroleum hydrocarbons, VOCs, PAHs, and metals and inorganics. The following adjacent properties may have associated issues of potential environmental concern:

Table 2.2: City Directory Search Summary

Address	Distance and Direction from Site	Tenant	Years Listed	Potential Contaminants of Concern	Comments
249 Bradford St.	170 m northwest	Water Pollution Control Centre	1961, 1966, 1998/99	Inorganics	Likely cross-gradient of the Site
259 Bradford St.	50 m northwest	Allandale Taxi	1961, 1966	PHC F1 to F4, VOCs, metals	Likely cross-gradient of the Site
274 Bradford St.	Directly adjacent to the northwest	Fox Fleet International	1989	PHC F1 to F4, VOCs, metals	
278 Bradford St.	On-Site. Not a current address	Hoar Transp. Co. Ltd.	1974, 1976	PHC F1 to F4, VOCs, metals	
		CNR	1966	PHC F1 to F4, VOC, PAHs, metals and inorganics	
9 Gowan St.	40 m south	Oil Tech Rust Control Centre Inc./Rust Control Centre Inc.	1982, 1989, 1993/94, 1998/99	PHC F1 to F4, VOC, metals	Upgradient of the Site
		Top Coat Asphalt Sealing	1993/94, 1998/99	PAHs	
		Overland Express	1961	BTEX, PHC F1 to F4	



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

Address	Distance and Direction from Site	Tenant	Years Listed	Potential Contaminants of Concern	Comments
17 Gowan St.	40 m south	BR Heating & Cooling Ltd., Auto Works	1998/99	PHC F1 to F4, VOCs, metals	Upgradient of the Site
		Huronia Ford Collision	1989, 1993/94		
		Barrie Honda Auto Sales	1982		
		Kerv Johnston Motors Ltd.	1976		
		Barrie Volkswagen	1974		
		Viau Motors Ltd.	1961, 1966		
59 Gowan St.	40 m south	G. Barnes Trucking	1993/94	PHC F1 to F4, VOCs, metals	Upgradient of the Site
75 Gowan St.	40 m south	Diamond Hardwood Flooring Services	1982, 1989, 1993/94	PAHs	Upgradient of the Site
		Sunshine Flr Serv	1974		
18 Essa Road	Adjacent to the west	Allandale Taxi, Allandale Leasing & Rentals	1974, 1976, 1982	PHC F1 to F4, VOCs, metals	
21 Essa Road	30 m west	Gulf Canada	1982	PHC F1 to F4, VOCs	A portion of the property may be upgradient of the Site
		Allandale Motors	1961, 1966	PHC F1 to F4, VOCs, metals	
28 Essa Road	40 m south	DeeVee Sales	1989	PHC F1 to F4, VOCs, metals	Upgradient of the Site
30 Essa Road	60 m southwest (not a current address)	Barrie Honda	1976	PHC F1 to F4, VOCs, metals	Upgradient of the Site
35 Essa Road	65 m southwest	Wagg's Laundry and Dry Cleaners Ltd.	1961, 1966, 1974	VOCs	Upgradient of the Site
41 Essa Road	80 m southwest	Midtown Used Cars	1961	PHC F1 to F4, VOCs, metals	Upgradient of the Site



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

Address	Distance and Direction from Site	Tenant	Years Listed	Potential Contaminants of Concern	Comments
43 Essa Road	110 m southwest	Barrie Drive A Car, Hertz Rent A Car	1966, 1974, 1976, 1982	PHC F1 to F4, VOCs, metals	Upgradient of the Site
		Industrial Radiant Heating and Research Plant	1961	Metals and inorganics, PAHs	
		Cooke Cartage and Storage	1961, 1966	PHC F1 to F4, VOCs, metals and inorganics	
45 Essa Road	140 m southwest	Gaydon Contractors Ltd.	1998/99	PHC F1 to F4, VOCs, metals	Upgradient of the Site
48 Essa Road	120 m southwest	Abercrombie Electric Co. Ltd.	1974, 1976, 1982, 1989, 1993/94, 1998/99	Metals and inorganics	Upgradient of the Site
		Pifher's Garage	1961, 1966	PHC F1 to F4, VOCs, metals	

2.2.4 Ministry of the Environment – Freedom of Information and Protection of Privacy Office

The MOE was contacted by Golder requesting a review of their files for information pertaining to the Site. A written response was received on January 20, 2010 indicating that no records were located responsive to the request, including the files located at the MOE Barrie District Office, Central Regional Office, Investigations and Enforcement Branch, and Safe Drinking Water Branch. A copy of the response is provided in Appendix A.

2.2.5 RMS Risk Management Environmental Services and Simcoe County Archives

AMICK Consultants Limited, the archaeologists for the Site, provided five sketch maps compiled by the former Barrie Local Architectural Conservation Advisory Committee ("LACAC") showing locations of structures from 1870-1900 as well as a fire insurance plan from 1904. These maps were located at the Simcoe County Archives. A summary of these maps is provided in Table 2.3 below.

Table 2.3: Simcoe County Archives Information Summary

Source	Year(s)	On-Site Structures	Adjacent Properties
Sketch map - Allandale	1850s	Rail line running east-west Cline's Saloon (NW corner) Passenger Station (central) Engine house (south-central) Turntable (SE of Engine house)	Royal Hotel (NW) Hamel's Inn (SW) Remainder is unlabelled



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

Source	Year(s)	On-Site Structures	Adjacent Properties
Sketch map - Allandale	1860s	Rail line running east-west Railroad restaurant (central) Passenger Station (central) Engine house (south-central) Repair shed (east, may be off-Site)	Allendale House (NW) Railroad Hotel (NW) Remainder is unlabelled
Sketch map - Allandale	1870s	Railway running east-west Allandale Depot (central) Repair shop (east, may be off-Site)	Clifton (NW) Railroad Hotel (NW) Shirdon's Store (NW) S. Brooks Black Smith (SW) Wesleyan Church (SE)
Sketch map - Allandale	1880s	Railway running east-west Allandale Depot (central) Ice house (NW of depot)	Clifton Hotel (NW) Butchery (NW) Sacred Mission Hall (W) Walker House Hotel (SW) Drug Store (NW) Anglican Church (SW) Post Office (S) Livery (S)
Sketch map - Allandale	1890s	Railway running east-west Allandale Depot (central) Shoe repair (north) Allan Hotel (north)	MacDougall's Dry Goods (NW) Butchers (NW) Bakery (NW) Webb's Jewellers (NW) Sacred Mission Hall (W) Walker House (SW) Black Smith (SW) Post Office (S) Livery (S) Hardware (S) Meat Store (S) Grocery (S)
Fire Insurance Plan	1904	Rail lines running east-west G.T.R. Station (east end of Bradford Street) Dining Room, Baggage (SE of station) Ice house (W of station) 4 additional buildings north side of tracks (unlabelled)	Several buildings to the northwest (unlabelled)

RMS was contacted by Golder and requested to review their records for any information (i.e., fire insurance plans or reports) relating to the Site. RMS issued a written response to Golder on January 28, 2010 stating that a search of the Site address revealed that there were two fire insurance plans (FIPs), including 1923, updated to 1946, and 1971; however, there were no Property Underwriters' Reports or Property Underwriters' Plans. Appendix C provides copies of the sketches and maps and the RMS report.



The 1923/1946 FIP indicates the presence of an elevated tank, likely the former water tank, on the north side of the lawn bowling property, the lawn bowling clubhouse on the west side of the property, a parking garage to the northwest of the water tank, an ice house, a storage shed, a CNR Express building on the southeast corner of Bradford and Tiffin Streets, and the station buildings (labelled as offices, a dining hall, and a passenger station), in the same location as present day. The CN rail lines were present running through the Site in an east-west direction, with additional rail lines on the adjacent lands to the south. A storage shed was located on the north side of Gowan Street, south of the Site. Wonders Bakeries and auto repairs were located to the southwest along Gowan Street. The Clifton Hotel is located to the north, with the Barrie Sewer Disposal Plant located north of that, surrounded on all sides by a creek. The remainder of the plan is blurred and cannot be read.

As of 1971, the lawn bowling clubhouse had moved east, there was a taxi office located in the southwest corner of the property, the ice house and storage sheds were removed and a transport depot was present to the east of the lawn bowling clubhouse, a fuel oil tank was located east of the transport depot and southwest of the office building, the dining hall was now labelled the freight shed. An unlabeled structure is located to the south of the fuel oil tank along the southern property line, which may indicate the presence of an underground storage tank ("UST"). The storage shed on the north side of Gowan Street is labelled as freight shed and the bakery is labelled furniture warehouse with an auto body shop to the east. An additional auto repairs building is reported east of the body shop with an unlabeled structure which may indicate the presence of a UST. The WPCC has expanded and the creek buried. Dangerfield Motors, with an auto body shop, is located on the east side of the Sewer Disposal Plant, west of Bradford Street. Two additional auto body shops are located on the east side of Bradford Street to the west and northwest of Dangerfield Motors. The properties to the north are likely cross-gradient of the Site and impacts associated with these properties is unlikely.

Based on the sketch maps and fire insurance plan, the property was being used as a railway station from at least the 1850s. The adjacent properties to the southwest were also developed and were used for vehicle maintenance from at least 1946.

2.2.6 Technical Standards Safety Authority (TSSA) Fuel and Safety Division Records

The TSSA maintains records related to registered underground storage tanks for petroleum-related products. The TSSA was contacted to establish the status of the Site and to identify outstanding instructions, incident reports, fuel oil spills or contamination records. TSSA issued a written response to Golder on January 7, 2010 stating that a search of the properties located between 9 and 121 Gowan Street, between 250 and 300 Bradford Street (including the Site), between 4 and 48 Essa Road, and between 25 and 44 Tiffin Street revealed that there are no records on file. A copy of the TSSA's response is provided in Appendix A.

2.2.7 The County of Simcoe, Environmental Services

The County of Simcoe (the "County") was contacted to determine if the County has maintained a file with respect to the Site. The County was asked to review their files for any environmental information relating to the Site. Specifically, the County was asked for any information pertaining to sewer use discharges/violations, waste disposal, filling activities, spills, and borehole logs. A written response from the County was received on December 21, 2009 stating that they did not have any records on file relating to the subject site. A copy of the County's response is provided in Appendix A.



2.2.8 Canadian National Railway, Real Estate Division

The Canadian National Railway's ("CNR") Real Estate Division was contacted to determine if they have maintained a file with respect to the Site. CNR was asked to review their files for any information they have relating to the Site, including internal correspondence, photographs, and/or drawings. A response from CNR was received on February 9, 2010 indicating that at the time of the sale of the property, CNR would have disclosed all the environmental information they had to the ACDC. This correspondence is summarized in Section 2.3 below.

2.2.9 Cando Contracting Ltd.

Mr. Steven Gallagher, of Cando Contracting Ltd. ("Cando"), operations manager for the Barrie-Collingwood rail line was contacted to determine whether any derailments have occurred on, or in the vicinity of the Site, as well as if herbicides or pesticides have, or are currently, applied to the Site. A written response from Mr. Gallagher was received on January 25, 2010 stating that there have been no derailments or spills in the area since Cando has been operating the railway. A minor derailment did occur on Essa Road (date unknown); however, there was reportedly no damage to the environment. Cando's vegetation management program includes an annual application of a mixture of "Karmex" and "Glyfos" herbicides, which are sprayed in a 4.9 m (16 ft) wide strip along the rail corridor. A copy of Cando's response is provided in Appendix A. The City indicated in writing on January 25, 2010, that their facilities staff had not applied any such materials since they recovered ownership for the Site in 2006. A copy of this statement is also provided in Appendix A.

2.2.10 The City of Barrie, Environmental Operations Department

The City of Barrie, Environmental Operations Department was contacted by telephone on January 22, 2010 to determine if they have maintained a file with respect to the Site. They were asked to review their files for any environmental information relating to the Site. Specifically, they were asked for any information pertaining to sewer use discharges/violations, and waste disposal. A written response was received from the City on January 27, 2010 indicated a search of their records showed no billing history for the Site as of 2002 (with no records before that date) for sewer or water as well as no drawing for a sanitary sewer connection to the buildings. A copy of the City's response is provided in Appendix A.

2.2.11 Local News Articles

Several local news articles were reviewed with select summaries provided below:

- Canadian National Railway Station, Barrie (Allandale), Ontario. [Marilyn E. Armstrong-Reynolds, Architectural History Branch, Historic Sites and Monuments Board of Canada, RSR-19, updated August 29, 2009.](#) This article provided the background for the Site. The railway station was first built in 1853, with the first train entering the station on October 11, 1853. Remodelling of the buildings was undertaken in 1955 in order to provide office space and during the late 1950s or early 1960s; the restaurant was converted into a shipping depot, complete with a shipping platform, installed on the original floor of the dining area. During the 1980s, the shipping facility was abandoned and the building was boarded up. Near the station, the rails formerly veered in two directions creating a "V" pattern. A former water tower was located to the north, with parklands along the west and east sides of the station. Service buildings previously existed adjacent to the eastern border of the yards. The following articles were referenced within this article:



- *A Large Fire! Allandale Station Burned Down on Tuesday Morning, Barrie Examiner*, 12 April 1894; and *Toronto News*, 24 June 1900. This article provided information regarding a previous building which burned down in 1894. The current buildings are reportedly the fourth set of buildings built on the property. Contaminants of concern usually associated with fires include metals and PAHs. However, during a telephone interview with Ms. Kathy Gray, Real Estate Manager for the City, this soil was likely removed during the stripping, and removal, of topsoil circa 1999.
- *Allandale's New Station. Handsomely Equipped Depot and Dining Hall, Barrie Northern Advocate*, 11 May 1905, p. 8. This article provides confirmation of the existence of the current building in 1905.
- Wikipedia, Allandale Station (Barrie), January 14, 2010. Reportedly, the Allandale Community Development Corporation ("ACDC"), with City interests, purchased the station buildings and adjacent 7 acres from CNR in the 1980s, which then sold it to CHUM Ltd. in 2000 before the City buying it in 2007. The rails were lifted in 1996.

2.2.12 Environmental Database Review

Golder retained EcoLog ERIS to provide a summary of databases of environmentally pertinent sites within the vicinity of the study area. The EcoLog ERIS report contains the results of a review of the following databases:

- Abandoned Aggregate Inventory;
- Aggregate Inventory;
- Abandoned Mine Information System;
- Anderson's Storage Tanks;
- Anderson's Waste Disposal Sites;
- Automobile Wrecking & Supplies;
- Borehole;
- Certificates of Approval;
- Commercial Fuel Oil Tanks;
- Chemical Register;
- Coal Gasification Plants;
- Compliance and Convictions;
- Drill Hole Database;
- Environmental Registry;
- Environmental Effects Monitoring;
- ERIS Historical Searches;
- Environmental Issues Information System;
- Federal Convictions;
- Contaminated Sites on Federal Lands;
- Fisheries & Oceans Fuel Storage Tanks;
- Fuel Storage Tanks;
- Ontario Regulation 347 Waste Generators Summary;
- Indian & Northern Affairs Fuel Tanks;
- Canadian Mine Locations;
- Mineral Occurrences;
- National Analysis of Trends in Emergencies System (NATES);



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

- Non-Compliance Reports;
- National Defence & Canadian Forces Fuel Storage Tanks;
- National Defence & Canadian Forces Spills;
- National Defence & Canadian Forces Waste Disposal Sites;
- National Environmental Emergencies System (NEES);
- National PCB Inventory;
- National Pollutant Release Inventory;
- Oil and Gas Wells;
- Ontario Oil and Gas Wells;
- Inventory of PCB Storage Sites;
- Canadian Pulp and Paper;
- Parks Canada Fuel Storage Tanks;
- Pesticide Register;
- Private and Retail Fuel Storage Tanks;
- Ontario Regulation 347 Waste Receivers Summary;
- Record of Site Condition;
- Retail Fuel Storage Tanks;
- Scott's Manufacturing Directory;
- Ontario Spills;
- Wastewater Discharger Registration Database;
- Transport Canada Fuel Storage Tanks;
- Waste Disposal Sites – MOE CA Inventory;
- Waste Disposal Sites – MOE 1991 Historical Approval Inventory; and,
- Water Well Information System.

The databases were searched within a 250 m radius of the Site. Golder received a written report from EcoLog ERIS on December 30, 2009. Several records were listed in the report associated with the City of Barrie's WPCC, including records found in Certificates of Approvals database, Ontario Regulation 347 ("O.Reg.347") Waste Generators Summary, Non-Compliance Reports, National Pollutant Release Inventory, and O.Reg.347 Waste Receivers Summary; however, this property is located cross-gradient of the Site and impacts relating to these records, if present, are not anticipated to affect the soil and groundwater conditions at the Site. Table 2.3 summarizes the records that present issues of potential environmental concern to the Site.

Table 2.4: Database Review Summary

Address	Dist. and Direction from Site	Database	Owner/Tenant	Year	Issue	Contaminants of Concern
285 Bradford Street	On-Site	O.Reg.347 Waste Generators Summary	The Corporation of the City of Barrie	2009	Generator of wastes from pigments, coatings, and paints	None, likely from the removal of wastes within the buildings during the renovations



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

Address	Dist. and Direction from Site	Database	Owner/Tenant	Year	Issue	Contaminants of Concern
9 Gowan Street	40 m south	O.Reg.347 Waste Generators Summary	Oil-Tech Rust Control Centre Inc.	1986 to 2004 (excluding 1991)	Generators of oil skimmings and sludges	PHC F1 to F4, VOCs
17 Gowan Street	40 m south	Private and Retail Fuel Storage Tanks	Sunoco Inc.	Expired Jan. 31, 1995	Full serve gasoline station with 3,000 L capacity	BTEX, PHC F1 to F4
62 Essa Road	170 m southwest	Fuel Storage Tank	Mac's Convenience Stores Inc.	2002 - present	2 - 36,370 L, 1 - 18,100 L gasoline USTs	BTEX, PHC F1 to F4
		Private and Retail Fuel Storage Tanks	Mike's Mart	Expired August 31, 1995	Self serve gasoline station with 37,135 L capacity	BTEX, PHC F1 to F4

Three wells were reported in the Water Well Information System. Two of the wells were reportedly installed in the south-central portion of the Site in 2007, one of which was used for dewatering purposes and one of which was abandoned. The third was reportedly installed in the north-central portion of the Site in 2008; however, no additional information was available regarding this well. The stratigraphy encountered in the 2007 wells was topsoil fill to 3.5 m below grade overlying water-bearing silty sand to the final depth of 7.0 m below grade. A copy of the full EcoLog ERIS report is included in Appendix D.

2.3 Previous Reports

Golder was provided with four previous reports pertaining to the Site. The first report was an Environmental Screening Form completed by Jacques Whitford Environment Ltd. for CN Real Estate Management ("CN REM") and dated February 7, 1995. The report was completed for PIN#42220 (i.e. the area in the vicinity, and south, of the former restaurant and station buildings). A Phase I ESA was recommended and a moderate level of environmental concern was estimated due to the possibility that the Site had been used as a rail yard for loading/unloading freight cars, that a 205 L drum was located on the CN property to the north, and that past Site use and neighbouring property use may have adversely impacted the Site. The tracks were still in place during the site reconnaissance. The building on the north side of Gowan was listed as general storage

The second report is entitled, "Phase I Environmental Site Assessment, CN REM Properties PIN#42220, PIN#46017 (Allandale Station, CNRA Bowling Club), Barrie, Ontario". The report was prepared for CN REM by Thurber Environmental Consultants Ltd. ("TECL") on April 19, 1996. The following is a summary of the report:

- Only a portion of the Site was assessed (i.e. PIN#42220 [0.77 acres] and PIN#46017 [0.85 acres], which includes the area in the vicinity, and south, of the Canadian National Recreation Association Allandale Lawn Bowling Club and the area in the vicinity, and south, of the present day station buildings).
- The report states that a 1923, later revised in 1946, fire insurance plan ("FIP") was reviewed, which showed the restaurant building and passenger station; however, no ASTs or USTs were shown on the plan. A 1971 FIP indicates that the restaurant had been changed to a freight shed and two fuel storage tanks were



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

shown west of PIN#42220. An AST and a UST (unknown volumes) were located southwest of the office building and in the south-central portion of the property between PIN#42220 and PIN#46017, respectively. The AST was referenced in CN correspondence as late as January 1990. In both FIPs, there were at least two buildings and one auto garage present in the northern portion of PIN#46017 located between the bowling club and the commercial/residential buildings fronting along Tiffin and Bradford Streets. A water tower was also located near the centre of PIN#46017;

- An undated/untitled CN drawing showed three buildings, consistent with present day, and a "CNR Express" building located on the northeast corner of Tiffin and Bradford Streets. The lawn bowling clubhouse was located on the west side of the western portion of the property, adjacent to Essa Road, and a storage building and a house were present to the east and southeast of the commercial properties to the northwest of the Site. The building on the north side of Gowan Street was labelled as general storage. Several rail sidings are present to the south of the on-Site station buildings with an additional line running along the north side of the station buildings. The water tower within PIN#46017 was present in this drawing as well;
- In the early 1980s, the City of Barrie purchased CN lands to the north of the station lands to infill a portion of the Bay to facilitate construction of Lakeshore Drive;
- The northern portion of the lawn bowling club was used for parking by several individuals;
- A heating oil AST was located on the north side of the lawn bowling clubhouse. Fill and vent pipes were noted along the rear walls of 11 Essa Road and 268 Bradford Street. No decommissioning records were available. No other evidence of ASTs or USTs was noted during the site reconnaissance;
- Three CN maintenance buildings were located to the south of PIN#46017; and,
- A Phase II ESA was recommended on both properties to investigate impacts relating to the liquid petroleum storage and handling, the placement of fill, the loading/unloading of rail freight, and light automobile use, as well as the adjacent automotive repair businesses, rail freight yards, liquid petroleum storage, transportation depot (east of the lawn bowling club), and the AST and UST located between the Pins.

The third report is entitled, "*Phase II Environmental Site Assessment, CNREM Properties PIN 42220 and 46017, Allandale Station and CNRA Bowling Club, Barrie, Ontario*". The report was prepared for CN REM by TECL and dated June 20, 1996. The report indicated the following:

- TECL drilled 13 boreholes throughout the Site, excavated two hand-auger holes in the vicinity of the fuel oil AST, and installed three groundwater monitoring wells. TECL submitted eight soil and three groundwater samples for chemical analysis;
- During the initial site visit, a concrete pad was noted in the vicinity of the former UST, which reportedly may have served as the base for a gasoline dispensing pump at one time;
- With the exception of one soil sample (BH96-6 SS5, at a depth ranging between 3.1 m to 3.5 m below grade), non-detectable levels of benzene, toluene, ethylbenzene, and xylenes ("BTEX"), VOCs and total petroleum hydrocarbon ("TPH") parameters were measured in all analysed soil and groundwater samples. Concentrations of total extractable hydrocarbons ("TEH"), above the Level II Criteria for Total Petroleum Hydrocarbons from the Interim Guidelines for the Assessment and Management of Petroleum



Contaminated Sites in Ontario (August 1993), which were applicable at the time, were measured in a soil sample from the vicinity of the former AST (i.e. southwest of the office building);

- TECL recommended that an area showing strong magnetic anomalies (immediately north of the concrete pad to the west of the office building) be further assessed for buried structures and that the lateral extent of diesel-impacted soil be delineated.

The fourth report is entitled, *“Geotechnical & Environmental Investigation, Proposed CKVR Broadcast Centre, Lakeshore Drive & Tiffin Street, Barrie, Ontario”*. The report was prepared for CKVR, Division of CHUM Ltd., c/o Skelton Brumwell & Associates Inc. by GeoSPEC Engineering Ltd. and was dated December 15, 2000. The report indicated the following:

- 20 boreholes were drilled throughout the Site and found to generally contain fill predominantly comprised of sand or granular material overlying a native layered sand with trace gravel and silt;
- Six surface soil samples and six subsurface soil samples were submitted for laboratory analysis of PAHs, metals, VOCs, and TPH. One groundwater sample was submitted for laboratory analysis of metals, VOCs, and TPH. The concentrations of all analysed soil and groundwater samples were below the Ministry of Environment and Energy (“MOEE”) Guideline for Use at Contaminated Sites in Ontario, February 1997, residential/parkland use; and,
- Geospec concluded that the soil and groundwater, as represented by the samples analysed, did not present an environmental concern or affect the use of the property (at that time) or neighbouring properties under the applicable soil remediation criteria; however, it was stated that some rail ballast remained under a portion of the asphalt, south of the station, which should be removed.

2.4 Interview

A telephone interview was conducted with Ms. Kathy Gray, the Real Estate Manager for the City, on January 22, 2010. The findings of this interview are incorporated below.

3.0 PHYSICAL SETTING

3.1 Site Location and Setting

Currently, the Site consists of approximately 3.67 ha (9.07 acres) of commercial-zoned land. The current owner of the property is the Corporation of the City of Barrie, which owned the property between 1999 and 2000 and from 2007 to present. CHUM Ltd. owned the property between 2000 and 2007. According to Ms. Gray, prior to the sale of the property to CHUM Ltd., the City landfill received fill from the surface soils at the Site during the grading of the Site. This surface soil would likely have contained ballast, and potentially contaminated soil from the past Site uses. The property is currently vacant and not in use. The former lawn bowling club is no longer present. The land use in the area of the Site is parkland to the north, across Lakeshore Drive, active Go Train rail lines to the east, residential to the south, and commercial to the southwest, west and northwest.

The Site is relatively flat with soil (or aggregate) stockpiles located to the southwest of the buildings (assumed to be stockpiled for use during the construction along Lakeshore Drive), and east (unknown origin). A berm located along the northern property boundary in the eastern portion of the Site may also be indicative of fill placement. The property is currently vacant with three station buildings present on Site. These buildings were designated



Heritage Status in 1991 under the Heritage Railway Stations Protection Act, which prohibits the removal, destruction or alteration of the buildings. These buildings are in the process of being renovated.

3.2 Regional Geological Setting

The local shallow groundwater flow direction is likely to the northeast toward Kempenfelt Bay. The presence of buried utilities, structures and septic systems can affect groundwater flow conditions. Groundwater flow directions are subject to confirmation with field measurements.

The Ministry of Northern Development and Mines (MNDM), Map 2556, Quaternary Geology of Ontario, Southern Sheet indicates that glaciolacustrine deposits of sand, gravelly sand and gravel; nearshore and beach deposits exist in the vicinity of the Site (MNDM, 1991). According to the Geological Survey of Canada (GSC), Sheet 30S, Map 1335A, Southern Sheet, bedrock in the vicinity of the study area consists of limestone of the Trenton Group (GSC, 1971).

The City of Barrie obtains its municipal water supply from 14 deep wells constructed into a confined overburden aquifer. The current operational wells are all constructed in the deepest of four aquifers identified in the area. The City maintains a network of Sentinel monitoring wells to monitor groundwater quality in the vicinity of Wells 12 and 15 located along Lakeshore Drive to the north of the Site. Other existing municipal aquifer monitoring wells (referred to as "Test Wells", and prefixed "TW") are located within the City and are largely used to measure water levels in the deep municipal aquifer.

A search of water well records for the area indicated five (5) water wells drilled within 250 m of the Site. According to Mr. Dave Truax, Acting Supervisor of Water Distribution Services for the City, Well #17576 was not instrumented as a monitoring well due to lack of water production. The stratigraphy indicated on the well records reported the presence of limestone in one well (Well #9345) located approximately 120 m southeast of the Site, at a depth of 87.2 m (286 ft) below grade, underlying layers of sand and clay (as described above). The remaining wells consisted of layered sand and clay to their maximum depth. The total depth of the wells ranged from 4.9 m (16 feet) and 88.1 m (289 feet) below grade.

4.0 SITE RECONNAISSANCE

On November 10, 2009, January 8, 2010, and January 20, 2010, Golder conducted a visual walk-over reconnaissance of the property. Golder was not accompanied during the site visits. Golder staff members visually assessed the property.

The property consists of a wood-framed, brick clad office building, a wood-framed, wooden clad former restaurant/freight depot building, and a wood-frame, wooden clad former passenger depot, originally built in 1904 in the north-central portion of the property. The buildings have stone foundations. The interior of the restaurant/freight depot building and the passenger depot building have been stripped and are not currently serviced, but were previously heated with a boiler reportedly located in the basement of the office building. Several metal pipes were noted on the exterior of the office building, likely associated with this former boiler. A large metal pipe with two-90° bends (appears to be connected to an underground reservoir of unknown content) was located to the east of the buildings. The use of this pipe is unknown; however, according to Ms. Gray, may be associated with the former boiler. A concrete pad with bollards was located to the west of the office. Its use is unknown.



One former water well was located to the east of the buildings, and was covered with a wooden lid. No evidence of a septic field was evident during the site visits. The washrooms in the buildings have been decommissioned and there is currently no water service to the Site. According to the City's sanitary and storm sewer maps, two main storm sewer laterals run in a north-south direction through the west-central and central portions of the property.

Several soil stockpiles were located to the southwest of the buildings, which are being used for the construction activities on Lakeshore Drive. An additional fill pile, mostly comprising wood debris and some rail ballasts, was noted in the east-central portion of the property. A berm is present along the northern property boundary and is elevated above the remainder of the Site and may be indicative of fill placement. The berm location is consistent with the previous location of rail lines.

4.1 Asbestos, Lead, PCBs and Urea Formaldehyde Foam Insulation

Based on the age of the buildings (1904), urea formaldehyde foam insulation ("UFFI"), asbestos, lead-based paint, and polychlorinated biphenyls ("PCBs") may be present. Reportedly a Designated Site Survey ("DSS") has been completed on the buildings and the asbestos and insulation, if present, has been removed. The paint throughout the buildings is in poor condition. Several light ballasts, potentially containing PCBs were noted in the interior and exterior of the buildings. The floor tiles in the office may be asbestos-containing; however, further assessments would be required to confirm this. No UFFI was noted during the site reconnaissance.

A pole-top transformer was noted to the northwest of the office building with several more located along Gowan Street. Approximately ten fluorescent light ballasts, which may contain PCBs, were present on-Site as well.

4.2 Air Emissions

No significant sources of air emissions are present on site during the site reconnaissance. Vents, assumed to be associated with the former boiler, were located on the exterior walls of the office building.

4.3 Chemical Storage and Waste Management Activities

No chemicals were noted on the property. One debris pile was located in the eastern portion of the Site and mainly consisted of wood waste, with some rail ballast. Several additional soil (or aggregate) stockpiles were located to the southwest of the buildings and were used during the construction activities along Lakeshore Drive.

One office trailer was located to the northeast of the buildings. This trailer is temporary. Some construction debris was located within the buildings; however, this will be removed or utilized by MCL during their renovation activities.

4.4 Spills and Staining

No staining was noted was noted during the site visits; however, the snow cover during the building assessments prevented an accurate assessment of the ground surface in this area.

Some water damage was noted on the ceiling tiles in the former passenger station building. Water damage is often associated with the presence of mould.



4.5 Underground Storage Tanks

The previous Phase I ESA identified the possible presence of a former gasoline UST located in the south-central portion of the property. No evidence of this tank was noted during Golder's on-site reconnaissance; however, an unlabeled structure (possibly the UST) was present on the 1971 FIP along the southern property line, southwest of the station buildings. The use of the metal pipe (with 2 90° bends) located to the north of the building is unknown; however, may reportedly be associated with the previous on-Site boiler. A large metal pole was also located on the east side of the former passenger station building and was more likely used as a flagpole or light standard than as a vent pipe for an underground structure. No other evidence of USTs was noted on the property.

4.6 Aboveground Storage Tanks (ASTs)

The 1971 FIP indicated the presence of a fuel oil AST to the southwest of the office building. A previous Phase II ESA report (TECL, 1996b) reported the presence of a fuel oil tank to the north of the former lawn bowling clubhouse. No evidence of these, or any other ASTs, was noted during Golder's site visit.

4.7 Adjacent Properties

The land use in the area of the Site is a mixture of residential, commercial, and parkland. The properties observed adjacent to the Site were as follows:

Table 4.1: Adjacent Properties

Direction	Land Use	Comment
North	Lakeshore Drive, with parkland and Kempenfelt Bay beyond. The City's WPCC is located to the northwest.	The area to the north of the Site was infilled in the 1980s with fill of unknown origin and quality. The WPCC has several records within the MOE databases; however, these areas are cross-gradient of the Site and impacts relating to these issues, if present, are unlikely to have affected the soil and groundwater conditions at the Site.
South	CN Rail lines, with Gowan Street beyond. Residential land use is located to the southeast and commercial land use to the southwest along the south side of Gowan Street.	Herbicides are reportedly placed annually along the rail corridor and fill of unknown quality is likely located beneath the tracks. The commercial properties to the southwest include Right Track Auto Repair, Oil Tech Automotive Rust Control, A1 Georgian Taxi, and Mac's gas station.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

Direction	Land Use	Comment
East	GO Train rail lines.	Several rail lines are used for rail car storage. Herbicides are reportedly applied annually in a 5 m wide strip along the rail corridor. This area is anticipated to be cross-gradient of the Site and impacts associated with these activities are unlikely.
West	Essa Road, with commercial land use beyond. Commercial properties are also located directly adjacent to the northwest portion of the Site (i.e. on the southeast corner of Tiffin and Bradford Streets).	The current commercial properties do not have any anticipated issues of potential environmental concern; however, the previous reports indicate the former use of fuel oil on the properties to the northwest.

Based on the review of adjacent properties, the vehicle maintenance and gas station to the southwest and the reported former fuel oil tanks on the properties to the northwest are issues of potential environmental concern. Herbicides are reportedly applied annually on a 5 m wide strip along the rail corridor and may represent an issue of potential environmental concern. The CNR right-of-way is sufficiently south of the Site to prevent a large volume of herbicides to be inadvertently deposited on-Site.

5.0 ISSUES OF POTENTIAL ENVIRONMENTAL CONCERN

Based on the information collected during the site reconnaissance and interview, the following are issues of potential environmental concern:

- Former presence of railway lines, including the use of rail ballasts and the placement of fill. Contaminants of concern include metals and inorganics and PAHs relating to the rail ballast, rail ties, and coal ash within the berm, and in the surficial fill;
- Previously identified gasoline UST in the FIP in the vicinity of the south-central portion of the Site, the former fuel oil AST to the southwest of the office building, and the former fuel oil AST on the north side of the former lawn bowling clubhouse. The concrete pad, with bollards, to the west of the office building may have previously housed an AST. Contaminants of concern include petroleum hydrocarbon fractions F1 to F4 ("PHC F1 to F4"), BTEX, and PAHs;
- The potential presence of PCB-containing fluorescent light ballasts, asbestos, mould, and lead-based paint within the buildings. UFFI was not noted within the buildings during the site reconnaissance;
- The previous exceedance of TEH in soil sample BH96-6 SS5, at a depth ranging between 3.1 m to 3.5 m below grade from the vicinity of the former AST, southwest of the office building (TECL, 1996b);
- The presence of metal pipes on the exterior of the office buildings; however, these are likely associated with the former boiler, and to the east of the former passenger depot (use unknown; however, may also be associated with the former boiler); and,
- Vehicle maintenance (metals and inorganics, PHC F1 to F4, VOCs), USTs, gas stations (PHC F1 to F4, BTEX), and/or dry cleaners (VOCs) located on properties to the southwest since at least 1961. These properties are upgradient of the Site.



Prior to the removal of material from the buildings, a consultant should be retained to conduct a designated substance survey to ensure appropriate handling and disposal of materials (i.e. PCBs, UFFI, lead-based paint, and asbestos). This has reportedly already been completed by MCL; however, Golder had not been provided a copy of this report at the time of publication of this report.

To determine whether actual impacts exist deeper in the subsurface at the Site or in the groundwater, and to better understand the potential risk associated with the above issues, further investigations would be required (i.e. a Phase II ESA).

Some background information for the Site is pending as noted above. Our review of this information may identify additional issues of potential environmental concern.

6.0 LIMITATIONS AND USE OF REPORT

This report was prepared for the exclusive use of the City of Barrie.

This report has been prepared as part of environmental due diligence activities associated with the sale of the property by the City and is not intended to be utilized as supporting documentation for a Record of Site Condition under Ontario Regulation 153/04 or its amendment under O.Reg.511/09. If a Record of Site Condition is required for the Site and this report is to be used as part of the supporting documentation, it must be reviewed and updated by Golder Associates Ltd. (Golder). Additional environmental site assessment activities may be required to comply with Ontario Regulation 153/04, as amended by O.Reg.511/09.

This report is based on data and information collected during the Phase I Environmental Site Assessment of the property conducted by Golder, and is based solely on Site conditions encountered at the time of the site visit on November 10, 2009, January 8, 2010, and January 20, 2010, supplemented by historical information and data obtained by Golder as described in this report.

In evaluating the property, Golder has relied in good faith on information provided by others. We accept no responsibility for any deficiency, misstatements or inaccuracies contained in this report as a result of omission, misinterpretations or fraudulent acts of the persons interviewed. Golder accepts no responsibility for any reduction in property value, either real or perceived, as a result of the reporting of factual information herein.

It should be noted that the results of an investigation of this nature should in no way be construed as a warranty that the Site is free from any and all contamination from past or current practices. No sampling of potential designated substances, soil, groundwater, air emissions or gas was conducted in association with this Phase I ESA.

If additional information is obtained during future work at the Site, including excavations, borings, or other studies that is different from that encountered in this assessment, Golder should be requested to re-evaluate the conclusions presented in this report and provide amendments as required.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO

7.0 CLOSURE

We trust that this report meets your immediate requirements. If you have any questions regarding the content of this report, please do not hesitate to contact this office.

GOLDER ASSOCIATES LTD.



Christi Groves, B.Sc.
Environmental Scientist



Shawn Lytle, P.Geo.
Managing Principal

CLG/SDL/plc

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

n:\active\2009\09-1170-6024\city of barrie\ea site assessment\report\phase 1\esair1002171_phase i esa allandale station lands_final.docx



8.0 REFERENCES

A Large Fire! Allandale Station Burned Down on Tuesday Morning, Barrie Examiner, 12 April 1894; and Toronto News, 24 June 1900.

Allandale's New Station. Handsomely Equipped Depot and Dining Hall, Barrie Northern Advocate, 11 May 1905, p. 8. This article provides confirmation of the existence of the current building in 1905.

Canadian National Railway Station, Barrie (Allandale), Ontario, Marilyn E. Armstrong-Reynolds, Architectural History Branch, Historic Sites and Monuments Board of Canada, RSR-19, updated August 29, 2009.

Geological Survey of Canada (GSC), Sheet 30S, Map 1335A, Southern Sheet. GSC, 1971.

GeoSPEC Engineering Ltd. “*Geotechnical & Environmental Investigation, Proposed CKVR Broadcast Centre, Lakeshore Drive & Tiffin Street, Barrie, Ontario*”. The report was prepared for CKVR, Division of CHUM Ltd., c/o Skelton Brumwell & Associates Inc. on December 15, 2000.

Jacques Whitford Environment Ltd., 1995. Environmental Screening Form. Report completed for CN Real Estate Management (“CN REM”) on February 7, 1995.

Ministry of Northern Development and Mines, 1991. *Quaternary Geology of Ontario*, Southern Sheet, Map 2556, Scale 1:1,000,000.

Ontario Ministry of the Environment, various years, Water Well Records.

Thurber Environmental Consultants Ltd. (“TECL”), 1996a. “*Phase I Environmental Site Assessment, CN REM Properties PIN#42220, PIN#46017 (Allandale Station, CNRA Bowling Club), Barrie, Ontario*”. The report was prepared for CN REM on April 19, 1996.

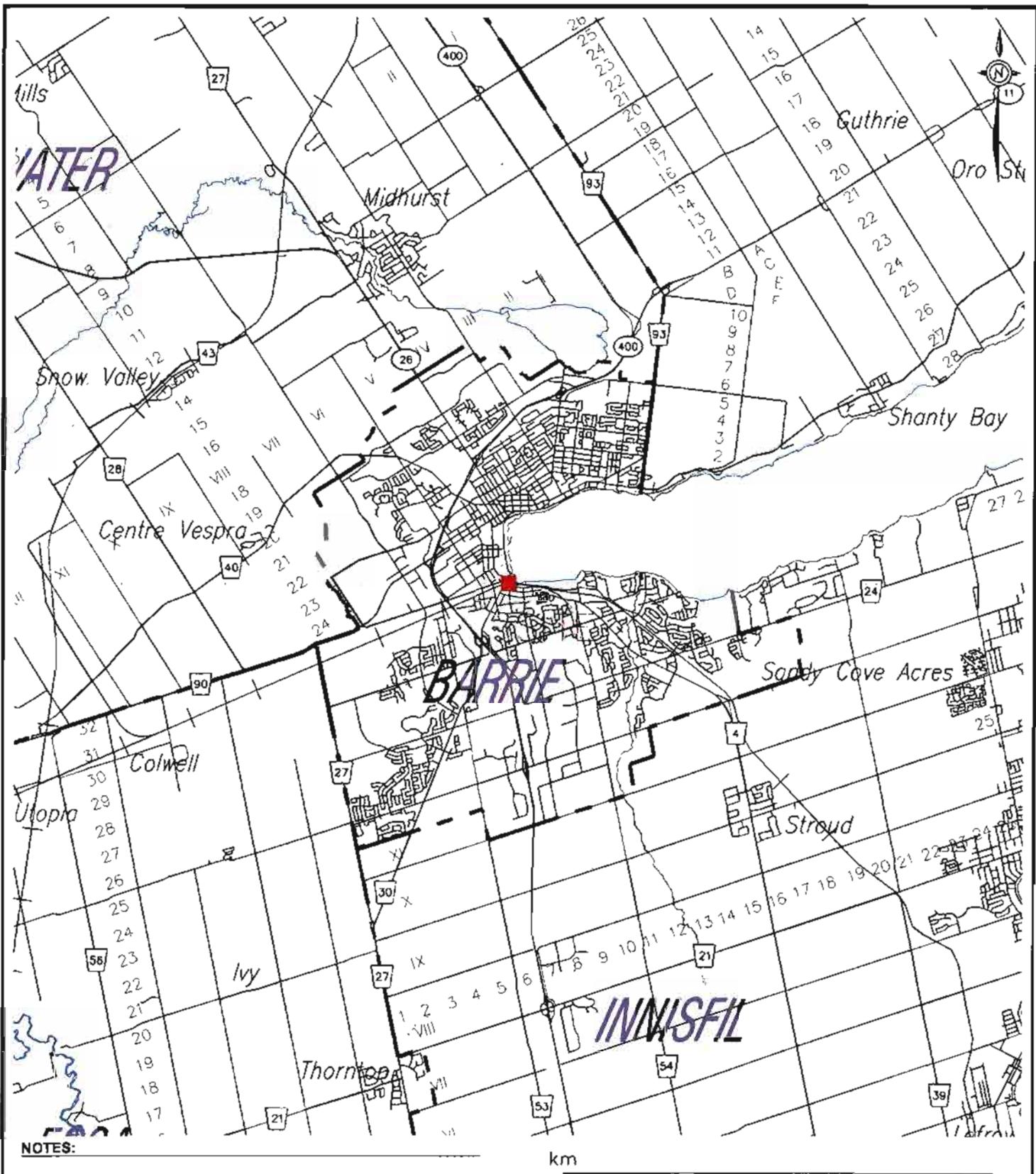
TECL, 1996b. “*Phase II Environmental Site Assessment, CNREM Properties PIN 42220 and 46017, Allandale Station and CNRA Bowling Club, Barrie, Ontario*”. The report was prepared for CN REM on June 20, 1996.

Wikipedia, *Allandale Station (Barrie)*, January 14, 2010.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO

FIGURES



**Golder
Associates**
Mississauga, Ontario, Canada

SCALE AS SHOWN
 DATE 15 JAN 2010
 DESIGN
 CAD J REGIER

TITLE

REGIONAL LOCATION MAP

FILE NO. 0911706024BAREG.dwg : F1

PROJECT NO. 09-1170-6024

REV.

CHECK
 REVIEW

ALLANDALE STATION
 PHASE I ESA

FIGURE

1



0 5 10 25 50
SCALE 1:1250 metres

NOTES:

Projection UTM NAD 83 Zone 17
City of Barrie Municipal Mapping 2007



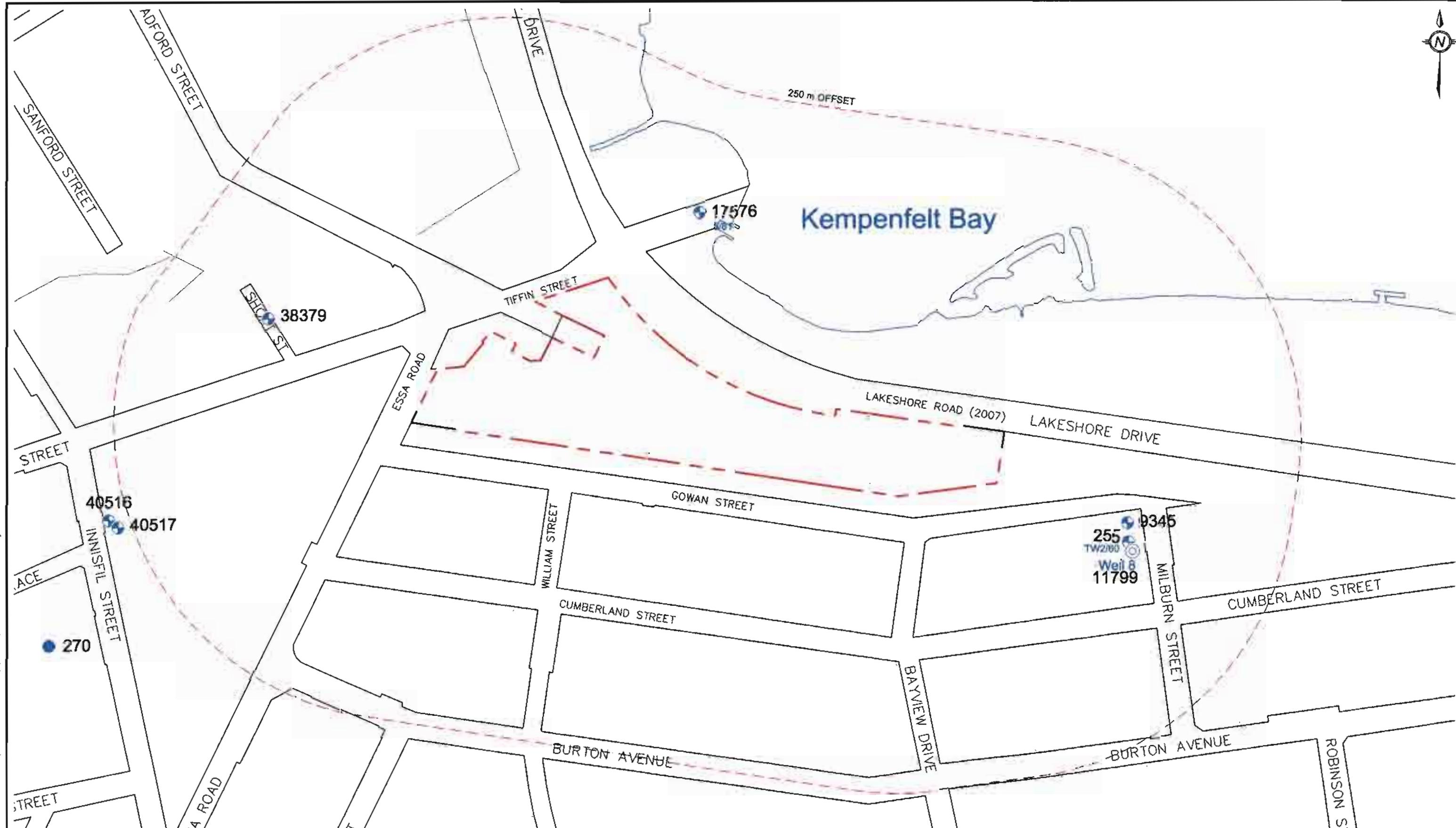
FILE No. 0911706024BASITE.dwg
PROJECT No. 09-1170-6024

SCALE AS SHOWN
DATE 05 JAN 2010
DESIGN
CAD J REGIER
CHECK
REVIEW



The City of
BARRIE
ALLANDALE STATION
PHASE 1 ESA

SITE LOCATION MAP



- SITE BOUNDARY WITH 250 m OFFSET
- DRILLED WELL
- TEST OR OBSERVATION WELL
- NON-ACTIVE MUNICIPAL WELL

NOTES:

Projection UTM NAD 83 Zone 17
 MOE Wells 2007

0 25 50 100 150
 SCALE 1:3000 metres



FILE No. 0911706024BAWELL.dwg

PROJECT No. 09-1170-6024 REV.

SCALE	AS SHOWN	TITLE
DATE	15 JAN 2010	
DESIGN		
CAD	J REGIER	

CHECK

REVIEW

WELL LOCATION MAP



ALLANDALE STATION
 PHASE I ESA

FIGURE
 3



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO

APPENDIX A

Regulatory Responses



COPY SERVICES CANADA

www.lgicscanada.com

alantos@lgicscanada.com

Phone: 613-875-7387

Fax: 819-684-7624

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1998/99	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Bradford Street (249-300)	250-Allison Nancy Lee -res 252-Res 268-Crazy fox Restr The 274-Decorating Place 276-Vacant 249-Sewage Treatment Plant 263-Toronto Dominion Bank 267-Res 285-Vacant
Essa Road (4-48)	4-Flowers & found Objects 8-Barrie & district Rape Crisis Line 18-Whistle Stop the old 28-Unicuts -Res 30-Country Curtain & Gift Shoppe -Res 34-Res 38-Vacant 40-Vintage Place the -Res 44-Addie's Confectionery 48-Abercrombie Electric Co Ltd 11-Vacant 21-Allandale Gaurdian Drugs -Allandale Jug City -R & J Christie Ltd

	31-Alternative Nail Studio -Res 33-Goedemondt Real Estate Ltd 35-Res 41-Aladdin Banquet & Meeting Centre 45-Kentucky Fried Chicken
Gowan Street (9-121)	9-Oil Tech Rust Control Centre Inc -Topcoat Asphalt Sealing 13-Res 17-B R Heating & Cooling Ltd -Wilson R Graphic Supply Inc -S G S Custom -Auto-Works 27-Res 33-121-Res (Res Apartments)
Tiffin Street (24-44)	30-Creative Input -Res 32-New Beginnings by Laurie 34-No Return 36-40-Res 44-No Return

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1993/94	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Bradford Street (249-300)	250-Res 252-Vidcomp Service 268-Crazy Fox Restr The 276-Vacant 257-No Return 263-Toronto Dominion Bank 267-NRS Aim Realty Ltd 285-No Return
Essa Road (4-48)	4-Flowers & found Objects 8-Barrie & District Rape Crisis Line

	18-Whistle Stop the old 28-Just Hair -Res 30-No Return 34-Res 40-Barrie Appliance Wholesales 44-Addie's Confectionery 48-Abercrombie Electric Co Ltd 21-Allandale Gaurdian Drugs -Allandale Jug City -R & J Christie Ltd -Auto-Star Compusystems Ontario -Tuck O H 31-Res 33-Goedemondt Lou Real Estate Ltd 35-Res -Allandale Allergy Clinic 41-Factory Carpets of America -Factory To You Carpet Outlet 45-Kentucky Fried Chicken -Gaydon Contractors Ltd
Gowan Street (9-121)	9-Oil Tech Rust Control Centre Inc -Topcoat Asphalt Sealing 13-Res 17-Huronia Ford Collision 27-Res 33-121-Res (Res Apartments) 49-Don's Piano Movers 59-Barnes G Trucking 75-Diamond Hardwood Flooring Service
Tiffin Street (24-44)	30-Tara Gallery & Custom Framing The 32-New Beginnings by Laurie 34-Res 36-40-Res 44-Res

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1989	
Site Listing:	-Address Not Listed

Adjacent Properties:	
Bradford Street (249-300)	250-Res 252-Vidcomp Service 268-Crazy Fox Restr The 274-Fox Fleet International 257-Clifton Hotel Ltd (barrie) 263-Toronto Dominion Bank 267-Res Apartments -Webb Jack Clothing 285-C N R Freight Sales -Via Rail Canada
Essa Road (4-48)	4-Harry's Trading Post & Pawn Shop 18-Whistle Stop the old 28-DeeVee Sales -Douglas Custom Upholstery 30-Res 34-Res 40-Jack's Music Hall 44-Addie's Confectionery 48-Abercrombie Electric Co Ltd 21-Allandale Gaurdian Drugs -Allandale Jug City -Tuck O H 27-Big Brother Assoc. of Barrie & District 31-Res 33-Brown Michael Realty Ltd 35-Res 41-U-Buy Discount Foods 45-Scotts Chicken Villa
Gowan Street (9-121)	9-Oil Tech Rust Control Centre Inc -House of Colours Pots Plus 13-Res 17-Huronia Ford Sales Ltd -HOJ National Leasing 27-Res 33-121-Res (Res Apartments) 49-Don's Piano Movers 75-Diamond Hardwood Flooring Service
Tiffin Street (24-44)	30-Tara Gallery & Custom Framing The

	32-New Beginnings by Laurie 36-40-Res 44-Res
--	--

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1982	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Bradford Street (249-300)	<p>250-Res 252-T's Ceramics 268-Crazy Fox Restr The 276-No Return</p> <p>257-Clifton Hotel -Rib Cage The -Pete's Place 261-Vacant 263-Toronto Dominion Bank 267-Res Apartments -Webb Jack Clothing 285-C N R Freight Sales -Via Rail Canada Inc -CN Offices</p>
Essa Road (4-48)	<p>4-Jesse's Restr 8-Webb's Jewellery -Res</p> <p>16-Allandale Lawn Bowling Club 18-Allandale Taxi -Allandale Leasing & Rentals 28-Douglas Custom Upholstery 30-Res -Gary's Barber Shop 34-Res -Alcona Departments Store 38-Earth Printing 40-Hay Lorne Real Estate -Hay's Travel Service 44-Addie's Confectionery 48-Abercrombie Electric Co Ltd</p>

	21-Gaurdian Drugs -Allandale Jug City -Tim Hortons Donuts -Allandale Drug Co Ltd -**Gulf Canada 25-Bank of Nova Scotia 27-Vacant 29-Goedemondt Lou Real Estate Ltd 33-Hogben Mayhew & Van Lange lawyers -Joyne Services Ltd -Star Amusements 35-Goedemondt Lou Real Estate Ltd 41-A & M Super Discount Marts Ltd 43-Barrie Drive A Car -Barrie Leasing & Drive A Car -Hertz Rent A Car 45-Kentuck Fried Chicken
Gowan Street (9-121)	9-Rust Control Centre Inc -Bikeland 13-Res 17-Barrie Honda Auto Sales 27-Res 33-121-Res (Res Apartments) 75-Diamond Hardwood Flooring Service
Tiffin Street (24-44)	30-Frank's Artistic Framing 32-Laurie's Hairstyling 34-Res -Allandale Photonics 36-40-Res 44-Res

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1976	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Bradford Street (249-300)	250-Res 252-Res

	254-No Return 268-Allandale Men's Residence 274-Res 276-Res 278-Hoar Transp Co Ltd 259-Vacnat 261-Riteway Industrial Catering 263-Toronto Dominion Bank 267-Res Apartments -Webb Jack Clothing 285-C N R Depot -Cn-CP Telec -CNRR Car Controls -Hoar Transport Co Ltd
Essa Road (4-48)	4-Allandale Drugs Co Ltd -Can Sub Post Offic 8-Webb's Jewellry -Res -Allandale Lawn Bowling Club 18-Allandale Taxi -Allandale Dely Serv 28-Douglas Custom Upholstery 30-Barrie Honda 32-36-Alcona Departments Store 38-Res 40-Georgian Sports 44-Addie's Confectionery 48-Abercrombie Electric Co Ltd 27-Gary's Barber Shop 29-Vacant 31-Res 33-Julie's 35-Maella Fabrics -Res 41-A & M Super Discount Marts Ltd 43-Barrie Drive A Car Co Ltd -Dangerfield Holdings Ltd -Hertz Rent A Car 45-Kentuck Fried Chicken
Gowan Street (9-121)	9-Northern Beauty Supply 13-Bikeland 17-Johnston Kerv Motors Ltd

	27-Vacant 33-121-Res (Res Apartments)
Tiffin Street (24-44)	30-Frank's Artistic Framing 32-Laurie's Hairstyling 34-Res 36-40-Res 44-Res 41-Vacant 43-Vacant

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1974	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Bradford Street (249-300)	250-Res 252-Res 254-Res -Marileen Studio, hrdrsr 268-Allandale Men's Residence 274-Vacant 276-Res 278-Hoar Transp Co Ltd 259-Vacant 261-Rite Way Industrial Catering 263-Toronto Dominion Bank 267-Res Apartments -Webb Jack Clothing 285-C N R Depot -Cn-CP Telec -CNR Car Controls -CNR Express
Essa Road (4-48)	4-Allandale Drugs Co Ltd -Can Sub Post Offic 8-Webb's Jewellry -Res -Allandale Lawn Bowling Club

	<p>-Canadian Natl Inst for the Blind 18-Allandale Taxi -Allandale Dely Serv 28-34-Allandale Home Hardware & Appliances 34-Res 38-Res 40-Res -Torkandic Ltd, diving & Marine contrs 44-Addie's Confectionery -Vacant 48-Abercrombie Electric Co Ltd</p> <p>27-Gary's Barber Shop 29-Vacant 31-Res 33-House of Bellini, bty salon 35-MacFarlane, Wm -**Wagg's Lndry & Dry Cleaners Ltd 41-Red & White Foodmaster 43-Barrie Drive A Car Co Ltd -Dangerfield Holdings Ltd -Hertz Rent A Car -Bennett & Wright Ltd 45-Kentuck Fried Chicken</p>
Gowan Street (9-121)	<p>9-Allandale Home Hardware Ltd furn 13-Res -Carter Body & Fender Shop 17-Barrie Volkswagen 18-Johnston Kerv Motors Ltd 27-Res 33-121-Res (Res Apartments) 75-Sunshine Flr Serv</p>
Tiffin Street (24-44)	<p>26-Res Apartments 30-44-Res</p> <p>41-Vacant 43-Vacant</p>

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1966	

Site Listing:	-Address Not Listed
Adjacent Properties:	
Bradford Street (249-300)	250-Res 252-Res 254-Res -Marileen Studio, hrdrsr 268-Allandale Men's Rooming House 274-Res 276-Res 278-CNR -CNR Telecommunications 249-Barrie Pollution Control Centre 257-Clifton Hotel 259-Allandale Taxi 261-Grill the Restr 263-Toronto Dominion Bank 267-Res Apartments -Webb Jack Clothing 285-C N R Depot -CNR Express
Essa Road (4-48)	4-Allandale Drugs Co Ltd 8-Webb's Jewellery -Res -Allandale Lawn Bowling Club -Canadian Natl Inst for the Blind 28-34-Allandale Hardware Appliances 34-Res 38-Res 40-Res -Shoe Craft -Sub P O 44-Addie's Confectionery -Res 48-Pifher's Garage 9-Vacant 11-Christie's I G A Foodliner Parking Lot 21-Allandale Motors 27-Vacant 29-Cliff's Barber Shop 31-Res 33-Eve's Beauty Shoppe

	35-MacFarlane, Wm -**Wagg's Lndry & Dry Cleaners Ltd 41-Red & White Foodmaster 43-Barrie Drive A Car -Cooke Cartage & Storage -Res 45-Res
Gowan Street (9-121)	9-Allandale Hdwr Second Hand Store 13-Res 17-Viau Motors Ltd 27-Res 33-113-Res (Res Apartments)
Tiffin Street (24-44)	26-Res Apartments 30-44-Res 32-Pom-Pom Hair Styling 41-Res 43-Res

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1961	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Bradford Street (249-300)	250-Res 252-Res 254-Res 268-Allandale Men's Rooming House 274-Res 276-Vacant 280-Res 249-Barrie Sewage Disposal 257-Clifton Hotel 259-Allandale Taxi 261-Booke Real Estate 263-Toronto Dominion Bank 267-Res Apartments -Webb W J, & Son

	no civic address-C N R Depot -CNR Express -CNR Restr
Essa Road (4-48)	4-Allandale Drugs Co Ltd 8-Webb's Jewellery -Res -Allandale Lawn Bowling Club -Canadian Natl Inst for the Blind -Webb, H G, piano tuner 28-34-Allandale Hardware 34-Res 38-Res 40-Res -Crofts Shoe Repair 44-Addie's Confectionery -Res 48-Pifher's Garage 9-Weston Grill 11-I G A Foodliner 15-Res 17-Ruby's Bty Salon 19-Pelican Fish & Chips 21-Allandale Motors 27-Collin's, Irene, ladies wear 29-Cliff's Barber Shop 31-Res 33-Lennox Beauty Shoppe 35-Res -**Wagg's Lndry & Dry Cleaners Ltd 41-Midtown Used Cars 43-Industrial Radiant Htg & Research plant -Cooke Cartage & Storage -Res 45-Res 47-Res
Gowan Street (9-121)	9-Overland Express Ltd 13-Res 17-Viau Motors Ltd 21-113-Res
Tiffin Street (24-44)	26-44-Res 41-Res

PROJECT NUMBER: Golder— Barrie	
Site Address:	Allandale Station Lands, Barrie, Ontario
Year: 1952	
Site Listing:	-Address Not Listed
Adjacent Properties:	
Bradford Street (249-300)	-Street Not Listed
Essa Road (4-48)	-Street Not Listed
Gowan Street (9-121)	-Street Not Listed
Tiffin Street (24-44)	-Street Not Listed



Ministry of
the Environment
Freedom of Information and
Protection of Privacy Office
12th Floor
40 St. Clair Avenue West
Toronto ON M4V 1M2
Tel: (416) 314-4075
Fax: (416) 314-4285

Ministère de
l'Environnement
Bureau de l'accès à l'information
et de la protection de la vie privée
12th étage
40, avenue St. Clair ouest
Toronto ON M4V 1M2
Tél.: (416) 314-4075
Téléc. : (416) 314-4285

Christie Groves
Golder Associates Ltd.
121 Commerce Park Dr, Unit L
Barrie, ON L4N 8X1

January 12, 2010

Dear: Christie Groves
RE: ***Freedom of Information and Protection of Privacy Act Request***
Our File # A-2009-04861, Your Reference 09-1170-6024

This letter is in response to your request made pursuant to the *Freedom of Information and Protection of Privacy Act* relating to Lot 8, Concession 14, Springwater Township, Barrie - Allandale Station Lands.

After a thorough search through the files of the Ministry's Barrie District Office, Central Regional Office, Investigations and Enforcement Branch, Environmental Monitoring and Reporting Branch, Sector Compliance Branch and Safe Drinking Water Branch, no records were located responsive to your request. To provide you with this response and in accordance with Section 57 of the *Freedom of Information and Protection of Privacy Act*, the fee owed is \$30.00 for 1 hour of search time @ \$30.00 per hour. **We have applied the \$30.00 for this request from your initial payment.**

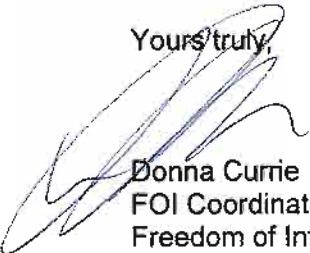
To conduct a search of the files of the Environmental Assessment and Approvals Branch requires an additional 13 hours of search time. If you would like us to search for Certificates of Approval, please forward to me at the above address payment by cheque (made payable to the Minister of Finance (FOI)) or credit card in the amount of \$390.00. Please note that there is no guarantee that any records will be located. Please note, a request for records must usually be answered within 30 calendar days, however Section 27 allows for time extensions under certain circumstances. If you choose to have the search conducted at the Environmental Assessment and Approvals Branch, the time for answering your request will be extended for an additional 30 days.

When remitting payment please quote our file number or attach a copy of this letter.

If you object to any decision I have made, you may request a review by contacting the Information and Privacy Commissioner/Ontario, 2 Bloor Street East, Suite 1400, Toronto, ON M4W 1A8 (800-387-0073 or 416-326-3333). Please note that there is a \$25.00 fee and you only have 30 days from receipt of this letter to request a review.

If you have any questions regarding this matter, please contact Liz Mico at (416) 212-0559.

Yours truly,


Donna Currie
FOI Coordinator
Freedom of Information and Protection of Privacy Office

From: CBuist@tssa.org on behalf of customerservices@tssa.org
Sent: Thursday, January 07, 2010 3:54 PM
To: Groves, Christi
Subject: Re: records search

Thank you for your inquiry.

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

For a further search in our archives please submit your request in writing to Public Information Services via e-mail (publicinformationservices@tssa.org) or through mail along with a fee of \$52.50 (including GST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Thank you & Have A Great Day!

Carlien
 "Putting Public Safety First"

Technical Standards and Safety Authority
 3300 Bloor Street West, 16th Floor Centre Tower
 Toronto, ON M8X 2X4

Ph: 416-734-2700
 Fax: 416-234-9169
 Toll-Free: 1-877-682-8772
 Toll-Free Fax: 1-866-725-1366
 Email: customerservices@tssa.org
 Web Site: www.tssa.org

"Groves, Christi" <Christi_Groves@golder.com>
 To: customerservices@tssa.org <customerservices@tssa.org>
 cc:
 Subject: records search

12/21/2009 02:18 PM

Hello,

Can you please search your records for any files relating to the following addresses within the City of Barrie:

Site: Allandale Station Lands (not sure of the municipal address). It is a 9.3 acre site which houses the old Allandale Train station building and the former lawn bowling club.

Adjacent: 9 to 121 Gowan Street
 250 to 300 Bradford Street
 4 to 48 Essa Road
 25 to 44 Tiffin Street.

Thanks,

Christi

Christi Groves (B.Sc. (Hons)) | Environmental Scientist | **Golder Associates Ltd.**
 121 Commerce Park Drive, Unit L, Barrie, Ontario, Canada L4N 8X1
 T: +1 (705) 722 4492 | D: +1 705 722 4492 ext 2220 | F: +1 (705) 722 3786 | C: +1 705 718 1446 | E: Christi_Groves@golder.com | www.golder.com

Work Safe, Home Safe

This email transmission is confidential and may contain proprietary information for the exclusive use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

Please consider the environment before printing this email.

This electronic message and any attached documents are intended only for the named addressee(s).

This communication from the Technical Standards and Safety Authority may contain information that is privileged, confidential or otherwise protected from disclosure and it is copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message.

Thank you.

Groves, Christi

From: Pickett, Kimberley [Kimberley.Pickett@simcoe.ca]
Sent: Monday, December 21, 2009 3:02 PM
To: Groves, Christi
Subject: RE: records search

Christi

Further to your email regarding the property noted below, after a review of the County's records I can advise that the County's records indicate that the above property is not a County owned active or inactive landfill site. Furthermore, our records indicate that this property is not within 500 meters of any County owned active or inactive landfill sites. Therefore this property is not subject to the Ministry of the Environment D4 Guidelines and related restrictions. However, we must inform you that the County took over waste management from the local municipalities in the early 1990's and the County's records may not be complete, especially regarding sites that are older for which records may not have been retained.

In addition the County has no jurisdiction over private landfills whether licensed or unlicensed and our response does not address whether the property is located on or near a private landfill. Accordingly, our records cannot be relied upon as the only source for determining the status of this property. We suggest that further due diligence be undertaken.

The County does not maintain any records relating to non-compliance or outstanding violations of environmental laws or any other regulatory orders including spills. Your inquiry regarding orders/violations or private landfills should be directed to the Ministry of the Environment and/or the District Health Unit as well as the City of Barrie and the current owner.

Kimberley Pickett

Technical Compliance Supervisor
County of Simcoe, Environmental Services
1110 Highway 26, Midhurst, Ontario L0L 1X0
Phone: (705) 726-9300 ext 1195 Fax: (705) 726-9832
email: kimberley.pickett@simcoe.ca
simcoe.ca

This message is confidential and intended for the exclusive use of the person to whom it is addressed. Any other person is prohibited from disclosing, distributing or reproducing it. If this message has been delivered to anyone other than the person intended, please delete it from your system, destroy all copies, and notify the sender. Thank you

From: Groves, Christi [mailto:Christi_Groves@golder.com]
Sent: Monday, December 21, 2009 2:53 PM
To: Pickett, Kimberley
Subject: records search

Ms. Pickett,

Golder Associates is currently conducting a Phase I ESA for the property referred to as Allandale Station Lands in the City of Barrie, Ontario. The property consists of approximately 9.3 acres and is located to the south of the Tiffin Street and Lakeshore Drive intersection (i.e. Lot 8, Concession 14). The property has operated as a railway since the early 1900s and was located in the former Allandale limits.

It would be appreciated if you could issue a brief report for the above-listed site responding to the following questions:

1. Does your department monitor discharges from any of these properties? If so, how often?
2. Are there any violations on record for these properties and what are the contaminants of concern?
3. Do these properties have a surcharge agreement?

It would also be appreciated if you could conduct a review for any environmental information you may have on file pertaining to the properties including, filling activities, spills, borehole logs, etc.

It would be appreciated if you could respond at your earliest convenience, followed by a hard copy in the mail. If you have any questions, please do not hesitate to contact the undersigned. Thank you for your attention to this matter.

Yours truly,

GOLDER ASSOCIATES LTD.

Christi Groves

Christi Groves (B.Sc. (Hons)) | Environmental Scientist | **Golder Associates Ltd.**

121 Commerce Park Drive, Unit L, Barrie, Ontario, Canada L4N 8X1

T: +1 (705) 722 4492 | **D:** +1 705 722 4492 ext 2220 | **F:** +1 (705) 722 3786 | **C:** +1 705 718 1446 | **E:**

Christi_Groves@golder.com | www.golder.com

Work Safe, Home Safe

This email transmission is confidential and may contain proprietary information for the exclusive use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

Please consider the environment before printing this email.

--
This message has been scanned for viruses and
dangerous content by **MailScanner(1)**, and is
believed to be clean.

Groves, Christi

From: Steve Gallagher [steve.gallagher@candoltd.com]
Sent: Monday, January 25, 2010 3:13 PM
To: Groves, Christi
Cc: Kathy Gray
Subject: Re: Allandale Station Lands, Barrie

Christi,

There have been no derailments or spills in this area since Cando Contracting has been operating the railway (minor derailment on Essa Rd but no damage to the environment). Once per year our vegetation management program includes this area. A mix of Carmax and Glyfos is sprayed 16 ft wide on the rail corridor.

Steve Gallagher

----- Original Message -----

From: [Groves, Christi](#)
To: [Steve Gallagher](#)
Cc: [Kathy Gray](#)
Sent: Friday, January 22, 2010 12:00 PM
Subject: Allandale Station Lands, Barrie

Hi Steve,

I was speaking with Kathy this morning and she said you may have some information relating to the Allandale Station Lands. Are you aware of any derailments or spills that occurred on the property? Also, have herbicides or pesticides been utilized on the property since the City purchased the property in 1999?

Thanks so much for your help,

Christi

Christi Groves (B.Sc. (Hons)) | Environmental Scientist | **Golder Associates Ltd.**

121 Commerce Park Drive, Unit L, Barrie, Ontario, Canada L4N 8X1

T: +1 (705) 722 4492 | **D:** +1 705 722 4492 ext 2220 | **F:** +1 (705) 722 3786 | **C:** +1 705 718 1446 | **E:** Christi_Groves@golder.com | www.golder.com

Work Safe, Home Safe

This email transmission is confidential and may contain proprietary information for the exclusive use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation.

Please consider the environment before printing this email.

Groves, Christi

From: Stephanie Huyssen [SHuyssen@barrie.ca]
Sent: Wednesday, January 27, 2010 1:27 PM
To: Groves, Christi
Cc: Diane Moreau
Subject: FW: 285 Bradford Street
Attachments: BRADFORD ST 268,270,274,276,285.pdf

Hello Christi,

As requested, please find attached a copy of a drawing showing the disconnection of the water service at 285 Bradford Street. We have searched our records and have no billing history for that property as of 2002 (no records before that date) for sewer or water as well as no drawing for a sanitary sewer connection.

I trust this is satisfactory, please let me know if require any further information.

Thank you,

Stephanie Huyssen, B.Sc.

Senior Environmental Officer
City of Barrie
Central Ontario's Premier Waterfront Community

Environmental Operations
P.O. Box 400 Barrie, ON
Barrie ON L4M 4T5
Tel: 705-739-4220 ext. 5810
Fax: 705-739-4251

This E-mail message (including attachments, if any) is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, proprietary, confidential and exempt from disclosure. If you are not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender and erase this E-mail message immediately.

 Please consider the environment before printing this email.

From: Allison Bullock
Sent: January 27, 2010 12:19 PM
To: Stephanie Huyssen
Subject: RE: 285 Bradford Street

Sorry for the delay. Glen says he believes the water line was removed, but that could just mean within the building. He said he's going to talk to Alan Miller to see if he knows anything. I don't think we're going to find anything on the sewer. All I can tell you for sure is that I don't have any record of billing water or sewer at this address since 2002. That's as far back as the billing goes.

There isn't a sewer drawing in the Sanitary file in R: drive, and the water one is confusing. Looks like a water line was removed in Aug/80, but it also shows another 38mm line coming off the hydrant line and into the building. I've attached it so you can see what I mean.

Allison Bullock
Utilities Service Clerk
Ext. 5217

 Please consider the environment before printing this email.

From: Stephanie Huyssen
Sent: January 25, 2010 10:10 AM

To: Allison Bullock
Subject: RE: 285 Bradford Street

Thanks Allison, let me know what Glen finds.

Stephanie Huyssen, B.Sc.

Senior Environmental Officer
City of Barrie
Central Ontario's Premier Waterfront Community

Environmental Operations
P.O. Box 400 Barrie, ON
Barrie ON L4M 4T5
Tel: 705-739-4220 ext. 5810
Fax: 705-739-4251

This E-mail message (including attachments, if any) is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, proprietary, confidential and exempt from disclosure. If you are not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender and erase this E-mail message immediately.

 Please consider the environment before printing this email.

From: Allison Bullock
Sent: January 25, 2010 10:01 AM
To: Stephanie Huyssen
Subject: RE: 285 Bradford Street

Glen's going to look into it and get back to me. We haven't billed water or sewer since at least 2002, but I don't have any records prior to that, so I can't say for sure if the lines are there but just turned off.

Allison Bullock
Utilities Service Clerk
Ext. 5217

 Please consider the environment before printing this email.

From: Stephanie Huyssen
Sent: January 25, 2010 9:06 AM
To: Allison Bullock
Subject: 285 Bradford Street

Hi Allison,

I am on the lookout for any information you may have for 285 Bradford Street. Would you be able to find out if and when they were connected to sewer and water? It's the old rail station down by the lake. Golder Associates is doing an environmental assessment on the property and is trying to get some background information.

Thank you,

Stephanie Huyssen, B.Sc.
Senior Environmental Officer
City of Barrie
Central Ontario's Premier Waterfront Community

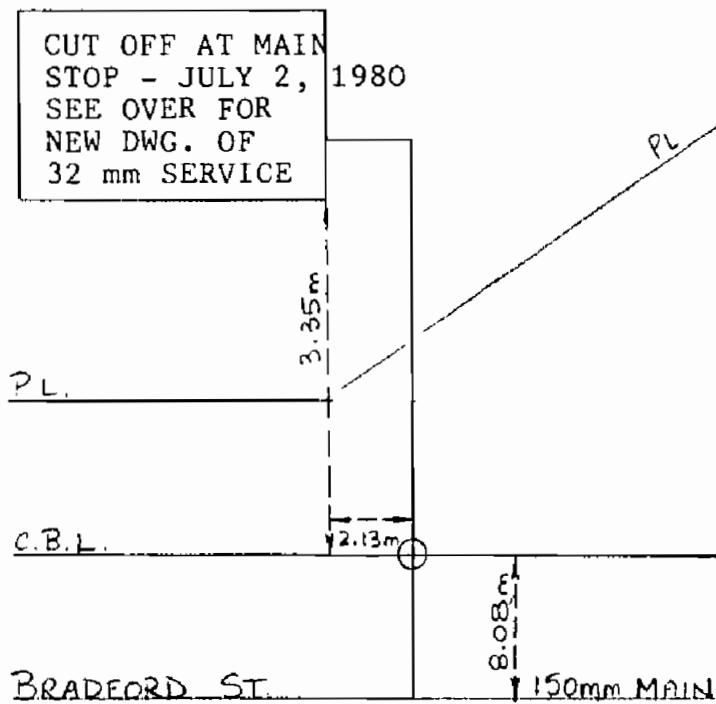
Environmental Operations
P.O. Box 400 Barrie, ON
Barrie ON L4M 4T5
Tel: 705-739-4220 ext. 5810
Fax: 705-739-4251

ADDRESS 268 & 270 BRADFORD STREET

NAME Allandale Men's Rooming House

DATE Renewed to C.B. in 1925 (3-48)

SIZE Renewed Main to Bldg.
19mm copper - August 1968

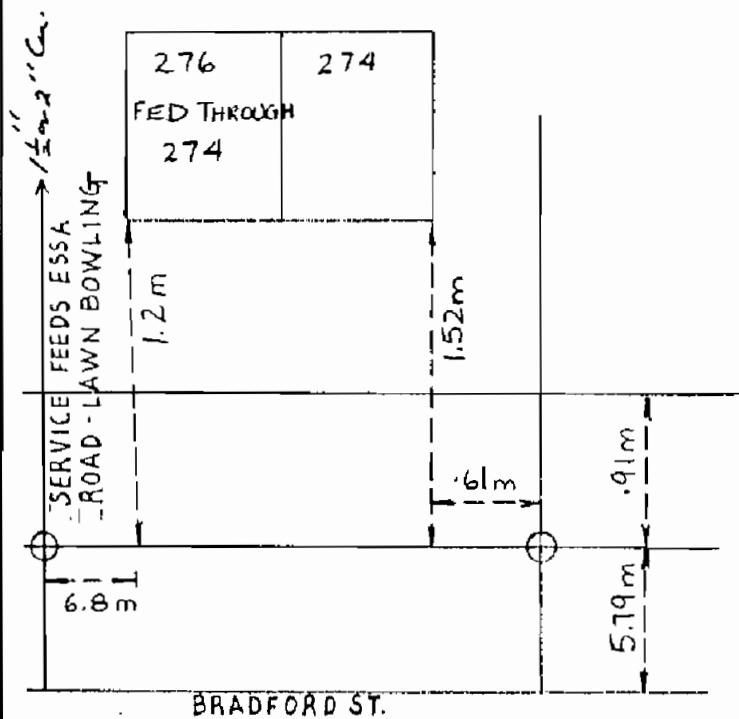


ADDRESS 274 & 276 BRADFORD STREET

NAME _____

DATE Renewed Main to P.L. (5-17)

SIZE 19mm copper - December 1, 1971

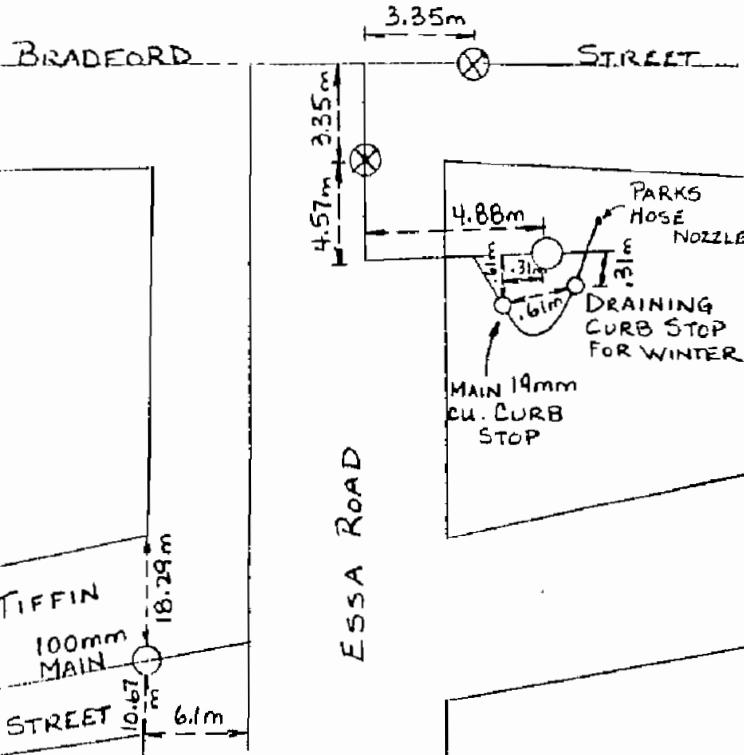


ADDRESS BRADFORD STREET GORE

NAME Parks & Recreation Dept.

DATE June 9, 1976 (22-17)

SIZE 19mm copper

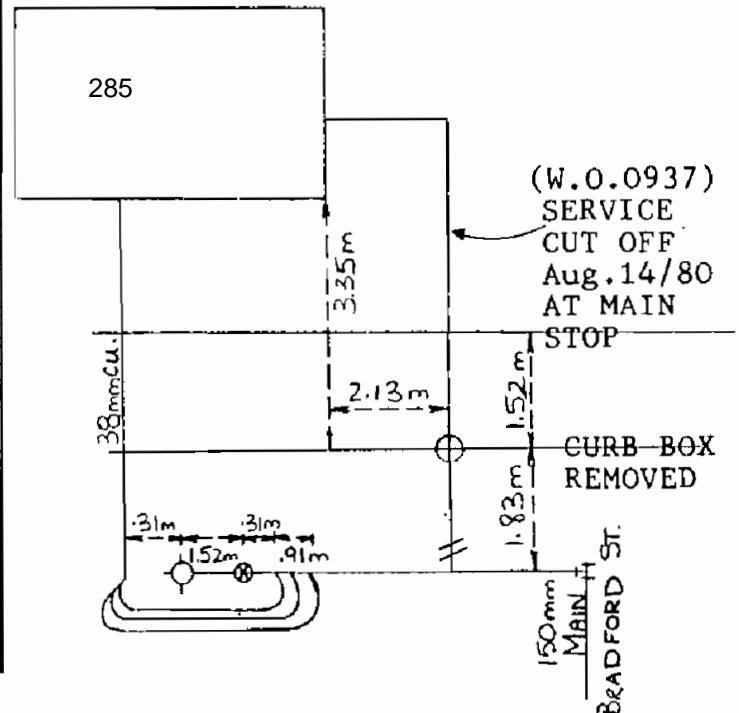


285 ADDRESS BRADFORD STREET

NAME Can. Nat. Railways Station

DATE (3-49)

SIZE _____



From: Kathy Gray [KGray@barrie.ca]
Sent: Monday, January 25, 2010 2:36 PM
To: Groves, Christi
Subject: Pesticides = Allandale

Our Facilities staff have not applied any such materials since we recovered ownership for the site in 2006.

Kathy Gray

Manager Real Estate Services
City of Barrie
Central Ontario's Premier Waterfront Community

Legal Services Department
P.O. Box 400
Barrie ON L4M 4T5
Tel: 705-739-4220 ext. 4452
Fax: 705-739-4278

This E-mail message (including attachments, if any) is intended for the use of the individual or entity to which it is addressed and may contain information that is privileged, proprietary, confidential and exempt from disclosure. If you are not the intended recipient, you are notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify the sender and erase this E-mail message immediately.



Please consider the environment before printing this email.

Table 1

Water Well Records

LABEL	CON	DATE	EASTING	ELEV	WATER	DIA	SCREEN			SWL	RATE	TIME	PL	TYPE	METHOD	MOE REFERENCE	
							ft	ASL	1)ft	Type	in	ft	TOS	Len	#	IGM	min
255		Oct-60	604928	747	213 Fr	2	213	15		75	360	1	TH	RC	2801	MOE# 5700225 BARRIE PUC TW2/60	
			4914135		284 Fr								NU			MSND GRVL 0004 MSND 0013 MSND GRVL BLDR 0026 BLUE CLAY 0028 CLAY SILT 0033 BLUE CLAY 0040 BLUE CLAY GRVL 0049 GRVL MSND BLDR 0055 BLUE CLAY MSND GRVL 0065 BLUE CLAY 0074 BLUE CLAY MSND 0099 BLUE CLAY SILT 0133 CLAY MSND 0150 FSND GRVL CLAY 0206 BLUE CLAY MSND 0210 FSND GRVL 0228 BLUE CLAY 0244 BLUE CLAY MSND GRVL 0245 BLUE CLAY 0253 BLUE CLAY MSND GRVL 0264 GRVL MSND BLDR 0272 GREY CLAY 0284	
9345		Nov-72	604927	745	206 Fr	2	213	16	2	37	360	3	TH	RC	2801	MOE# 5709345 BARRIE PUC 4/72	
			4914151									DO				BLCK MUCK 0001 BRWN SAND GRVL 0004 BRWN SAND 0009 BRWN SAND GRVL CLAY 0027 GREY CLAY STNS 0053 GRVL SAND 0067 GREY CLAY GRVL 0081 SAND GRVL BLDR 0083 GREY CLAY 0150 GREY FSND SAND 0176 GREY SAND GRVL 0178 GREY FSND GRVL 0208 GREY CLAY SAND GRVL 0213 GREY GRVL SAND 0230 GREY CLAY 0243 GREY CLAY GRVL 0244 GREY CLAY 0254 GRVL SAND CLAY 0273 GREY CLAY SAND GRVL 0284 BRWN LMSN 0286	
11799		Oct-74	604931	746	3 Fr	24	153	41	5	800	1440	61	WS	RR		MOE# 5711799 BARRIE PUC WELL 8	
			4914127		135 Fr		213	15				MU,PS		2801		BRWN TPSL 0001 BRWN CLAY 0003 BRWN SAND GRVL CLAY 0026 GREY CLAY GRVL 0046 BRWN GRVL SAND CLAY 0059 GREY CLAY GRVL 0077 GREY GRVL SAND CLAY 0082 GREY CLAY GRVL 0135 GREY MSND 0195 GREY SAND GRVL CLAY 0211 GREY CSND GRVL 0229 GREY CLAY 0235	
17576		May-81	604568	719								TH	RC	2801		MOE# 5717576 BARRIE PUC TW5/81	
			4914413													FILL 0001 GREY CLAY SAND LYRD 0021 GREY CLAY SAND SILT 0041 GREY CLAY FSND 0052 WDFR 0054 GREY CLAY LYRD SLTY 0060 GREY CLAY SNDY SOFT 0065 FGVL 0068 GRVL SAND BLDR 0071 CLAY SAND HARD 0084 GREY CLAY CSND SILT 0093 GREY CLAY SLTY 0096 GREY CLAY SNDY LYRD 0108 CLAY SLTY SOFT 0126 GREY CLAY SILT 0138 SILT FSND CLAY 0147 GREY CLAY SLTY 0194 GREY CLAY SNDY 0230 CLAY FGVL MARL 0245 CLAY GRVL CMTD 0250 GREY CLAY 0255 CLAY GRVL 0261 CLAY SNDY 0269 CLAY GRVL MARL 0289	
38379		Sep-03	604205	742	5 Fr	2	10	3				OW			6809	MOE# 5738379	
			4914324									NU				FILL 0001 BRWN SILT SNDY 0007 GREY SILT 0012 GREY SILT SAND 0016	
40516		Dec-05	604071	749		5	180	30				OW	RC		7075	MOE# 40516 TAG A033364	
			4914154									MU				BRWN FSND MSND 0031 BRWN SAND CLAY LYRD 0039 BRWN MSND MGV LOOS 0102 GREY CLAY HARD 0111 BRWN FSND 0163 BRWN CSND CGVL 0210	
40517		Dec-05	604079	749		6	241	30				OW	RC		7075	MOE 5740517 TAG A033394	
			4914148									MU				BRWN FSND MSND 0031 BRWN SAND CLAY LYRD 0039 BRWN MSND MGV LOOS 0102 GREY CLAY HARD 0111 BRWN FSND 0163 BRWN CSND CGVL 0271	

QUALITY:

Fr Fresh
 Mn Mineral
 Sa Salty
 Su Sulphur

TYPE:

WS Water Supply
 AQ Abandoned Quality
 AS Abandoned Supply

USE:

CO Comercial
 DO Domestic
 MU Municipal
 PS Public

METHOD :

CT Cable Tool
 JT Jetting
 RC Rotary Conventional
 RA Rotary Air



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO

APPENDIX B

Aerial Photographs



Image File: 20091221017_(1946)A10080_032

0 50 100 250 500

SCALE 1:10000 metres

SOURCE: National Air Photo Library, Provided by EcoLog ERIS; 04 January 2010

— Site Boundary (Approximate)



SCALE AS SHOWN

DATE 18 JAN 2010

DESIGN

CAD J REGIER

TITLE

PHOTO PLATE 1946

FILE No 0911706024ABPHOTO.dwg

CHECK

PROJECT No 09-1170-6024

REV.

REVIEW

ALLANDALE STATION
PHASE I ESA

FIGURE

B-1

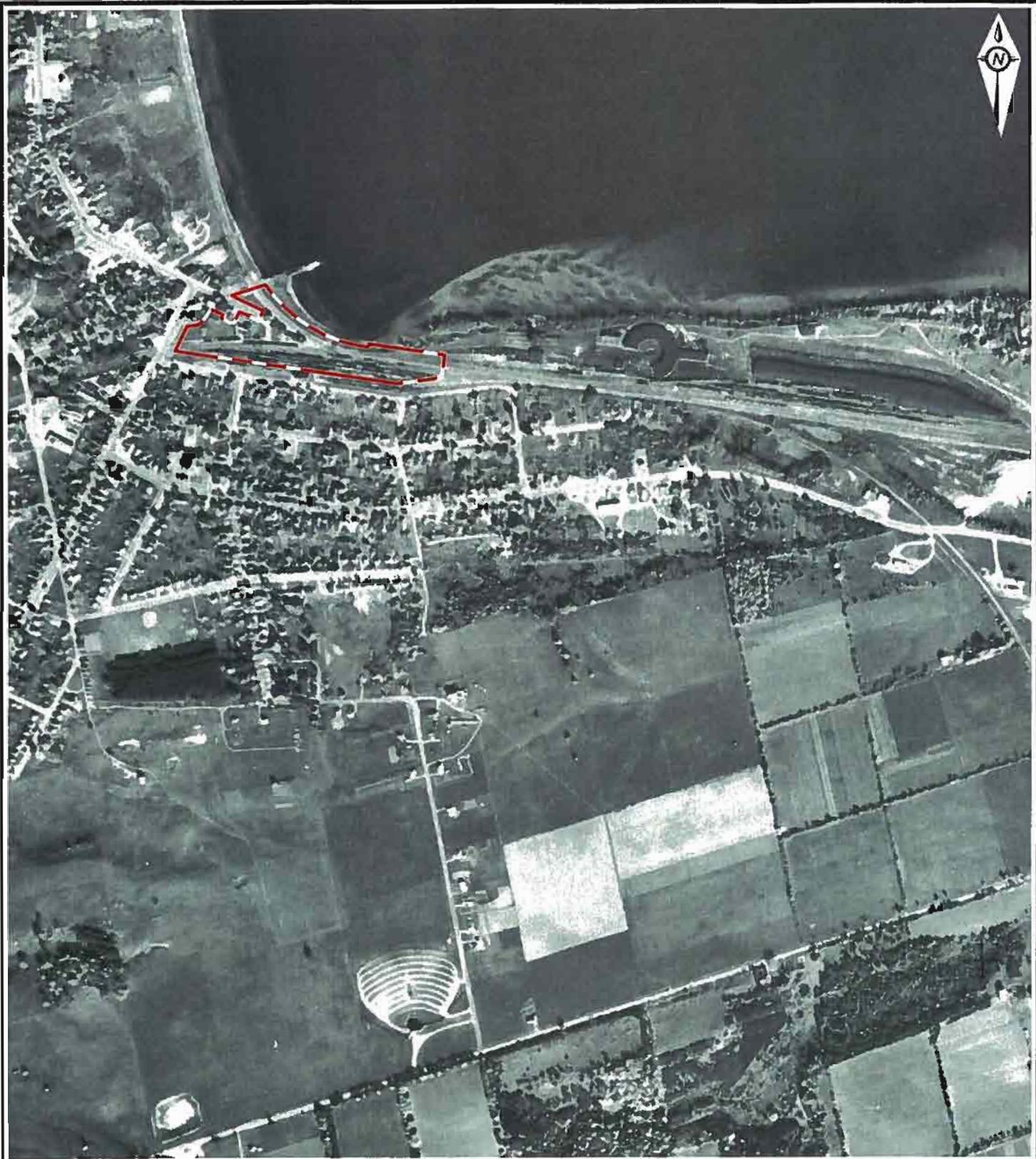


Image File: 20091221017_(1955)A15102_016

0 50 100 250 500

SCALE 1:10000 metres

SOURCE: National Air Photo Library, Provided by EcoLog ERIS; 04 January 2010

— Site Boundary (Approximate)



SCALE AS SHOWN
DATE 18 JAN 2010
DESIGN
CAD J REGIER

PHOTO PLATE 1955

FILE No. 0911706024ABPHOTO.dwg

CHECK

PROJECT No. 09-1170-6024

REV

REVIEW

ALLANDALE STATION
PHASE I ESA

FIGURE

B-2

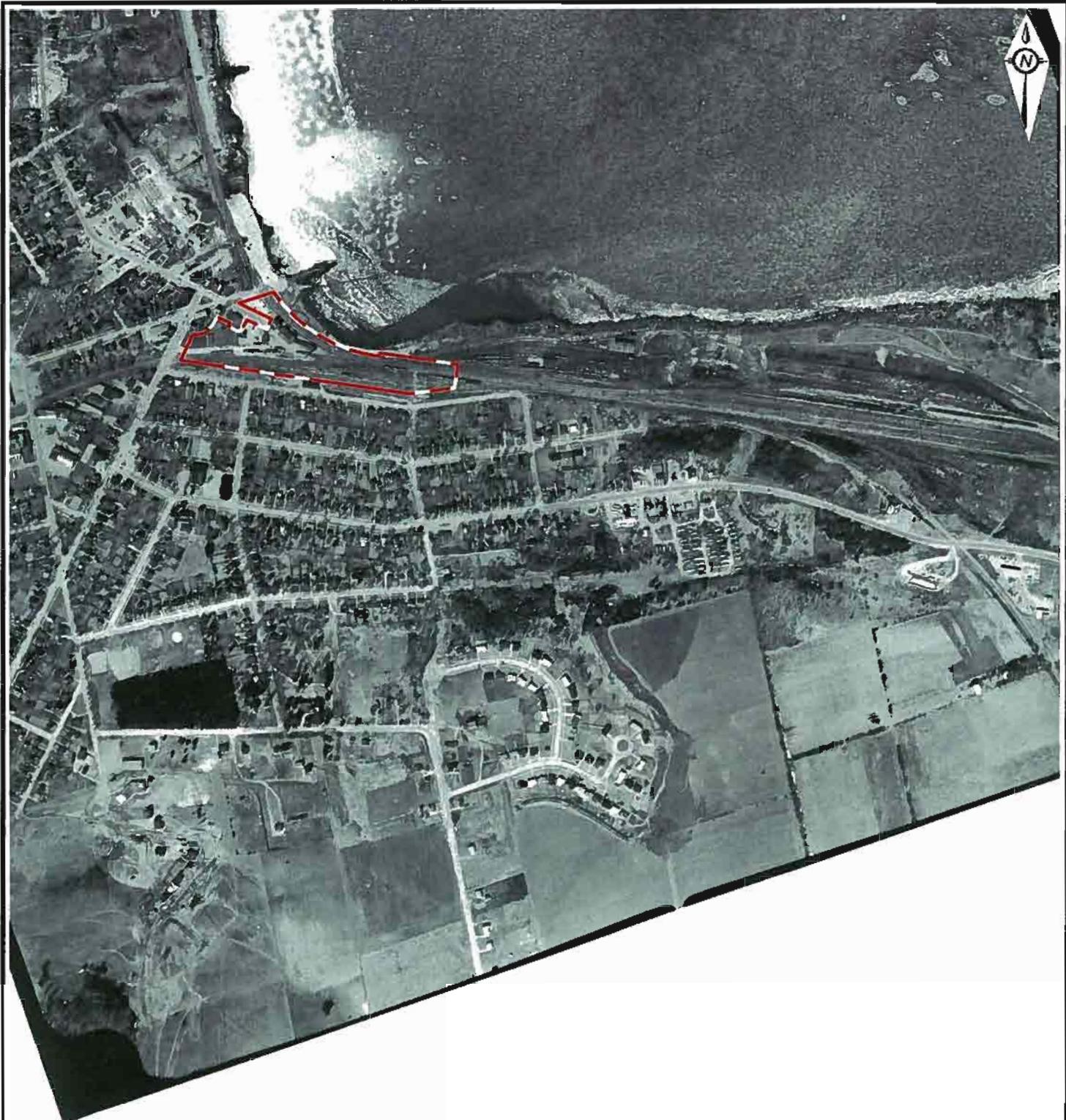


Image File: 20091221017_(1965)VRR2633_485

SOURCE: National Air Photo Library, Provided by EcoLog ERIS; 04 January 2010

— Site Boundary (Approximate)

0 50 100 250 500
SCALE 1:10000 metres

 Golder Associates Barrie, Ontario, Canada		SCALE AS SHOWN DATE 18 JAN 2010 DESIGN CAD J REGIER	TITLE PHOTO PLATE 1965
FILE No. 0911706024ABPHOTO.dwg	CHECK 		
PROJECT No. 09-1170-6024	REV.	REVIEW 	ALLANDALE STATION PHASE I ESA
			FIGURE B-3

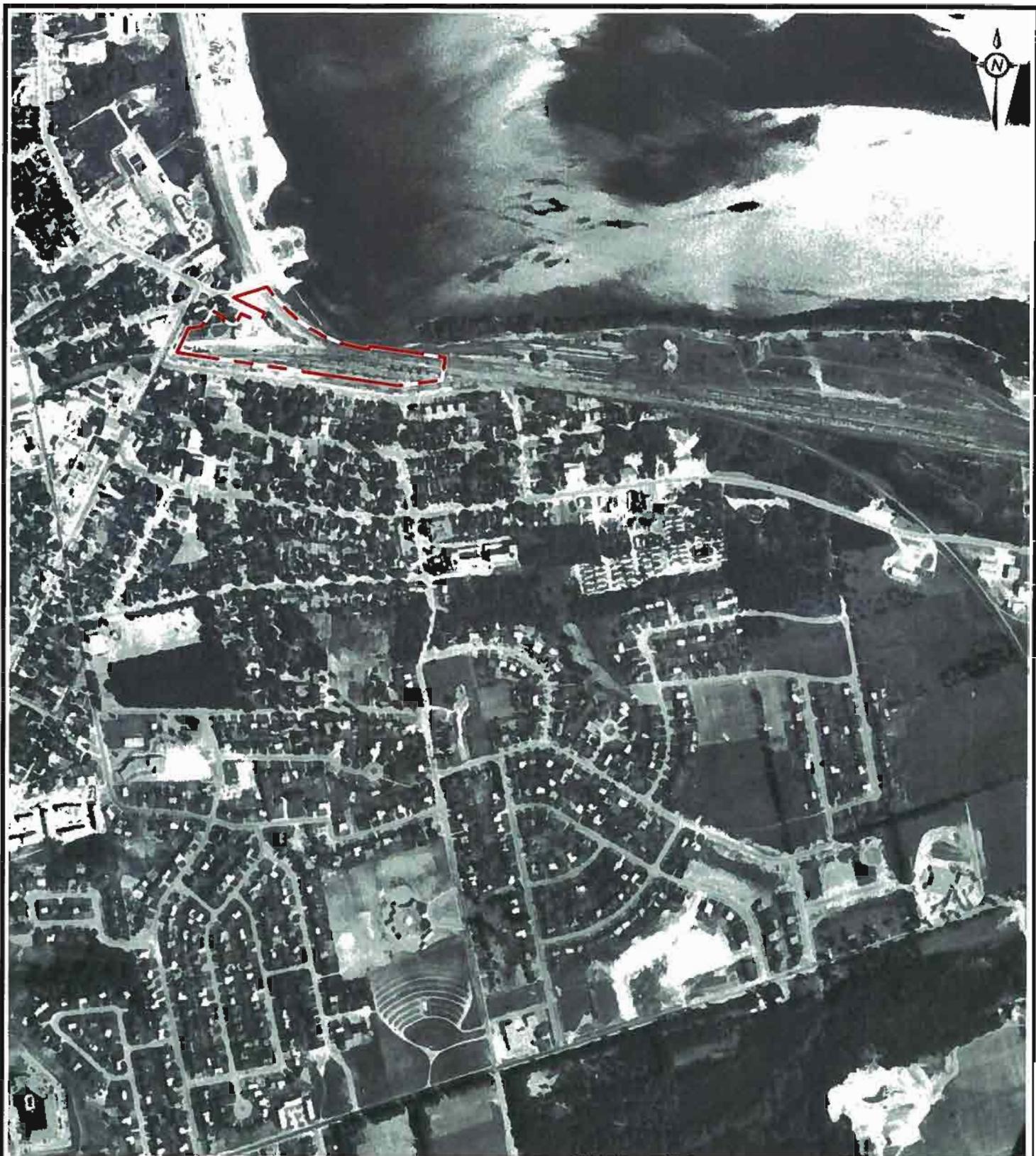


Image File: 20091221017_(1975)A23963_043

0 50 100 250 500
SCALE 1:10000 metres

SOURCE: National Air Photo Library, Provided by EcoLog ERIS; 04 January 2010

— Site Boundary (Approximate)



SCALE AS SHOWN

DATE 18 JAN 2010

DESIGN

CAD J REGIER

TITLE

PHOTO PLATE 1975

FILE No. 09111706024ABPHOTO.dwg

PROJECT No. 09-1170-6024

REV

CHECK *bx*

REVIEW *bx*

ALLANDALE STATION
PHASE I ESA

FIGURE

B-4



Image File: 20091221017_(1981)A25691_102

0 50 100 250 500

SCALE 1:10000 metres

SOURCE: National Air Photo Library, Provided by EcoLog ERIS; 04 January 2010

— Site Boundary (Approximate)

PLOT DATE: January 18, 2010
FILENAME: r:\Projects\2009\09-1170-6024 (Barrie, Allandale EA)\AB-\0911706024AABPHOTO.dwg



SCALE AS SHOWN

DATE 18 JAN 2010

DESIGN

CAD J REGIER

TITLE

PHOTO PLATE 1981

FILE No. 0911706024AABPHOTO.dwg

CHECK

PROJECT No. 09-1170-6024

REV

REVIEW

ALLANDALE STATION
PHASE I ESA

FIGURE

B-5

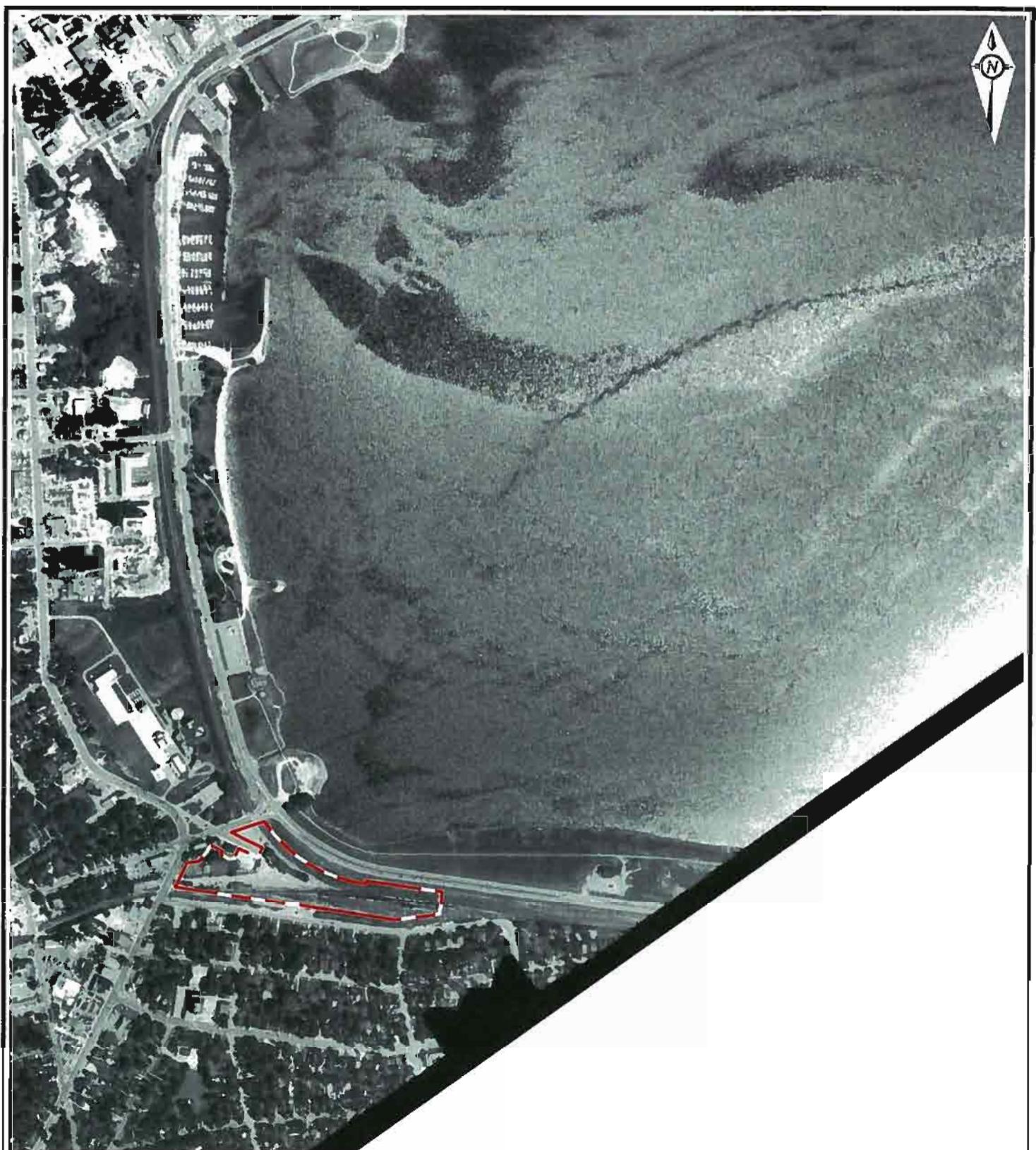


Image File: 20091221017_(1990)A27606_105

0 50 100 250 500
SCALE 1:10000 metres

SOURCE: National Air Photo Library, Provided by EcoLog ERIS: 04 January 2010

— Site Boundary (Approximate)

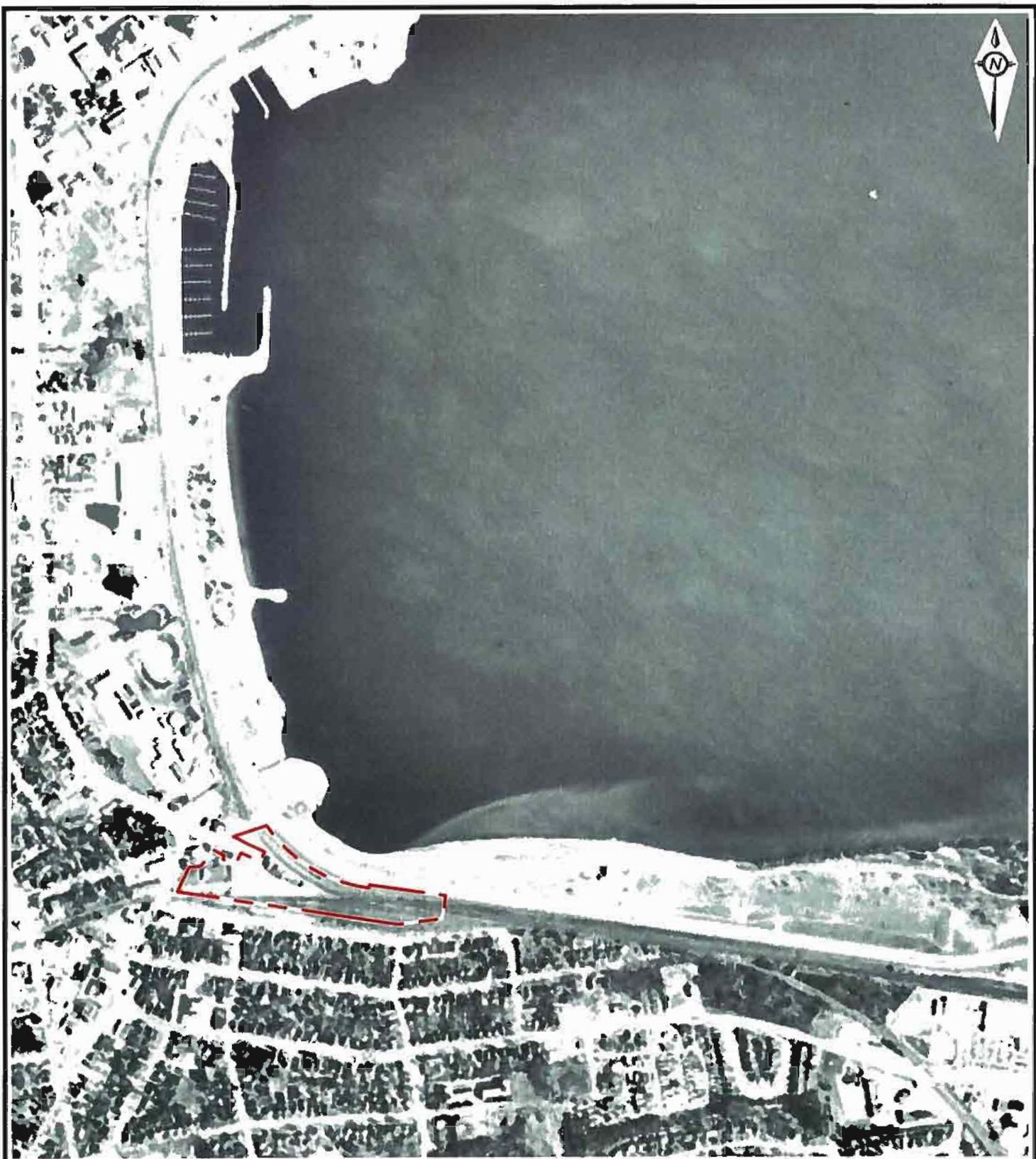


Image File: 20091221017_(1995)A28173_28

0 50 100 250 500
SCALE 1:10000 metres

SOURCE: National Air Photo Library, Provided by EcoLog ERIS; 04 January 2010

— Site Boundary (Approximate)

PLOT DATE: January 18, 2010
FILENAME: T:\Projects\2009\09\1170-6024 (Bonne, Allandale & EA)\-0911706024ABPHOTO.dwg



SCALE AS SHOWN
DATE 18 JAN 2010
DESIGN
CAD J REGIER

TITLE

PHOTO PLATE 1995

FILE No. 0911706024ABPHOTO.dwg

PROJECT No. 09-1170-6024

CHECK

REV.

REVIEW

ALLANDALE STATION
PHASE 1 ESA

FIGURE

B-7



APPENDIX C

Historical Fire Insurance Plans and RMS Report

The growth of Barrie

MAPS 1810-1869

Sources: These include 19th century maps, registered plans, books, pamphlets, and directories, etc.

The source for individual pieces of information is given in abbreviated form in brackets.

The bibliography will list all sources and their abbreviations.

Estimated locations: The location of buildings has been estimated from directory listings, population figures, registered plans (the location of building lots), maps, newspaper advertisements (listing business locations), and general histories.

Dates: Wherever possible the date a building was erected is given or estimated. If a building first appears on a map without a date, it first appeared on a source map of the period without a date. (e.g. The Steam Saw Mill at the foot of Victoria Street on the 1850-59 map first appeared on Gibbard's 1854 map, undated.)

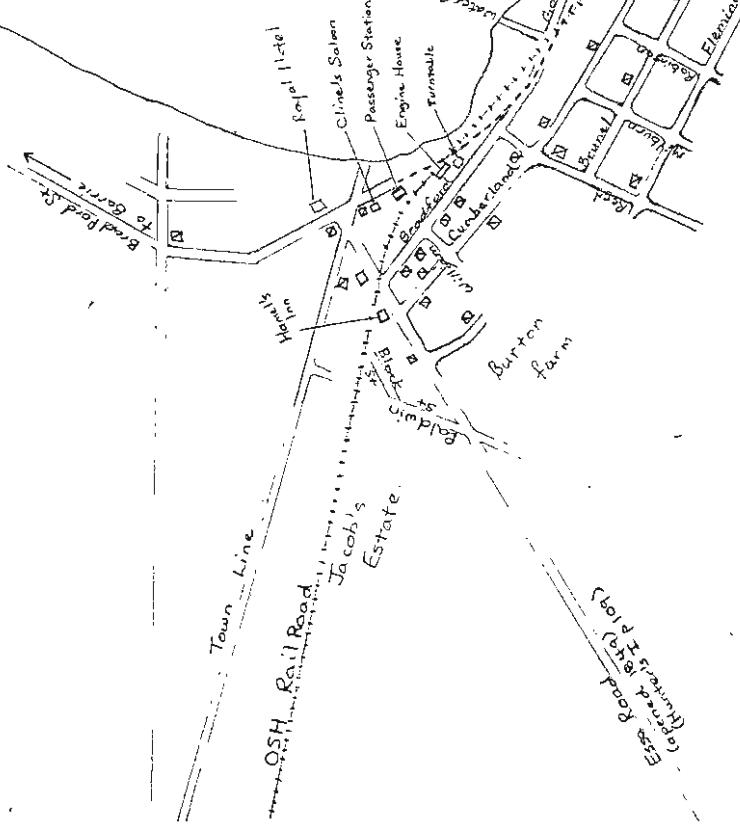
Population figures: These are estimated for the decade from all available information. Some maps and directories give these. The Archives (SCA) has a sheet of population figures for Barrie compiled from various sources (in Barrie Misc. file). The census gives an indication of population. (1842 census is very general, but from 1861 on the population is recorded for the town of Barrie.)

Allendale.
1850's
(population 15-70)

Allendale was first settled in 1846 by
John Boon, Collingwood Harris, N. King, Bernard
Sheridan (Wm. Hamill and Thomas McManon
(Brown's 72)

Location of Buildings:
□ Known
■ Estimated

Probable path
of Penitanguishene Rd.
before the railroad.
(Hogg's 71, Thomson's 79)

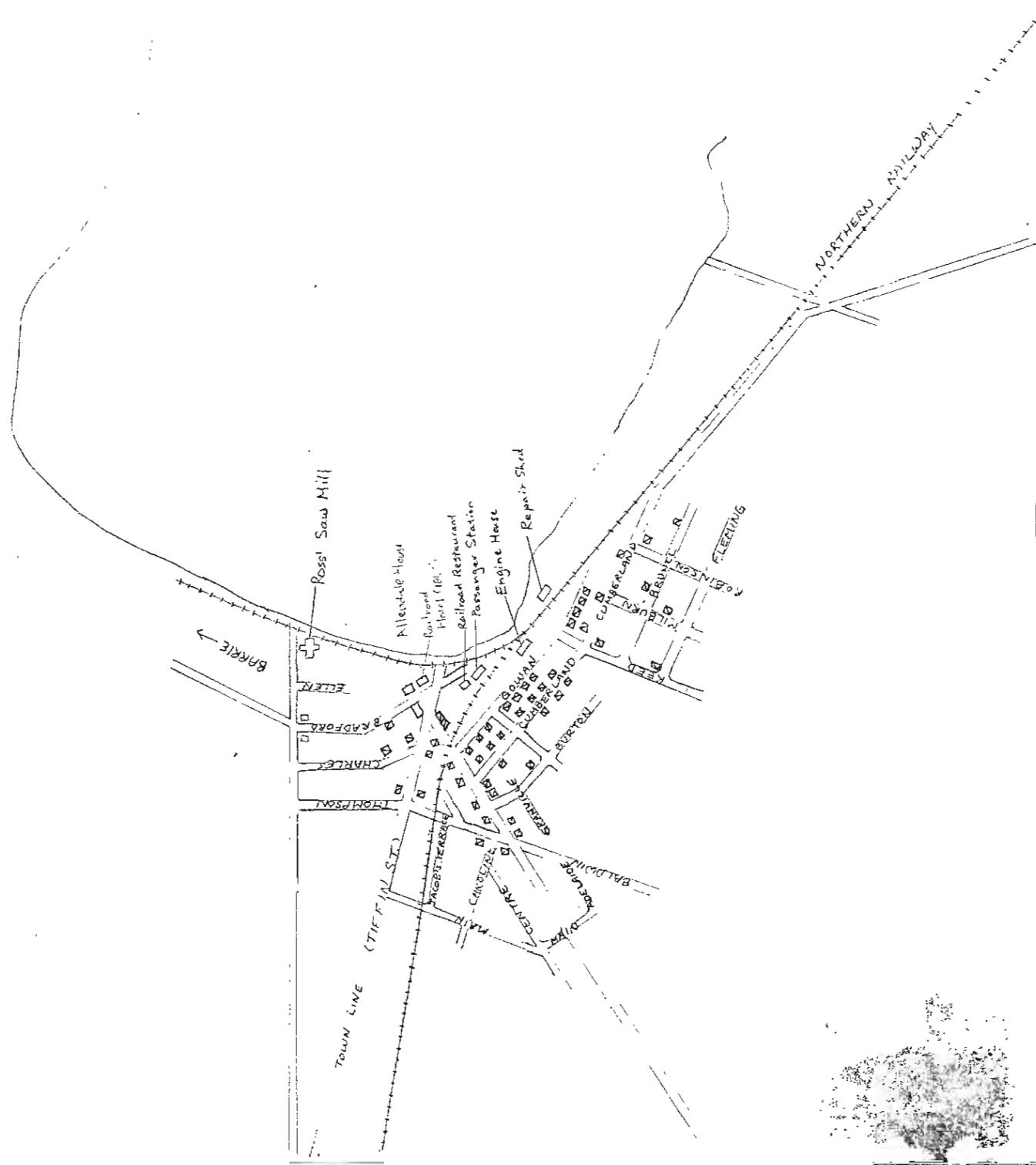


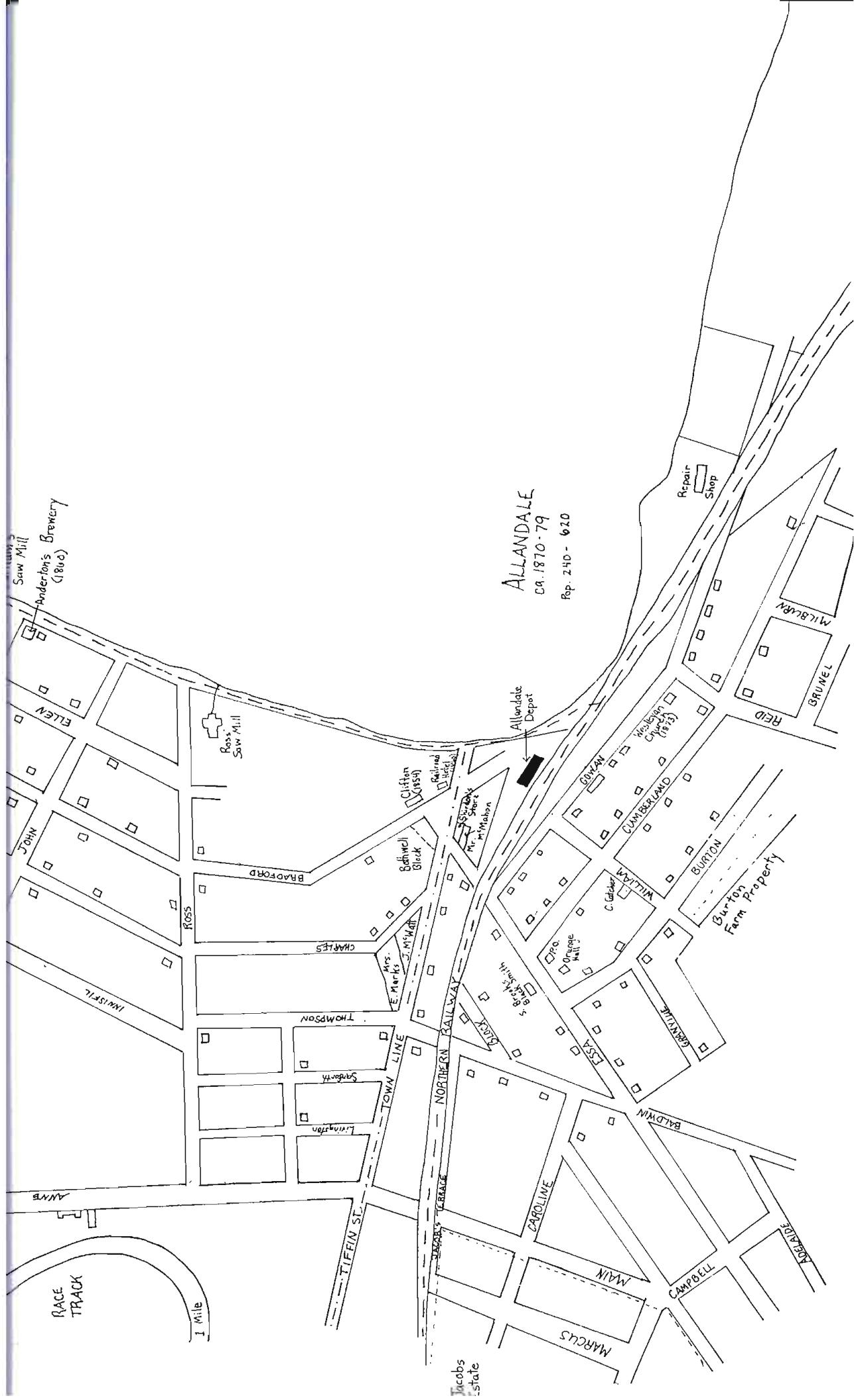
From: RP 440 and 225A
#207

Allendale
1860s
(population, 700-240)

Location of Buildings:

Known
 Estimated



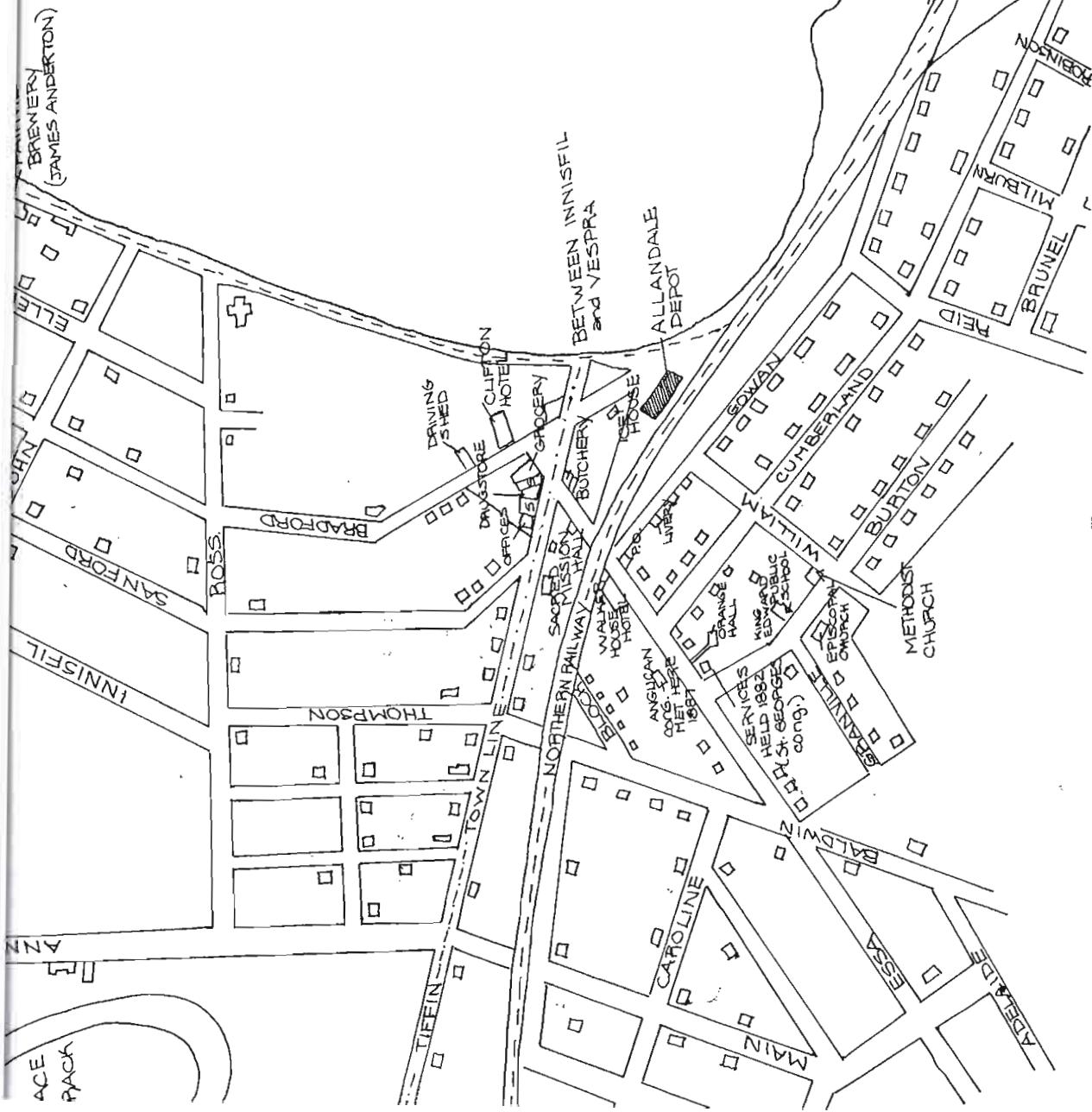


① CONFECTIONERY
 ② STORES
 ③ WELLING
 DUNLOP (SOUTHSIDE)
 CHINESE
 ④ FURNACE
 ⑤ BAKERY
 ⑥ STORAGE
 ⑦ OFFICE
 ⑧ CONFECTIONERY
 ⑨ OFFICES
 ⑩ TAILOR
 ⑪ MUSIC H.
 ⑫ GAZETTE
 ⑬ POST OFFICE
 ⑭ ROSS B.
 ⑮ STEAM CYCLE
 ⑯ SEED
 ⑰ EAST END
 ⑱ PRINTER
 ⑲ REST
 ⑳ HARNESS
 ㉑ HARD W.
 ㉒ PAINT
 ㉓ STORE
 ㉔ EXCAV.
 ㉕ STORE
 ㉖ DIMPL
 ㉗ DOVE P.
 ㉘ GLAZIER
 ㉙ LIVERY
 ㉚ GREEN

ALLANDALE

ca. 1880 - 1890

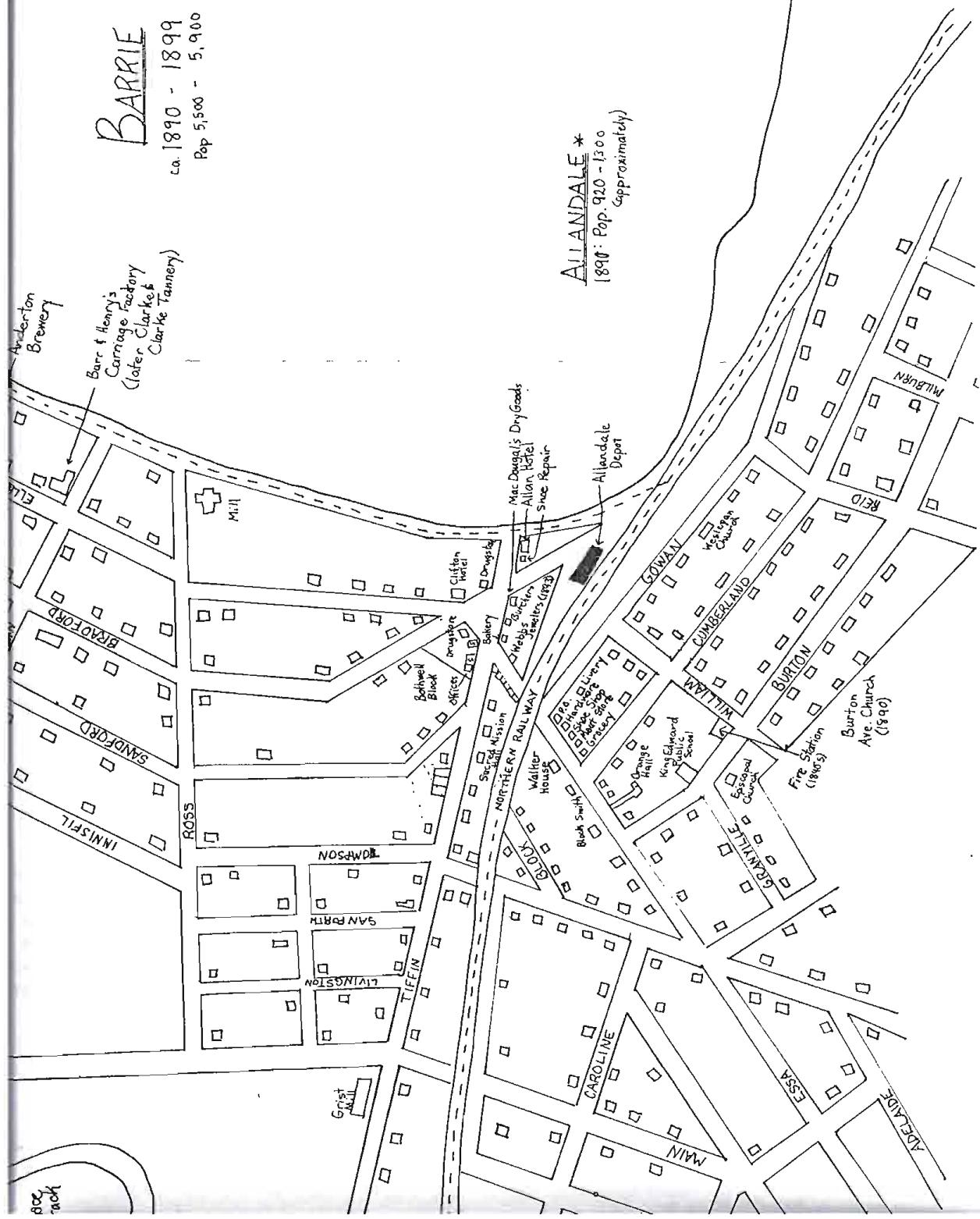
Pop: 620 - 920

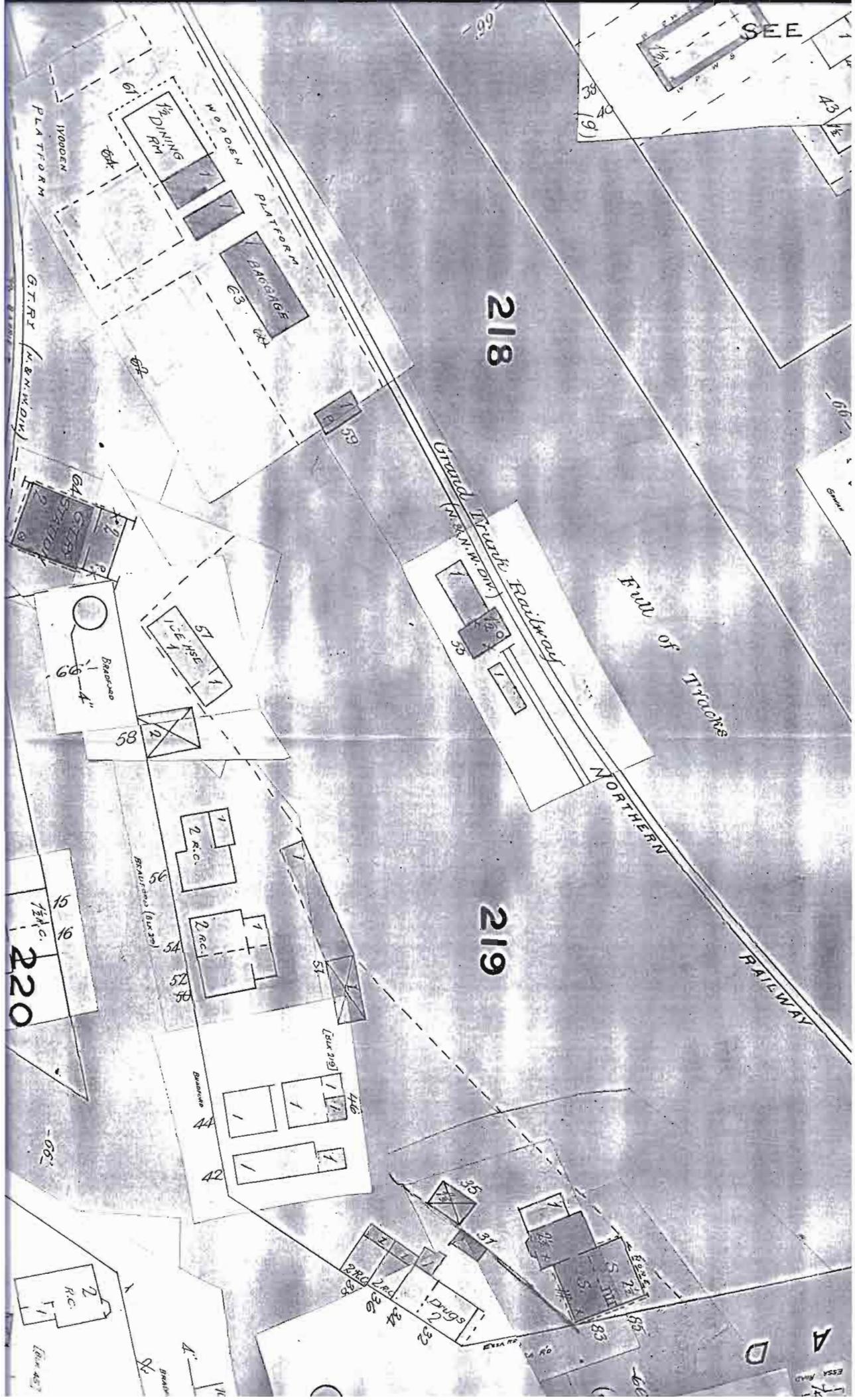


BARRIE

ca. 1890 - 1899
Pop 5,500 - 5,900

W. Farine
 7. Bookstore (later a Liquor
 8. Bakery
 9. Storage
 10. Offices
 11. Barrie Stove & Furnace
 12. Capon Teas
 13. Barric Examiner
 14. Northern Advance
 15. Offices (Boss-Block)
 16. Repair Shop
 17. Grocery
 18. Spencer Industrial Co. (1
 19. Store
 20. East End Block
 29 Stores with offices
 21 McCandles Harnesses
 22 Lane Painter & Glazier
 23 Store
 24 Livery
 25 Grocery
 26 Tailor
 27 Boots
 29 Milliner
 39 Blacksmith
 30. Store

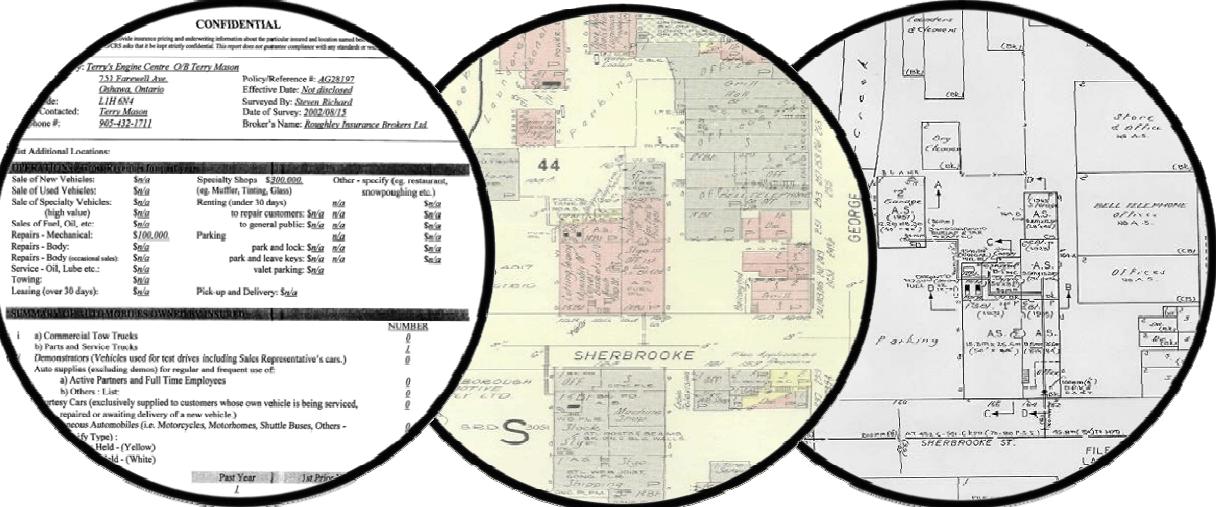




HEIRS™



Historical Environmental Information Reporting System



RISK MANAGEMENT SERVICES
An **SCM** Company

150 Commerce Valley Drive W
Thornhill, ON L3T 7Z3
Tel: (905) 882-6300 ext 5210
www.scm-rms.ca

Report Completed By:
Devon Mallay

Site Address:
Lot 8, Concession 14,
Barrie, ON

Project No:
09-1170-6024

Requested by:
Christi Groves
Golder Associates Ltd

Date Completed:
Revised January 18th, 2010



ISO 9001 Certified

Risk Management Services
150 Commerce Valley Drive W
8th Floor
Markham, ON
L3T 7Z3

Tel: (905) 762-2800 ext 5210
Fax: (905) 695-6543

Historical Environmental Information Reporting System (HEIRS™)

Christi Groves
Golder Associates
14 Cedar Pointe Drive, Unit 1501
Barrie, ON
L4N 5R7

Revised January 28th, 2010

Regarding: Lot 8, Concession 14, Barrie – 09-1170-6024

As requested, we have searched our records concerning the above site and the following information as listed below is appended hereto:

Information	Date(s)
Fire Insurance Plan(s)	1971,1946
Property Underwriters' Report(s)	NRF
Property Underwriters' Plan(s)	NRF

NRF: No Records Found NO: Not Ordered

Our invoice in the amount of \$125.00 (+ GST) for the information provided will follow in due course.

Thank you for employing our services.

A handwritten signature in black ink that reads 'Devon Mallay'.

Devon Mallay
Environmental Services

New Website – www.cgi-ibs.com/iao

TERMS AND CONDITIONS

Report. The documents (hereinafter referred to as the "Documents") to be released as part of the report (hereinafter referred to as the "Report") to be delivered to the purchaser as set out above are documents in RMS's records relating to the described property (hereinafter referred to as the "Property"). RMS makes no representations or warranties respecting the Documents whatsoever, including, without limitation, with respect to the completeness, accuracy or usefulness of the Documents, and does not represent or warrant that these are the only plans and reports prepared in association with the Property. The Documents are current as of the date(s) indicated on them. Interpretation of the Documents, if any, is by inference based upon the information which is apparent and obvious on the face of the Documents only. RMS does not represent, warrant or guarantee that interpretations other than those referred to do not exist from other sources. The Report will be prepared for use by the purchaser of the services as shown above hereof only.

Disclaimer. RMS disclaims responsibility for any losses or damages of any kind whatsoever, whether consequential or other, however caused, incurred or suffered, arising directly or indirectly as a result of the services (which services include, but are not limited to, the preparation of the Report provided hereunder), including but not limited to, any losses or damages arising directly or indirectly from any breach of contract, fundamental or otherwise, from reliance on RMS Reports or from any tortious acts or omissions of RMS's agents, employees or representatives.

Entire Agreement. The parties hereto acknowledge and agree to be bound by the terms and conditions hereof. The request form constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, negotiations and discussions, whether oral or written, and there are no representations or warranties, or other agreements between the parties in connection with the subject matter hereof except as specifically set forth herein. No supplement, modification, waiver, or termination of the request shall be binding, unless confirmed in writing by the parties hereto.

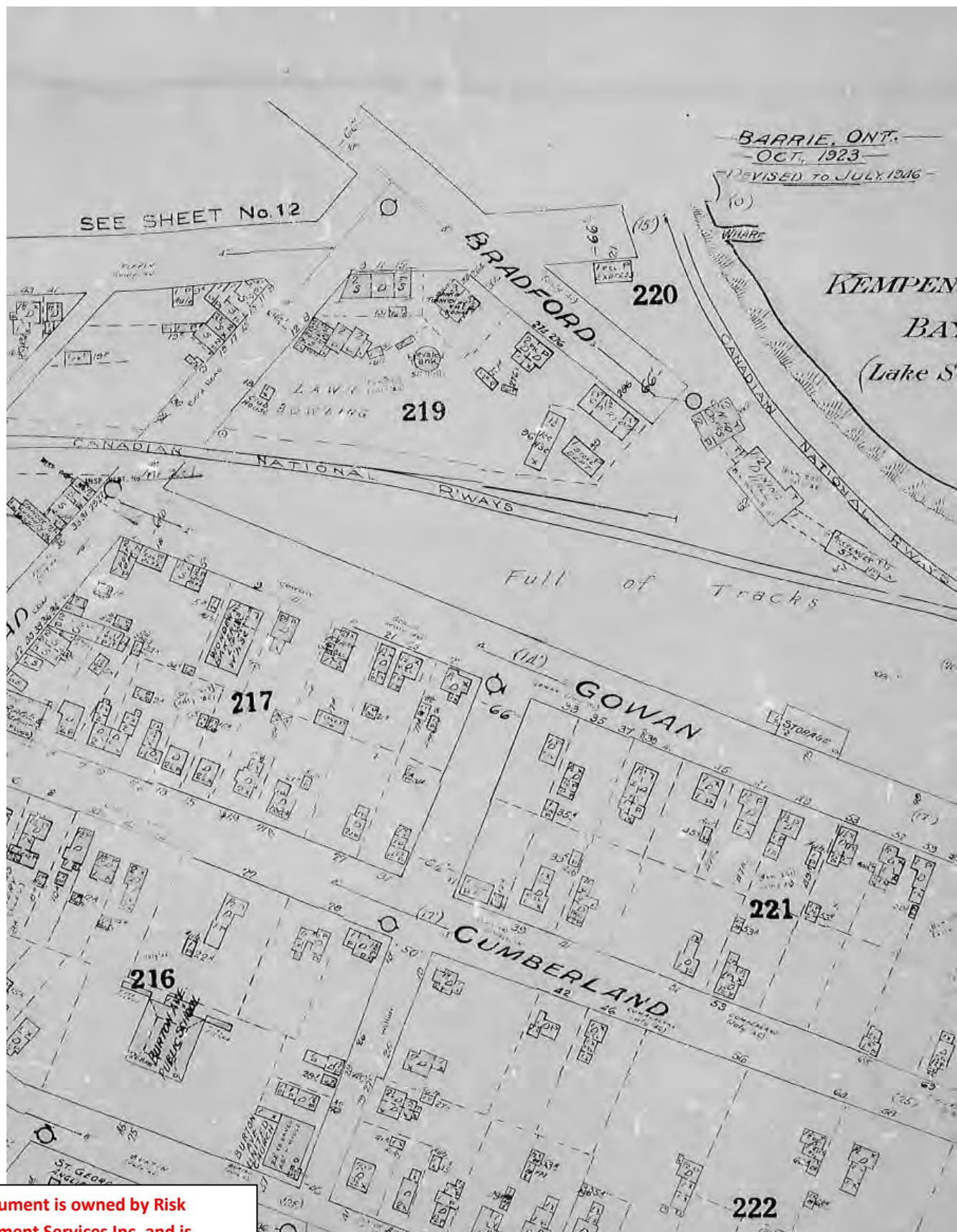
Governing Document. In the event of any conflicts or inconsistencies between the provisions hereof and the Reports, the rights and obligations of the parties shall be deemed to be governed by the request form, which shall be the paramount document.

Law. This agreement shall be governed by and construed in accordance with the laws of the Province of * and the laws of Canada applicable therein.



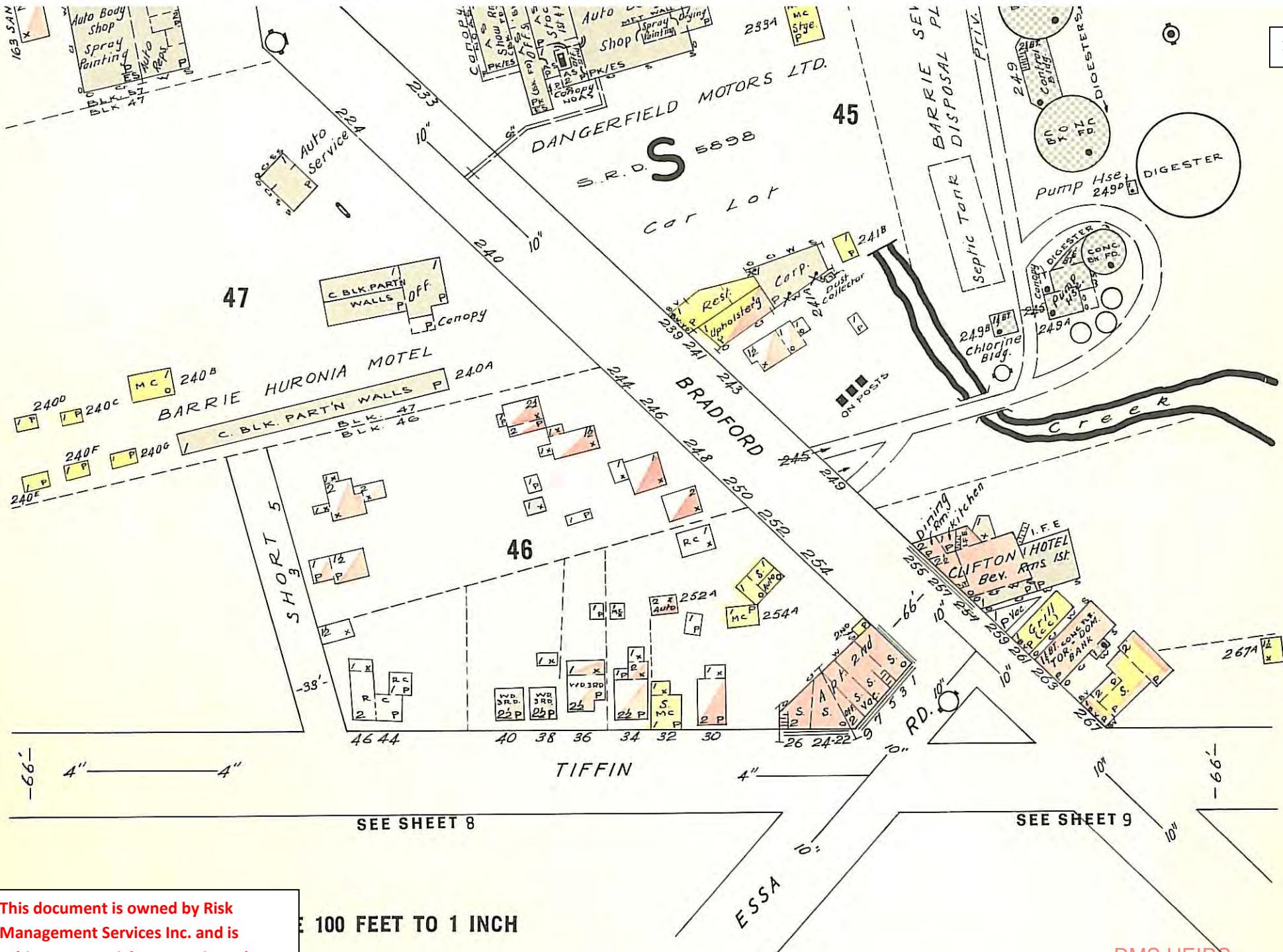
This document is owned by Risk Management Services Inc. and is subject to copyright protection. Please see the purchase order relating to the release of this document for complete terms and conditions.

RMS HEIRS
All Rights Reserved
PO# 09-1170-6024



This document is owned by Risk Management Services Inc. and is subject to copyright protection. Please see the purchase order relating to the release of this document for complete terms and conditions.

RMS HEIRS
All Rights Reserved
PO# 09-1170-6024



This document is owned by Risk Management Services Inc. and is subject to copyright protection. Please see the purchase order relating to the release of this document for complete terms and conditions.

100 FEET TO 1 INCH

ESSP

SEE SHEET 9

~~RMS HEIRS
All Rights Reserved
PO# 09-1170-6024~~

9

~~SEE SHEET 14~~

BRADFORD

G.N.C.

BARRIE, ONT.
MAY 1971

1971

This plan is the property of the CANADIAN UNDERWRITERS' ASSOCIATION, (unauthorized reproduction prohibited) and is loaned on the following conditions: that the plan is to be kept in good order, that it is to be used only in connection with business of Companies, Members of the Canadian Underwriters' Association and is to be returned on request to the CANADIAN UNDERWRITERS' ASSOCIATION.

**COPYRIGHT REGISTERED AT OTTAWA
BY THE
CANADIAN UNDERWRITERS' ASSOCIATION**

This document is owned by Risk Management Services Inc. and is subject to copyright protection. Please see the purchase order relating to the release of this document for complete terms and conditions.

215



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO

APPENDIX D

EcoLog ERIS Report



Canada's Primary Environmental Risk Information Service

Project Site: Allandale Station Lands
South of the Intersection of Lakeshore Drive and Tiffin
Street
Barrie, ON

Client: Christi Groves
Golder Associates Ltd.
14 Cedar Pointe Drive, Unit 1501
Barrie, ON L4N5R7

ERIS Project No: 20091221017

Report Type: Custom Report - .25km Search Radius

Prepared By: Matt Thompson
mthompson@eris.ca

Date: December 30, 2009

DISCLAIMER AND COPYRIGHT NOTICE

The information contained in this report has been produced by EcoLog ERIS Ltd. using various sources of information, including information provided by Federal and Provincial government departments. Although EcoLog ERIS Ltd. has endeavoured to present you with information that is accurate, EcoLog ERIS Ltd. disclaims, except as set out below, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence or otherwise, and for any consequences arising therefrom. Liability on the part of EcoLog ERIS Ltd. is limited to the monetary value paid for this report. The report applies only to the address specified on the cover of this report, and any alterations or deviation from this description will require a new report. This report and the data contained herein does not purport to be and does not constitute a guarantee of the accuracy of the information contained herein and does not constitute a legal opinion nor medical advice. This report is solely intended to be used to focus further investigation and is not intended to replace a full Phase 1 Environmental Site Assessment. No page of this report should be used without this cover page, this disclaimer and the project property identifier.

The contents of this Service are protected by copyright. Copyright in the Service is owned by EcoLog ERIS Ltd. Copyright in data obtained from private sources is owned by EcoLog ERIS Ltd. or its licensors. The Service and its contents may not be copied or reproduced in whole or in any substantial part without prior written consent of EcoLog ERIS Ltd.



Table of Contents

Order Number: 20091221017
Site Name: Allandale Station Lands
Site Address: South of the Intersection of Lakeshore Drive and Tiffin Street Barrie, ON
Report Type: Custom Report, 0.25 km Search Radius

Report Summary

This outlines the number of records from each database that fall on the site, and within various distances from the site.

Site Diagram

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

This table describes the records that relate directly to the property that is being researched.

Detail Report

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>Section</u>
Report Summary	i
Site Diagram	ii
Site Profile	iii
Detail Report	iv
	<u>Page</u>
Fuel Storage Tank	11
Ontario Regulation 347 Waste Generators Summary	12
Non-Compliance Reports	16
National Environmental Emergencies System (NEES)	18
National Pollutant Release Inventory	19
Pesticide Register	22
Private and Retail Fuel Storage Tanks	23
Ontario Regulation 347 Waste Receivers Summary	24
Scott's Manufacturing Directory	25
Ontario Spills	26
Water Well Information System	35
Certificates of Approval	1
Environmental Registry	9
ERIS Historical Searches	10

Appendix: Database Descriptions

Report Summary

Order Number: 20091221017

Site Name: Allandale Station Lands

Site Address: South of the Intersection of Lakeshore Drive and Tiffin Street Barrie

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 0.25km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0	0
AGR	Aggregate Inventory	Y	0	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0	0
BORE	Borehole	Y	0	0	0	0
CA	Certificates of Approval	Y	0	18	0	18
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0	0
CHEM	Chemical Register	Y	0	0	0	0
COAL	Coal Gasification Plants	Y	0	0	0	0
CONV	Compliance and Convictions	Y	0	0	0	0
DRL	Drill Hole Database	Y	0	0	0	0
EBR	Environmental Registry	Y	0	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0	0
EHS	ERIS Historical Searches	Y	1	2	0	2
EIIS	Environmental Issues Information System	Y	0	0	0	0
FCON	Federal Convictions	Y	0	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0	0
FOFT	Fisheries & Oceans Fuel Storage Tanks	Y	0	0	0	0
FST	Fuel Storage Tank	Y	0	2	0	2
GEN	Ontario Regulation 347 Waste Generators Summary	Y	1	14	0	14
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0	0
MNR	Mineral Occurrences	Y	0	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0	0
NCPL	Non-Compliance Reports	Y	0	5	0	5
NDFT	National Defence & Canadian Forces Fuel Storage Tanks	Y	0	0	0	0
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0	0
NPCB	National PCB Inventory	Y	0	0	0	0
NPRI	National Pollutant Release Inventory	Y	0	7	0	7
OGW	Oil and Gas Wells	Y	0	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	0	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0	0
PES	Pesticide Register	Y	0	1	0	1
PRT	Private and Retail Fuel Storage Tanks	Y	0	2	0	2
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	2	0	2
RSC	Record of Site Condition	Y	0	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0	0

Report Summary

Order Number: 20091221017

Site Name: Allandale Station Lands

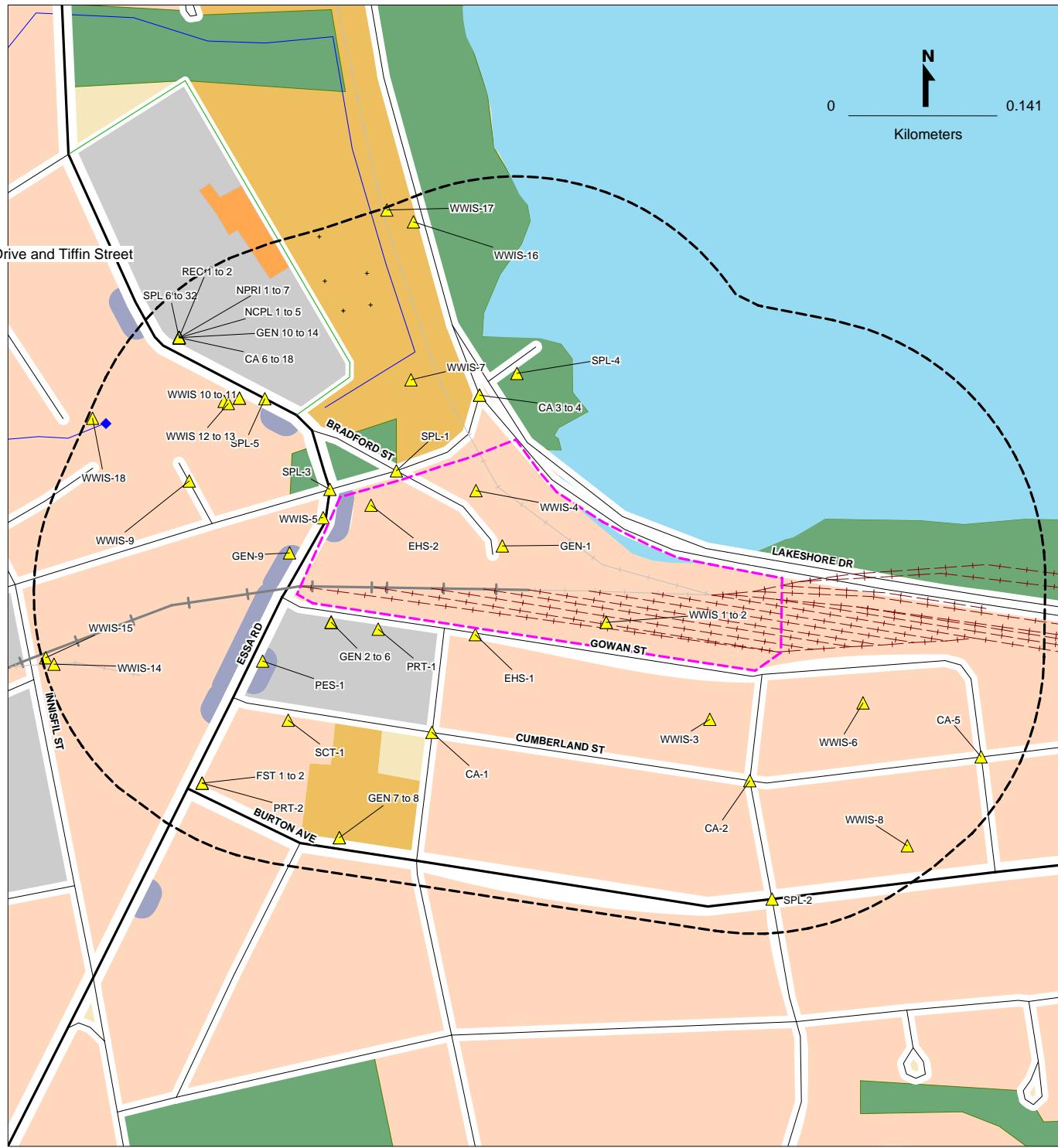
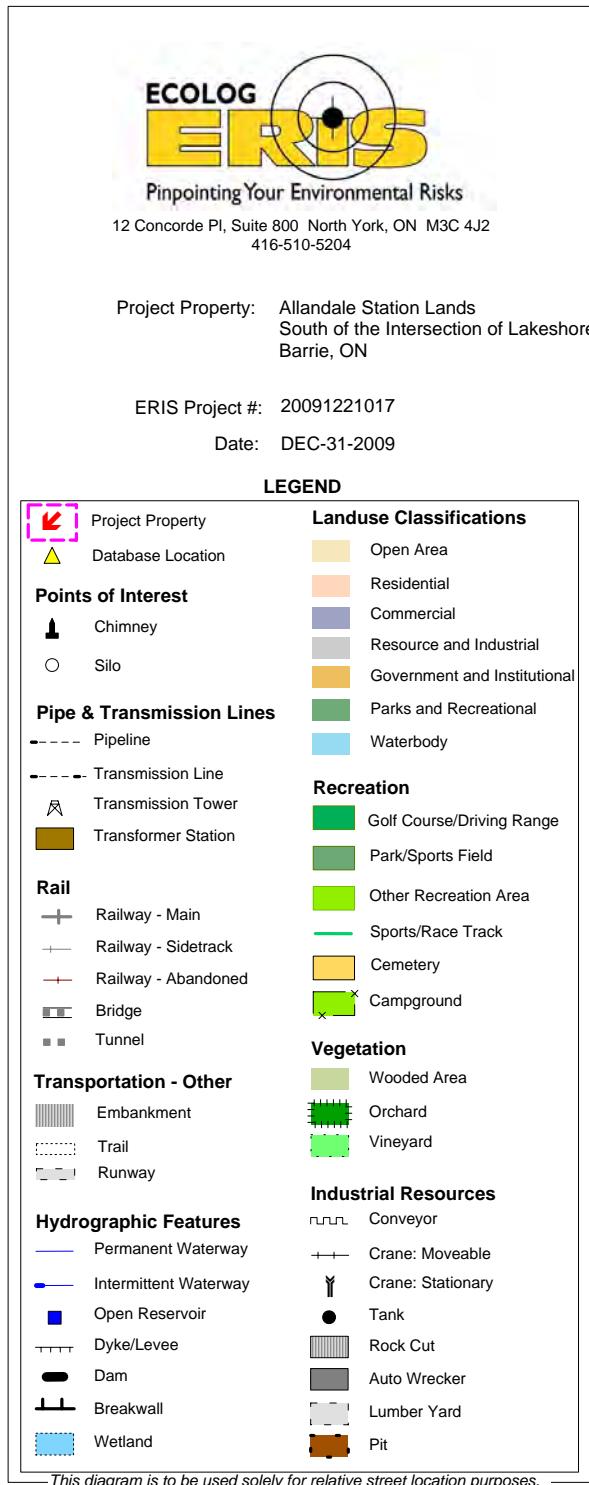
Site Address: South of the Intersection of Lakeshore Drive and Tiffin Street Barrie

Report Type: Custom Report, 0.25 km Search Radius

Database		Selected	On-site	Within 0.25	0.25km to 0.25km	Total
SCT	Scott's Manufacturing Directory	Y	0	1	0	1
SPL	Ontario Spills	Y	0	32	0	32
SRDS	Wastewater Discharger Registration Database	Y	0	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0	0
WWIS	Water Well Information System	Y	3	18	0	18
		TOTAL	5	104	0	104

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



Site Report

Order Number: 20091221017

Site Name: Allandale Station Lands

Site Address: South of the Intersection of Lakeshore Drive and Tiffin Street Barrie

Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Ontario Regulation 347 Waste Generators Summary

Map Key	Company Name	Address	City	Postal Code
GEN-1	The Corporation of the City of Barrie	285 Bradford Street	Barrie	L4N 3B9

ERIS Historical Searches

Map Key	Company Name	Address	City	Postal Code
EHS-2		4 Essa Road	Barrie	L4N 3K3

Water Well Information System

Map Key	Company Name	Address	City	Postal Code
WWIS-1			BARRIE CITY	
WWIS-2			BARRIE CITY	
WWIS-4			BARRIE CITY	

Detail Report

Order Number: 20091221017
Site Name: Allandale Station Lands
Site Address: South of the Intersection of Lakeshore Drive and Tiffin Street Barrie
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.

Fuel Storage Tank
Ontario Regulation 347 Waste Generators Summary
Non-Compliance Reports
National Environmental Emergencies System (NEES)
National Pollutant Release Inventory
Pesticide Register
Private and Retail Fuel Storage Tanks
Ontario Regulation 347 Waste Receivers Summary
Scott's Manufacturing Directory
Ontario Spills
Water Well Information System
Certificates of Approval
Environmental Registry
ERIS Historical Searches

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-1	BARRIE CITY - BAYVIEW DR./ESSA RD.	CUMBERLAND ST./WILLIAM ST. BARRIE CITY	3-0872-91-	91	6/18/1991	Municipal sewage	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		
CA-2	P.U.C. BARRIE	CUMBERLAND ST./BAYVIEW AVE. BARRIE CITY	7-0712-91-	91	6/21/1991	Municipal water	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		
CA-3	P.U.C. BARRIE	LAKESHORE DR./TIFFIN ST. BARRIE CITY	7-0156-92-	92	3/5/1992	Municipal water	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		
CA-4	BARRIE CITY TIFFIN ST.	LAKESHORE DR. BARRIE CITY	3-0874-88-	88	6/21/1988	Municipal sewage	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-5	BARRIE CITY - LOT 10/CONC. 14 INNISFIL	CUMBERLAND ST./MILBURN ST. BARRIE CITY	3-2237-89-	89	11/14/1989	Municipal sewage	Approved	
								<p>Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:</p>
CA-6	BARRIE CITY	249 BRADFORD ST. (WPCP) BARRIE CITY	3-0098-96-	96	4/2/1996	Municipal sewage	Approved	
								<p>Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:</p>
CA-7	BARRIE CITY	249 BRADFORD ST. (WPCP) BARRIE CITY	8-5015-96-	96	5/30/1996	Industrial air	Cancelled	
								<p>Client Name: Client Address: Client City: Client Postal Code: Project Description: PILOT ODOUR CONTROL SYSTEM AT WPCP Contaminants: Emission Control:</p>
CA-8	BARRIE CITY - TEMP. DEWATERING POND	LAKESHORE DR./TIFFIN ST. WPCP BARRIE CITY	3-0580-92-	92	7/14/1992	Municipal sewage	Approved	
								<p>Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:</p>

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-9	Barrie Water Pollution Control Centre	249 Bradford Street Barrie	1474-563HBT	02	8/2/02	Municipal & Private water	Revoked and/or Replaced	New Certificate of Approval
			Client Name:		Corporation of the City of Barrie			
			Client Address:		249 Bradford Street			
			Client City:		Barrie			
			Client Postal Code:					
			Project Description:		The works facilities for the City of Barrie is comprised of an integrated network of fifteen wells pumping directly into the distribution system, six booster pumping stations, three in-ground storage reservoirs and two elevated storage tanks.			
			Contaminants:					
			Emission Control:					
CA-10	BARRIE CITY	249 BRADFORD ST.,BARRIE WPCP BARRIE CITY na 10/6/93	3-0339-93-	93	10/6/1993	Municipal sewage	Approved	
			Client Name:					
			Client Address:					
			Client City:					
			Client Postal Code:					
			Project Description:					
			Contaminants:					
			Emission Control:					
CA-11	Barrie Well Supply	249 Bradford Street Barrie	0408-57SPS5	02	8/2/02	Municipal & Private water	Revoked and/or Replaced	Amended CofA
			Client Name:		The Corporation of the City of Barrie			
			Client Address:		70 Collier Street			
			Client City:		Barrie			
			Client Postal Code:		L4M 4Z2			
			Project Description:		This application is to amend the existing consolidated Certificate of Approval No. 1474-563HBT to incorporate one (1) diesel generator with respect to the waterworks for Well 11, Heritage Park Pumping Station and Bayview Park Pumping Station and Reservoir, and to comply with Condition 5.1(b)(vii) for the diesel generator installed at Well 14, Heritage Park.			
			Contaminants:					
			Emission Control:					
CA-12	Ellen Street, Waste Water Pollution Control Centre	69 Ellen Street and 249 Bradford Street Barrie	3513-4MMHFV	00	8/1/00	Municipal & Private sewage	Approved	New Certificate of Approval
			Client Name:		Corporation of the City of Barrie			
			Client Address:		70 Collier St., P.O. Box 400			
			Client City:		Barrie			
			Client Postal Code:		L4M 4T5			
			Project Description:		Installation of Sanitary Sewers to service Ellen Street and the Water Pollution Control Centre.			
			Contaminants:					
			Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-13	CORPORATION OF THE CITY OF BARRIE	249 BRADFORD ST. W.P.C.P. BARRIE CITY	8-3278-93-	93	8/13/1993	Industrial air	Approved	
			Client Name:					
			Client Address:					
			Client City:					
			Client Postal Code:					
			Project Description:	2) BOILERS/GAS ENGINES,1) REL.GAS BURNER				
			Contaminants:	Nitrogen Oxides, Sulphur Dioxide, Carbon Monoxide, Suspended Particulate Matter				
			Emission Control:	Flare				
CA-14	BARRIE CITY	249 BRADFORD ST., BARRIE WPCP BARRIE CITY	3-0340-93-	93	7/19/1993	Municipal sewage	Revised	
			Client Name:					
			Client Address:					
			Client City:					
			Client Postal Code:					
			Project Description:					
			Contaminants:					
			Emission Control:					
CA-15	Barrie Water Pollution Control Centre	249 Bradford Street Barrie	9229-5DFRL7	02	9/5/02	Municipal & Private water	Amended	Amended CofA
			Client Name:	The Corporation of the City of Barrie				
			Client Address:	249 Bradford Street				
			Client City:	Barrie				
			Client Postal Code:					
			Project Description:	Request for extension to compliance deadline for upgrade works				
			Contaminants:					
			Emission Control:					
CA-16	Barrie Water Pollution Control Centre	249 Bradford Street Barrie	3-0039-93-	01 007	3/8/01	Municipal & Private sewage	Approved	Notice
			Client Name:	Corporation of the City of Barrie				
			Client Address:	70 Collier St., P.O. Box 400				
			Client City:	Barrie				
			Client Postal Code:	L4M 4T5				
			Project Description:	This is an application for a notice to amend a Municipal Sewage Works Certificate of Approval to extend the expiration date.				
			Contaminants:					
			Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-17	Barrie Water Pollution Control Centre	249 Bradford Street Barrie	9396-5BAR4T 02		7/4/02	Municipal & Private sewage	Approved	New Certificate of Approval
						Client Name: The Corporation of the City of Barrie Client Address: 549 Bradford Street, PO Box 400 Client City: Barrie Client Postal Code: L4M 4T5 Project Description: This application is for an approval to upgrade the WPCC. The works consist of providing additional primary treatment and grit works and upgrades of plant headworks. The application does not change the plant's rated capacity of 57, 000m3/d. The works will consist of civil, architectural, mechanical instrumentation and control system.		
						Contaminants: Emission Control:		
CA-18	Barrie Water Pollution Control Centre	549 Bradford Street, PO Box 400 Barrie	3-0339-93-007	02	5/21/02	Municipal & Private sewage	Approved	Notice
						Client Name: The Corporation of the City of Barrie Client Address: 549 Bradford Street, PO Box 400 Client City: Barrie Client Postal Code: L4M 4T5 Project Description: Amendment to dual digestion conditional approval Contaminants: Emission Control:		
n/a	BARRIE CITY BUSINESS PARK PH. 3	BAYVIEW DR. FORMERLY PH. 1 BARRIE CITY	3-0681-87-87		6/4/1987	Municipal sewage	Cancelled	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		
n/a	ALLENDALE CONSTRUCTION PROJECT #1323	BURTON AVENUE BARRIE CITY	3-0975-86-86		7/25/1986	Municipal sewage	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	BARRIE CITY	LAKESHORE DR. TRUNK SANITARY BARRIE CITY	3-1622-86-	86	12/1/1986	Municipal sewage	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		
n/a	BARRIE CITY	LAKESHORE DR. BARRIE CITY	3-2126-88-	88	11/8/1988	Municipal sewage	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		
n/a	LITTLE BAY HOLDINGS INC.- BAYVIEW DR.	STORMWATER DETENTION POND BARRIE CITY	3-1026-90-	90	9/24/1990	Municipal sewage	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		
n/a	D. BATTAGLIA	CUMBERLAND ST. BARRIE CITY	7-1416-89-	89	8/23/1989	Municipal water	Approved	
						Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	P.U.C. BARRIE - PUC WELL #15	LAKESHORE DRIVE BARRIE CITY cl sent 1/11/93	7-0203-92-	92	8/28/1992	Municipal water	Approved	
								Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:
n/a	BARRIE CITY	VESPRA ST/BRADFORD ST/ELLEN ST BARRIE CITY	3-0631-96-	96	6/25/1996	Municipal sewage	Approved	
								Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:
n/a	BARRIE CITY	SWM-BURTON AVE/LAKESHORE DR. BARRIE CITY	3-0869-97-	97	7/11/1997	Municipal sewage	Approved	
								Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:
n/a	CITY	BURTON AVE. BARRIE CITY	7-0829-85- 006	85	10/22/85	Municipal water	Approved	
								Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	CITY REVISION FINAL LETTER SENT	LAKESHORE RD. BARRIE CITY	3-1116-85-867	85	7/14/86	Municipal sewage	First Ammendment in 1986	
								Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:
n/a	MOLSON BREWERIES PROPERTIES LTD.	BAYVIEW DR.,LOTS 8&9/C12 (SWM) BARRIE CITY	3-1318-95-006	95	10/25/95	Municipal sewage	Approved	
								Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:
n/a	SUNOCO CANADA INC.	WEST HALF OF LOT 24, CONC. 6 BARRIE CITY	8-3140-89-006	89	7/28/89	Industrial air	Approved	
								Client Name: Client Address: Client City: Client Postal Code: Project Description: GROUNDWATER DECONTAMINATION SYSTEM Contaminants: Benzene (Carcinogen Requires Bact), Toluene(Pentyl Methane)(Methyl Benzene), Xylene, Ethyl Benzene Emission Control: Act. Charcoal Filter

Environmental Registry

Map Key	Company	Address	Year	EBR Registry No.	Ministry Ref. No.	Type
n/a	1309493 Ontario Inc.	Part Lot 9 City of Barrie	1999	IA9E1104		Instrument

Instrument Type: EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)
Proposal Date:
Location: City of Barrie
Proponent Address: 1309493 Ontario Inc., Warren Paving & Materials Group Ltd.170 Attwell Drive, Suite #504, Etobicoke, Ontario, M9W 5Z5

ERIS Historical Searches

Map Key	Company	Address	Order No.	Report Date	Report Type	Search Radius (km)
EHS-1		Lakeshore Drive Barrie	20041126002	12/2/04	Custom Report	0.25
			Addit. Info Ordered:	Aerials Photos and/or Topographical Maps		
EHS-2		4 Essa Road Barrie L4N 3K3	20071002002	10/11/2007	CAN - Complete Report	0.25
			Addit. Info Ordered:			

Fuel Storage Tank

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-1	MAC'S CONVENIENCE STORES INC	62 ESSA RD BARRIE L4N 3K6	8/1/2002	Licensed	December 2008	Retail Fuel Outlet	Gasoline Station - Self Serve
				<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Tank Fuel Type</u>
				Active	36370	1985	Liquid Fuel Single Wall UST - Gasoline
				Active	36370	1985	Liquid Fuel Single Wall UST - Gasoline
				Active	18100	1985	Liquid Fuel Single Wall UST - Gasoline
FST-2	MAC'S CONVENIENCE STORES INC	62 ESSA RD BARRIE L4N 3K6	8/1/2002	Licensed	August 2007	Retail Fuel Outlet	Gasoline Station - Self Serve
				<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Tank Fuel Type</u>
				Active	36370	1985	Liquid Fuel Single Wall UST - Gasoline
				Active	36370	1985	Liquid Fuel Single Wall UST - Gasoline
				Active	18100	1985	Liquid Fuel Single Wall UST - Gasoline

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-1	The Corporation of the City of Barrie	285 Bradford Street Barrie L4N 3B9			145	Wastes from the use of pigments, coatings and paints
				Generator #: ON8206510 Approval Yrs: As of June 2009		
GEN-2	OIL-TECH RUST CONTROL CENTRE INC.	9 GOWAN STREET BARRIE L4N 2N9				
				Generator #: ON0266100 Approval Yrs: 02		
GEN-3	OIL-TECH RUST CONTROL CENTRE INC.	9 GOWAN STREET BARRIE L4N 2N9	6399	OTHER VEH. SERVICES	251	OIL SKIMMINGS & SLUDGES
				Generator #: ON0266100 Approval Yrs: 98,99,00,01,03		
GEN-4	OIL-TECH RUST CONTROL CTR INC 29-018	9 GOWAN ST. BARRIE L4N 2N9	6399	OTHER VEH. SERVICES	251	OIL SKIMMINGS & SLUDGES
				Generator #: ON0266100 Approval Yrs: 92,93,94,95,96,97		
GEN-5	OIL-TECH RUST CONTROL CTR INC	9 GOWAN ST. BARRIE L4N 2N9	6399	OTHER VEH. SERVICES	251	OIL SKIMMINGS & SLUDGES
				Generator #: ON0266100 Approval Yrs: 86,87,88,89,90		
GEN-6	OIL-TECH RUST CONTROL CENTRE INC.	9 GOWAN STREET BARRIE L4N 2N9				
				Generator #: ON0266100 Approval Yrs: 04		
GEN-7	SIMCOE COUNTY DISTRICT SCHOOL BOARD	KING EDWARD PUBLIC SCHOOL 19 BURTON AVENUE BARRIE L4N 2R3			121	Alkaline slutions - containing heavy metals
				Generator #: ON0358154 Approval Yrs: As of June 2009	145	Wastes from the use of pigments, coatings and paints
GEN-8	SIMCOE COUNTY DISTRICT SCHOOL BOARD	KING EDWARD PUBLIC SCHOOL 19 BURTON AVENUE BARRIE L4N 2R3	8511	ELEMNT./SECON. EDUC.	145	PAINT/PIGMENT/COATING RESIDUES
				Generator #: ON0358154 Approval Yrs: 99,00,01,04,05	331	WASTE COMPRESSED GASES
					148	INORGANIC LABORATORY CHEMICALS
					263	ORGANIC LABORATORY CHEMICALS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-9	TRISTAR PHARMACIES LIMITED	21 ESSA ROAD BARRIE L4N 3K4	6031	PHARMACIES	261	PHARMACEUTICALS
				Generator #: ON1838400	312	PATHOLOGICAL WASTES
				Approval Yrs: 94,95,96,97,98,99,00,01,02 ,03,04,05		
GEN-10	BARRIE, CITY OF	P.W.D. POLLUTION CONTROL CENTRE 249 BRADFORD STREET BARRIE L4N 3B2	8373	ENVIRON. ADMIN.	113	ACID WASTE - OTHER METALS
				Generator #: ON0310601	121	ALKALINE WASTES - HEAVY METALS
				Approval Yrs: 89,90,92,93,97,98,99,00,01	145	PAINT/PIGMENT/COATING RESIDUES
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					221	LIGHT FUELS
					252	WASTE OILS & LUBRICANTS
GEN-11	BARRIE, CITY OF	POLLUTION CONTROL CENTRE 249 BRADFORD STREET BARRIE L4N 3B2	0000	*** NOT DEFINED ***		
				Generator #: ON0310601		
				Approval Yrs: 86,87,88		

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-12	BARRIE, CORPORATION OF THE CITY OF	WATER POLLUTION CONTROL CENTRE 249 BRADFORD STREET BARRIE L4N 3B7	Generator #: ON0310601 Approval Yrs: 02,03,04,05,06		112 133 146 211 262 331 113 121 145 148 212 213 221 252 263	ACID WASTE - HEAVY METALS BRINES, CHLOR-ALKALI WASTES OTHER SPECIFIED INORGANICS AROMATIC SOLVENTS DETERGENTS/SOAPS WASTE COMPRESSED GASES ACID WASTE - OTHER METALS ALKALINE WASTES - HEAVY METALS PAINT/PIGMENT/COATING RESIDUES INORGANIC LABORATORY CHEMICALS ALIPHATIC SOLVENTS PETROLEUM DISTILLATES LIGHT FUELS WASTE OILS & LUBRICANTS ORGANIC LABORATORY CHEMICALS
GEN-13	BARRIE, CORPORATION OF THE CITY OF	WATER POLLUTION CONTROL CENTRE 249 BRADFORD STREET BARRIE L4N 3B7	Generator #: ON0310601 Approval Yrs: As of June 2009		112 146 148 213 232 252 262	Acid solutions - containing heavy metals Other specified inorganic sludges, slurries or solids Misc. wastes and inorganic chemicals Petroleum distillates Polymeric resins Waste crankcase oils and lubricants Detergents and soaps

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-14	BARRIE, CITY OF 336	05- P.W.D. POLLUTION CONTROL CENTRE 249 BRADFORD STREET BARRIE L4N 3B2	8373	ENVIRON. ADMIN. Generator #: ON0310601 Approval Yrs: 94,95,96	113 121 145 213 221 252	ACID WASTE - OTHER METALS ALKALINE WASTES - HEAVY METALS PAINT/PIGMENT/COATING RESIDUES PETROLEUM DISTILLATES LIGHT FUELS WASTE OILS & LUBRICANTS
n/a	ALLAN G. COOK LTD.	LOT 9 CONC. 14 TAX TWP P.O.BOX 1500 BARRIE L4M 4V3	0629	OTHER NON-METAL MINE Generator #: ON0684201 Approval Yrs: 89	252	WASTE OILS & LUBRICANTS
n/a	ALLAN G. COOK LTD.	LOT 9 CONC. 14 TAY TWP P.O.BOX 1500 BARRIE L4M 4V3	0629	OTHER NON-METAL MINE Generator #: ON0684201 Approval Yrs: 90	252	WASTE OILS & LUBRICANTS
n/a	ALLAN G. COOK LTD. 02-317	LOT 9 CONC. 14 TAY TWP P.O.BOX 1500 BARRIE L4M 4V3	0629	OTHER NON-METAL MINE Generator #: ON0684201 Approval Yrs: 94,95,96	252	WASTE OILS & LUBRICANTS

Non-Compliance Reports

Map Key	Company	Address	Year	Discharge Type	Sector	Type of Concern		
NCPL-1	The Corporation of the City of Barrie - Barrie WPCP	249 Bradford St Barrie	2006	Private Sewage	Sewage Municipal	C of A/Permit Non-Compliance		
				Contaminant: AMMONIA Status Report:				
				<u>Incident Date</u>	<u>Limit/Unit/ Freq</u>	<u>Quantity Min/Max</u>	<u>Facility Action</u>	<u>Ministry Action</u>
				2/28/2006	10 mg/L	10.32/10.32	Equipment Modified, Repaired, Replaced or Re-calibrated	Assessment Complete - No Action Required
				4/30/2006	571 kg/d	615/615	Equipment Modified, Repaired, Replaced or Re-calibrated	Assessment Complete - No Action Required
				4/30/2006	10 mg/L	10.32/10.32	Equipment Modified, Repaired, Replaced or Re-calibrated	Assessment Complete - No Action Required
NCPL-2	Barrie WPCP	Barrie	1995	Wastewater	Municipal	Control Order/Certificate of Approval		
				Contaminant: see "Status Report" Status Report:				
				Exceeded the Certificate of Approval total phosphorus limit for three months due to a local industry's discharge. The industry has since initiated changes to reduce their total phosphorus loading to the plant.				
				<u>Incident Date</u>	<u>Limit/Unit/ Freq</u>	<u>Quantity Min/Max</u>	<u>Facility Action</u>	<u>Ministry Action</u>
NCPL-3	Barrie WPCP	Barrie	1996	Wastewater	Municipal	Certificate of Approval		
				Contaminant: see "Status Report" Status Report:				
				Exceeded total phosphorus limit once. One clarifier had been removed from service for repairs, compliance anticipated for 1997.				
				<u>Incident Date</u>	<u>Limit/Unit/ Freq</u>	<u>Quantity Min/Max</u>	<u>Facility Action</u>	<u>Ministry Action</u>
NCPL-4	The Corporation of the City of Barrie - Barrie WPCP	249 Bradford St Barrie	2005	Mun. Private Sewage	Sewage Municipal	C of A Non-Compliance		
				Contaminant: PHOSPHORUS Status Report:				
				<u>Incident Date</u>	<u>Limit/Unit/ Freq</u>	<u>Quantity Min/Max</u>	<u>Facility Action</u>	<u>Ministry Action</u>
				4/30/2005	13.7 kg/d	13.9\	Operational Process Modification	Voluntary Abatement Program Underway
				8/31/2005	13.7 kg/d	14.5\15.3	Conducting Study	Voluntary Abatement Program Underway
				8/31/2005	0.24 mg/L	0.3\0.32	Conducting Study	Voluntary Abatement Program Underway

Non-Compliance Reports

Map Key	Company	Address	Year	Discharge Type	Sector	Type of Concern		
NCPL-5	The Corporation of the City of Barrie - Barrie WPCP	249 Bradford St. Barrie	2005	Mun. Private Sewage	Sewage Municipal	C of A Non-Compliance		
				Contaminant: AMMONIA				
				Status Report:				
				<u>Incident Date</u>	<u>Limit/Unit/ Freq</u>	<u>Quantity Min/Max</u>	<u>Facility Action</u>	<u>Ministry Action</u>
				2/28/2005	10 mg/L	10.6\	Operational Process Modification	Voluntary Abatement Program Underway
				4/30/2005	10 mg/L	11.16\	Operational Process Modification	Voluntary Abatement Program Underway
				4/30/2005	571 kg/d	649.8\	Operational Process Modification	Voluntary Abatement Program Underway
				9/30/2005	4 mg/L	4.66\8.39	Conducting Study	Voluntary Abatement Program Underway
				9/30/2005	228.4 kg/d	392\403.2	Conducting Study	Voluntary Abatement Program Underway
				10/31/2005	228.4 kg/d	293.4\	Conducting Study	Voluntary Abatement Program Underway
				10/31/2005	4 mg/L	5.78\	Conducting Study	Voluntary Abatement Program Underway

National Environmental Emergencies System (NEES)

Map Key	Company	Address	Incident Date	Contaminant
n/a	UNITED CO-OP	BARRIE CITY	12/5/88	AMMONIUM NITRATE LIQUID Amount: 0 Units: Container Leak Quantity: Cause: Unknown Source: Other Motor Vehicle Reason: Sector: Agriculture

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude			
NPRI-1	The Corporation of the City of Barrie	249 Bradford Street PO Box 400 Barrie L4M 4T5	5986	2001					
					<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
					0.00	39.40	0.00	tonnes	Ammonia (Total)
					0.00	161.50	0.00	tonnes	Nitrate ion in solution at pH >= 6.0
NPRI-2	The Corporation of the City of Barrie	249 Bradford Street PO Box 400 Barrie L4M 4T5	5986	2002					
					<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
					38.72	50.2	0	tonnes	Ammonia (Total)
					0	966.394	0	tonnes	Nitrate ion in solution at pH >= 6.0
NPRI-3	The Corporation of the City of Barrie	249 Bradford Street PO Box 400 Barrie L4M 4T5	5986	2003					
					<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
					38.68	67.52	0.00	tonnes	Ammonia (Total)
					0.00	1303.84	0.00	tonnes	Nitrate ion in solution at pH >= 6.0
					0.00	2.03	0.00	tonnes	Phosphorus (total)
NPRI-4	CITY OF BARRIE	249 BRADFORD Street PO Box 400 Barrie	5986	2004	-79.6874		44.3798		
					<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
					73.31			tonnes	Ammonia (Total)
					1362.55			tonnes	Nitrate ion in solution at pH >= 6.0
					2.87			tonnes	Phosphorus (total)

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude
NPRI-5	CITY OF BARRIE	249 BRADFORD Street PO Box 400 Barrie	5986	2005	-79.6874	44.3798
				<u>Air</u>	<u>Water</u>	<u>Land</u>
				5.78		tonnes
				1.90		tonnes
						kg
				142.22		tonnes
				1237.33		tonnes
				4.12		tonnes
				19.90		tonnes
						Volatile Organic Compounds (VOCs)
NPRI-6	CITY OF BARRIE	249 BRADFORD Street PO Box 400 Barrie	5986	2006	-79.6907	44.3763
				<u>Air</u>	<u>Water</u>	<u>Land</u>
				6.04		tonnes
				1.98		tonnes
						tonnes
				89.80		tonnes
				1424.52		tonnes
				3.26		tonnes
				20.79		tonnes
						Volatile Organic Compounds (VOCs)

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude	
NPRI-7	CITY OF BARRIE	249 BRADFORD Street PO Box 400 Barrie L4M 4T5	5986	2007			
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			6.00			tonnes	Toluene
			1.97			tonnes	Xylene (all isomers)
				35.47		tonnes	Ammonia (Total)
				1613.50		tonnes	Nitrate ion in solution at pH >= 6.0
				2.27		tonnes	Phosphorus (total)
			20.66			tonnes	Volatile Organic Compounds (VOCs)

Pesticide Register

Map Key	Company	Address	Licence No.	Licence Type
PES-1	SHOPPERS DRUG MART #1028 (ESSA & FERNDALE)	40 ESSA RD BARRIE L4N 3K5		Limited Vendor

Private and Retail Fuel Storage Tanks

Map Key	Company	Address	Location ID	Type	Expiry Date	Capacity (L)	Licence #	Facility Description
PRT-1	SUNOCO INC ATTN: MR. GEORGE PERROW	17 GOWAN ST BARRIE L4N2N9	27511	retail	1995-01-31	3000	0076411867	GASOLINE STATION - FS
PRT-2	MIKE'S MART	62 ESSA RD BARRIE L4N 3K6	1301	retail	1995-08-31	91135	0054510001	GASOLINE STATION - SS
n/a	SUPERIOR PROPANE INC.	BURTON AV BARRIE	1287	retail	1995-07-31	50000	0023258001	PROP FILLNG PLT > 5000 FS

Ontario Regulation 347 Waste Receivers Summary

Map Key	Company	Address	Receiver #:	Facility Type	Waste Code	Waste Description
REC-1	BARRIE WPCP	249 BRADFORD ST. 165 FERNDALE DR., P.O. BOX 647 BARRIE L4M 4V1	W120578	WATER POLLUTION CONTROL PLANT Approval Yrs: 86,94,95,96,97,98,99,00	149	LANDFILL LEACHATES
REC-2	BARRIE WPCP	249 BRADFORD STREET BARRIE L4M 4V1	W120578	WATER POLLUTION CONTROL PLANT Approval Yrs: 01,02,03,04,05,06	149	LANDFILL LEACHATES

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft ²)	Employment	SIC/NAICS Code	Description
SCT-1	X-LINE MANUFACTURING	12 CUMBERLAND ST BARRIE L4N 2P4	1995	0	2	3446 3599	ARCHITECTURAL AND ORNAMENTAL METAL WORK INDUSTRIAL AND COMMERCIAL MACHINERY AND EQUIPMENT, NOT ELSEWHERE CLASSIFIED

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-1	TRANSPORT TRUCK	INTERSECTION OF TIFFON AND BRADFORD TRANSPORT TRUCK (CARGO) BARRIE CITY	226205	5/24/2002	5/24/2002	Incident Summary: REGION OF HURONIA:8L OF CONDITIONED SLUDGE TO RD CONTAINED AND CLEANED Incident Cause: UNKNOWN Incident Reason: UNKNOWN Nature of Impact: Soil contamination Receiving Medium: LAND Environmental Impact: POSSIBLE	
SPL-2	PRIVATE OWNER	BAYVIEW & BURTON MOTOR VEHICLE (OPERATING FLUID) BARRIE CITY	176036	12/21/1999	12/21/1999	Incident Summary: PRIVATE OWNER:PUNCTURED FUEL TANK VIA ROAD DEBRIS-FD, WORKS, CU COMPLETE Incident Cause: OTHER TRANSPORTATION ACCIDENT Incident Reason: DAMAGE BY MOVING EQUIPMENT Nature of Impact: Water course or lake Receiving Medium: LAND / WATER Environmental Impact: POSSIBLE	
SPL-3	CO-OP	ESSA RD. & TIFFIN RD. S. BARRIE CITY	216149	11/15/2001	11/15/2001	Incident Summary: CO-OP: 757 L 12% SODIUM HYPOCHLORIDE TO GROUND AND SANITARY SEWER Incident Cause: VALVE/FITTING LEAK OR FAILURE Incident Reason: ERROR Nature of Impact: Multi Media Pollution Receiving Medium: Land, Water Environmental Impact: Possible	
SPL-4	PRIVATE OWNER	KEMPENFELT BAY ON LAKESHORE ROAD AT THE BOTTOM OF TIFFEN STREET. MOTOR VEHICLE (OPERATING FLUID) BARRIE CITY	144016	7/23/1997	7/23/1997	Incident Summary: PRIVATE OWNER-VEHICLE PULLED FROM KEMPENFELT BAY, OIL SHEEN ON WATER. Incident Cause: OTHER CONTAINER LEAK Incident Reason: OTHER Nature of Impact: Water course or lake Receiving Medium: WATER Environmental Impact: POSSIBLE	
SPL-5	UNKNOWN	ON BRADFORD FROM TIFFIN TO THE W.W.T.P. BARRIE	184858	8/12/2000	8/12/2000	Incident Summary: SOURCE UKN-UKN QTY USED MOTOR OIL TO ROADWAY OVER110 METERS,SWEPT-UP Incident Cause: UNKNOWN Incident Reason: UNKNOWN Nature of Impact: Receiving Medium: LAND Environmental Impact: NOT ANTICIPATED	

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-6	BARRIE, CITY OF	LAKE SIMCOE, BARRIE WPCP BARRIE WPCP 249 BRADFORD STREET BARRIE CITY	224131 249	4/17/2002	4/17/2002	Incident Summary: BARRIE WPCP: SPILL OF 250 M3 UNCHLOR. SEWAGE TO GROUND, L. SIMCOE. Incident Cause: WASTEWATER DISCHARGE TO WATERCOURSE Incident Reason: EQUIPMENT FAILURE Nature of Impact: Water course or lake Receiving Medium: LAND / WATER Environmental Impact: POSSIBLE	
SPL-7	UNKNOWN	CB SOUTH OF 249 BRADFORD STREET. BARRIE CITY	220322	1/24/2002	1/24/2002	Incident Summary: SOURCE UKN-USED MOTOR OIL FOUND ON ROAD, SOME TO CB, CLEANED-UP BY CITY. Incident Cause: UNKNOWN Incident Reason: UNKNOWN Nature of Impact: Receiving Medium: LAND / WATER Environmental Impact: NOT ANTICIPATED	
SPL-8	BARRIE, CITY OF	249 BRADFORD STREET BARRIE WPCP 249 BRADFORD STREET BARRIE	191242	11/28/2000	11/29/2000	Incident Summary: CITY OF BARRIE--SPILL OF 54,000 L WATER/SEWAGE MIX TO CREEK. RUPTURED SEWER Incident Cause: PIPE/HOSE LEAK Incident Reason: OTHER Nature of Impact: Water course or lake Receiving Medium: WATER Environmental Impact: POSSIBLE	
SPL-9	Flags Unlimited<UNOFFICIAL>	BARRIE WATER POLLUTION CONTROL CENTRE BARRIE	2487-5P4RJF	7/3/2003	7/3/2003	SOLVENT (N.O.S.)	
						Incident Summary: Flags Unlimited: discharging solvents to sani	
						Incident Cause:	
						Incident Reason:	
						Nature of Impact: Surface Water Pollution	
						Receiving Medium: Water	
						Environmental Impact: Possible	
SPL-10	Section 21(1)(f)	Barrie Water Pollution Control Centre Barrie	0684-7LSLN2		11/27/2008	SEWAGE,FINAL EFFLUENT UNCHLORINATED	100 m3
						Incident Summary: Barrie WPCC - 100m3 effluent to Kempenfelt Bay	
						Incident Cause: Discharge Or Bypass To A Watercourse	
						Incident Reason: Power Interruption - Loss of electrical power	
						Nature of Impact: Surface Water Pollution	
						Receiving Medium:	
						Environmental Impact: Confirmed	

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-11	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	7522-7LRPXY		11/26/2008	SEWAGE,FINAL EFFLUENT UNCHLORINATED	700 m3
				Incident Summary:	Barrie WPCC: 700m ³ , undis final effluent to Kempenfelt Bay.		
				Incident Cause:	Discharge Or Bypass To A Watercourse		
				Incident Reason:	Equipment Failure		
				Nature of Impact:	Surface Water Pollution		
				Receiving Medium:			
				Environmental Impact:	Confirmed		
SPL-12	City of Barrie <UNOFFICIAL>	Barrie Water Pollution Control Centre Barrie	2076-7GJKPJ		7/14/2008	Tertiary sewage	20 m3
				Incident Summary:	Barrie WPCC - 20m3 tert sewage to Kem Bay		
				Incident Cause:	Discharge Or Bypass To A Watercourse		
				Incident Reason:	Equipment Failure		
				Nature of Impact:	Surface Water Pollution		
				Receiving Medium:			
				Environmental Impact:	Not Anticipated		
SPL-13		Barrie Water Pollution Control Centre Barrie	5460-7EAK3F		5/3/2008		
				Incident Summary:	Oil slick around WPCC, Kempenfelt Bay, Barrie		
				Incident Cause:	Other Discharges		
				Incident Reason:			
				Nature of Impact:	Surface Water Pollution		
				Receiving Medium:			
				Environmental Impact:	Not Anticipated		
SPL-14		Barrie Water Pollution Control Centre Barrie L4M 4T5	2484- 7DZRWJ		4/24/2008		
				Incident Summary:	Barrie WPCP: Silt to Hodgekiss Cr. and Dynement Cr.		
				Incident Cause:			
				Incident Reason:			
				Nature of Impact:			
				Receiving Medium:			
				Environmental Impact:	Not Anticipated		
SPL-15	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	0834- 7DPMYK		4/14/2008		
				Incident Summary:	Barrie WPCP: Water line Hit- Drinking water to Dyments Crk.		
				Incident Cause:			
				Incident Reason:	Error- Operator error		
				Nature of Impact:	Surface Water Pollution		
				Receiving Medium:			
				Environmental Impact:	Not Anticipated		

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-16	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	7378-7DAJTX		4/1/2008	SEWAGE,SECONDARY CHLORINATED	2 m3
				Incident Summary: Incident Cause: Incident Reason: Nature of Impact: Receiving Medium: Environmental Impact:	Barrie WPCP-2 m3 of sec. effluent to ground, clng. Other Discharges Ice/Snow/Rain Soil Contamination Not Anticipated		
SPL-17	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	8321-7CDUTW		3/3/2008	SEWAGE,PRIMARY UNCHLORINATED	548.8 m3
				Incident Summary: Incident Cause: Incident Reason: Nature of Impact: Receiving Medium: Environmental Impact:	Barrie STP, primary uv treated, non chlor sewage, Lk Simcoe Discharge Or Bypass To A Watercourse Equipment Failure Surface Water Pollution Confirmed		
SPL-18	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	0180-7AUS2R		1/14/2008	SEWAGE,SECONDARY UV DISINFECTED	29.7 m3
				Incident Summary: Incident Cause: Incident Reason: Nature of Impact: Receiving Medium: Environmental Impact:	Barrie WPCC: secondary, UV treated sewage to Lake Simcoe Discharge Or Bypass To A Watercourse Equipment Failure Surface Water Pollution Confirmed		
SPL-19	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	5481-7AR8PX		1/11/2008	SEWAGE,SECONDARY UNCHLORINATED	
				Incident Summary: Incident Cause: Incident Reason: Nature of Impact: Receiving Medium: Environmental Impact:	BP-Barrie WPCP-Sand filter bypass,Filter Fail. Discharge Or Bypass To A Watercourse Equipment Failure - Malfunction of system components Surface Water Pollution Possible		
SPL-20	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	3027-7AR2GZ		1/10/2008	SEWAGE,SECONDARY UNCHLORINATED	16 m3
				Incident Summary: Incident Cause: Incident Reason: Nature of Impact: Receiving Medium: Environmental Impact:	BP-Barrie WPCP-Sand filter bypass,Filter Fail. Discharge Or Bypass To A Watercourse Equipment Failure - Malfunction of system components Surface Water Pollution Possible		

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-21	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	7350-6ZWL6F	4/3/2007		Tertiary and UV treated sewage	13.1 m3
				Incident Summary: BP: Barrie WPCP, 13.1 m3 of tert UV sewage to Lk. Simcoe			
				Incident Cause: Discharge Or Bypass To A Watercourse			
				Incident Reason: Process upset			
				Nature of Impact: Surface Water Pollution			
				Receiving Medium: Water			
				Environmental Impact: Not Anticipated			
SPL-22		Barrie Water Pollution Control Centre Barrie	2418-6Y46QR	2/3/2007		SEWAGE,SECONDARY UNCHLORINATED	8250 m3
				Incident Summary: Barrie WPCP: process upset, high SS to lake.			
				Incident Cause: Discharge Or Bypass To A Watercourse			
				Incident Reason: Process upset			
				Nature of Impact: Surface Water Pollution			
				Receiving Medium: Water			
				Environmental Impact: Not Anticipated			
SPL-23		Barrie Water Pollution Control Centre Barrie	7032-6ZJS73	3/22/2007		HYDRAULIC OIL	15 L
				Incident Summary: Frith Regional: 15 L of hydr oil to grnd, creek			
				Incident Cause: Pipe Or Hose Leak			
				Incident Reason:			
				Nature of Impact: Soil Contamination; Surface Water Pollution			
				Receiving Medium: Land & Water			
				Environmental Impact: Confirmed			
SPL-24	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	3088-6ZJKFK	3/22/2007		SEWAGE,SECONDARY UNCHLORINATED	4.6 m3
				Incident Summary: Barrie WPCC: spill 4.6 m3 sec treated swg to lake			
				Incident Cause:			
				Incident Reason:			
				Nature of Impact: Surface Water Pollution			
				Receiving Medium: Water			
				Environmental Impact: Confirmed			
SPL-25	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	7151-72MPW4	4/26/2007		SEWAGE	unknown unknown
				Incident Summary: BP: Barrie WPCC - part.tertiary sewage to L. Simcoe			
				Incident Cause: Discharge Or Bypass To A Watercourse			
				Incident Reason: Other - Reason not otherwise defined			
				Nature of Impact: Surface Water Pollution			
				Receiving Medium: Water			
				Environmental Impact: Possible			

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-26	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	7403-6X9JNN		1/8/2007	DIESEL FUEL	2 L
				Incident Summary:	Barrie WPCP: ~1-2 L diesel to parking lot		
				Incident Cause:	Unknown		
				Incident Reason:			
				Nature of Impact:	Soil Contamination; Surface Water Pollution		
				Receiving Medium:	Land & Water		
				Environmental Impact:	Not Anticipated		
SPL-27	Wessuc Inc.	BARRIE WATER POLLUTION CONTROL CENTRE BARRIE	2753-67GU5P	12/8/2004	12/8/2004	WASTEWATER (HIGH BOD)	
				Incident Summary:	Wessuc: biosolids to Hodgekins Creek		
				Incident Cause:	Discharge Or Bypass To A Watercourse		
				Incident Reason:	Negligence (Apparent) - Caused by lack of diligence		
				Nature of Impact:	Surface Water Pollution		
				Receiving Medium:	Water		
				Environmental Impact:	Not Anticipated		
SPL-28	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	1740-69UPEY	2/22/2005	2/22/2005	OXYGEN (PRESSURIZED LIQUID)	
				Incident Summary:	Barrie WPCP: Oxygen tank spill, evacuation.		
				Incident Cause:			
				Incident Reason:			
				Nature of Impact:	Human Health/Safety		
				Receiving Medium:	Land		
				Environmental Impact:	Not Anticipated		
SPL-29	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	4282- 6DSKXU	6/28/2005	6/28/2005	SEWAGE,SECONDARY UNCHLORINATED	
				Incident Summary:	Barrie WPCP: 1L/min spill of 2nd effluent to grnd,contd		
				Incident Cause:	Other Discharges		
				Incident Reason:	Unknown - Reason not determined		
				Nature of Impact:	Other Impact(s)		
				Receiving Medium:	Land		
				Environmental Impact:	Possible		
SPL-30	The Corporation of the City of Barrie	Barrie Water Pollution Control Centre Barrie	7615-6E7NTQ	7/11/2005	7/11/2005	SEWAGE,FINAL EFFLUENT UNCHLORINATED	unknown
				Incident Summary:	BP: Barrie WPCC-Tertiary effluent to Lk Simcoe		
				Incident Cause:	Discharge Or Bypass To A Watercourse		
				Incident Reason:	Other - Reason not otherwise defined		
				Nature of Impact:	Surface Water Pollution		
				Receiving Medium:	Water		
				Environmental Impact:	Possible		

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-31	The Corporation of the City of Barrie	549 BRADFORD ST BARRIE WATER POLLUTION CONTROL CENTRE Barrie	6811-6UAP2R	10/5/2006	10/5/2006	SEWAGE,RAW UNCHLORINATED	60 L
				Incident Summary:	Barrie WPCP,60 L sewage to driveway of WPCP,clnd up		
				Incident Cause:			
				Incident Reason:			
				Nature of Impact:	Soil Contamination		
				Receiving Medium:	Land		
				Environmental Impact:	Not Anticipated		
SPL-32	The Corporation of the City of Barrie	249 BRADFORD STREET BARRIE WATER POLLUTION CONTROL CENTRE Barrie	7847- 6SYPSG	8/24/2006	8/24/2006	SLUDGE (N.O.S.)	Unknown
				Incident Summary:	Barrie WPCP: seconday sludge to Lake Simcoe		
				Incident Cause:	Discharge Or Bypass To A Watercourse		
				Incident Reason:	Equipment Failure - Malfunction of system components		
				Nature of Impact:	Surface Water Pollution		
				Receiving Medium:	Water		
				Environmental Impact:	Not Anticipated		
n/a	UNKNOWN	BRADFORD STREET BARRIE CITY	54328	//	7/5/1991		
				Incident Summary:	BACKENTRY: HEAVY RAINS FLUSHED OIL TO RETENTION POND FROM UNKNOWN SOURCE.		
				Incident Cause:	UNKNOWN		
				Incident Reason:	UNKNOWN		
				Nature of Impact:			
				Receiving Medium:	WATER		
				Environmental Impact:	NOT ANTICIPATED		
n/a	UNKNOWN	ON BAYVIEW STREET NEAR SOPHIA BARRIE CITY	139798	4/22/1997	4/22/1997		
				Incident Summary:	UNKNOWN SOURCE:SMALL QUANTITY OF TRANSMISSION FLUID TO ROAD.		
				Incident Cause:	UNKNOWN		
				Incident Reason:	UNKNOWN		
				Nature of Impact:			
				Receiving Medium:	LAND		
				Environmental Impact:	NOT ANTICIPATED		
n/a	RECREATION & PARKS DEPARTMENT	BRADFORD ARENA ARENA BARRIE CITY	197668	4/5/2001	4/5/2001		
				Incident Summary:	BRADFORD AENA SNOW+PAINT RESIDUL TO HOTCHKISS CREEK		
				Incident Cause:	UNKNOWN		
				Incident Reason:	ERROR		
				Nature of Impact:	Water course or lake		
				Receiving Medium:	Land, Water		
				Environmental Impact:	Possible		

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
n/a	BARRIE, CITY OF	END OF MCVEIGH ST. BARRIE WPCP BRADFORD STREET BARRIE CITY	249	202725	6/5/2001	6/5/2001	 Incident Summary: BARRIE PUC- SEWAGE TO GROUND FROM PLUGGED Incident Cause: PROCESS UPSET Incident Reason: OTHER Nature of Impact: Soil contamination Receiving Medium: Land Environmental Impact: Confirmed
n/a	Sunoco Inc.	SUNOCO INC.<UNOFFICIAL> BARRIE	4058-5TLQLP	11/24/2003	11/24/2003	DIESEL FUEL	20 L
						 Incident Summary: Sunoco:20L Dsl, Unknwn Qty to Sewer Incident Cause: Unknown Incident Reason: Unknown - Reason not determined Nature of Impact: Surface Water Pollution Receiving Medium: Water Environmental Impact: Possible	
n/a		KIDD'S CREEK AT LAKESHORE DRIVE<UNOFFICIAL> Barrie	4857- 6THVSC	9/9/2006	9/10/2006	HYDRAULIC OIL	25 l
						 Incident Summary: Source Ukn-Sheen on Kidd's Creek,Contained. Incident Cause: Incident Reason: Nature of Impact: Surface Water Pollution Receiving Medium: Water Environmental Impact: Not Anticipated	
n/a	Unknown<UNOFFICIAL>	IN POND BESIDE THE BARRIE WPCP ON BRADFORD ST. <UNOFFICIAL> Barrie	8816-6QF24J	6/3/2006	6/3/2006	DIESEL FUEL	not provided
						 Incident Summary: Bus (N.O.S.) - diesel fuel to sewer & pond. Incident Cause: Container Leak (Fuel Tank Barrels) Incident Reason: Unknown - Reason not determined Nature of Impact: Surface Water Pollution Receiving Medium: Water Environmental Impact: Not Anticipated	
n/a		Bradford St<UNOFFICIAL> Barrie	0863-73Q3V8		5/30/2007	ETHYLENE GLYCOL (ANTIFREEZE)	20 L
						 Incident Summary: MVA resulting in 20L antifreeze, 1L to CB Incident Cause: Other Transport Accident Incident Reason: Unknown - Reason not determined Nature of Impact: Human Health/Safety; Surface Water Pollution Receiving Medium: Land & Water Environmental Impact: Possible	

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
n/a	The Corporation of the City of Barrie	Lockheart Dr. (south of Mapleview and Bayview)<UNOFFICIAL> Barrie	7411-7BCN6Y	1/30/2008		OIL (PETROLEUM BASED, NOT SPECIFIED)	other - see incident description

Incident Summary: Ukn source;leaking oily products from barrels;City Barrie
Incident Cause: Other Discharges
Incident Reason: Equipment Failure
Nature of Impact: Soil Contamination
Receiving Medium:
Environmental Impact: Possible

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality											
WWIS-1		BARRIE CITY	7047930				SIMCOE	BARRIE CITY											
					<p>Easting Nad83: 604604 Northing Nad83: 4914196 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 7/15/2007 Primary Water Use: Not Used Secondary Water Use: Well Depth (ft): 22.96588 Pump Rate (gpm): Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: Final Well Status: Dewatering Construction Method: Boring Flowing (y/n): Elevation (ft): Elevation Reliability: Depth to Bedrock (ft): Overburden/Bedrock: Water Type: FRESH Casing Material: PLASTIC</p> <table> <thead> <tr> <th><u>Thickness (ft)</u></th> <th><u>Original Depth (ft)</u></th> <th><u>Material Colour</u></th> <th><u>Material</u></th> </tr> </thead> <tbody> <tr> <td>11.48294</td> <td>11.48294</td> <td>BROWN</td> <td>TOPSOIL, TOPSOIL, FILL</td> </tr> <tr> <td>11.48294</td> <td>22.96588</td> <td>GREY</td> <td>SAND, WATER-BEARING, SILTY</td> </tr> </tbody> </table>	<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>	11.48294	11.48294	BROWN	TOPSOIL, TOPSOIL, FILL	11.48294	22.96588	GREY	SAND, WATER-BEARING, SILTY		
<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>																
11.48294	11.48294	BROWN	TOPSOIL, TOPSOIL, FILL																
11.48294	22.96588	GREY	SAND, WATER-BEARING, SILTY																

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality											
WWIS-2		BARRIE CITY	7048190				SIMCOE	BARRIE CITY											
					<p>Easting Nad83: 604604 Northing Nad83: 4914196 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 8/3/2007 Primary Water Use: Secondary Water Use: Well Depth (ft): 22.96588 Pump Rate (gpm): Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: Final Well Status: Abandoned-Other Construction Method: Flowing (y/n): Elevation (ft): Elevation Reliability: Depth to Bedrock (ft): Overburden/Bedrock: Water Type: Casing Material:</p> <table> <thead> <tr> <th><u>Thickness (ft)</u></th> <th><u>Original Depth (ft)</u></th> <th><u>Material Colour</u></th> <th><u>Material</u></th> </tr> </thead> <tbody> <tr> <td>11.48294</td> <td>11.48294</td> <td>BROWN</td> <td>TOPSOIL, FILL, SILTY</td> </tr> <tr> <td>11.48294</td> <td>22.96588</td> <td>GREY</td> <td>SAND, SILTY, WATER-BEARING</td> </tr> </tbody> </table>	<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>	11.48294	11.48294	BROWN	TOPSOIL, FILL, SILTY	11.48294	22.96588	GREY	SAND, SILTY, WATER-BEARING		
<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>																
11.48294	11.48294	BROWN	TOPSOIL, FILL, SILTY																
11.48294	22.96588	GREY	SAND, SILTY, WATER-BEARING																

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-3		BARRIE CITY	5709345				SIMCOE	BARRIE CITY
					Easting Nad83: 604704.4 Northing Nad83: 4914106 Zone: 17 Utm Reliability: margin of error : 30 m - 100 m Construction Date: 11/21/1972 Primary Water Use: Domestic Secondary Water Use: Well Depth (ft): 286 Pump Rate (gpm): 37 Static Water Level (ft): 2 Flow Rate (gpm): Clear/Cloudy: CLEAR Specific Capacity: 37 Final Well Status: Test Hole Construction Method: Rotary (Convent.) Flowing (y/n): N Elevation (ft): 750 Elevation Reliability: Read from topographic map, contour interval - 25 ft Depth to Bedrock (ft): 284 Overburden/Bedrock: Bedrock Water Type: FRESH Casing Material: STEEL			
					<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
					1	1	BLACK	MUCK
					3	4	BROWN	SAND, GRAVEL
					5	9	BROWN	SAND
					18	27	BROWN	SAND, GRAVEL, CLAY
					26	53	GREY	CLAY, STONES
					14	67		GRAVEL, SAND
					14	81	GREY	CLAY, GRAVEL
					2	83		SAND, GRAVEL, BOULDERS
					67	150	GREY	CLAY
					26	176	GREY	FINE SAND, SAND
					2	178	GREY	SAND, GRAVEL
					30	208	GREY	FINE SAND, GRAVEL
					5	213	GREY	CLAY, SAND, GRAVEL
					17	230	GREY	GRAVEL, SAND
					13	243	GREY	CLAY

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
			1	244	GREY	CLAY, GRAVEL		
			10	254	GREY	CLAY		
			19	273		GRAVEL, SAND, CLAY		
			11	284	GREY	CLAY, SAND, GRAVEL		
			2	286	BROWN	LIMESTONE		
WWIS-4		BARRIE CITY	7117041				SIMCOE	BARRIE CITY
					Easting Nad83: 604478			
					Northing Nad83: 4914319			
					Zone: 17			
					Utm Reliability: margin of error : 10 - 30 m			
					Construction Date: 8/15/2008			
					Primary Water Use:			
					Secondary Water Use:			
					Well Depth (ft):			
					Pump Rate (gpm):			
					Static Water Level (ft):			
					Flow Rate (gpm):			
					Clear/Cloudy:			
					Specific Capacity:			
					Final Well Status:			
					Construction Method:			
					Flowing (y/n):			
					Elevation (ft):			
					Elevation Reliability:			
					Depth to Bedrock (ft):			
					Overburden/Bedrock:			
					Water Type:			
					Casing Material:			
					<u>Thickness</u> <u>ft</u>	<u>Original</u> <u>Depth</u> <u>ft</u>	<u>Material Colour</u>	<u>Material</u>

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality															
WWIS-5		BARRIE CITY L4N 3K4	7043261				SIMCOE	BARRIE CITY															
					<p>Easting Nad83: 604333 Northing Nad83: 4914291 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 2/13/2007 Primary Water Use: Secondary Water Use: Well Depth (ft): 14.0091868 Pump Rate (gpm): Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: Final Well Status: Abandoned-Other Construction Method: Other Method Flowing (y/n): Elevation (ft): Elevation Reliability: Depth to Bedrock (ft): Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC</p> <table> <thead> <tr> <th><u>Thickness (ft)</u></th> <th><u>Original Depth (ft)</u></th> <th><u>Material Colour</u></th> <th><u>Material</u></th> </tr> </thead> <tbody> <tr> <td>8.1692916</td> <td>10.170604</td> <td>BROWN</td> <td>SAND</td> </tr> <tr> <td>3.8385828</td> <td>14.0091868</td> <td>BROWN</td> <td>SAND</td> </tr> <tr> <td>2.0013124</td> <td>2.0013124</td> <td>BROWN</td> <td>GRAVEL, FILL</td> </tr> </tbody> </table>	<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>	8.1692916	10.170604	BROWN	SAND	3.8385828	14.0091868	BROWN	SAND	2.0013124	2.0013124	BROWN	GRAVEL, FILL		
<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>																				
8.1692916	10.170604	BROWN	SAND																				
3.8385828	14.0091868	BROWN	SAND																				
2.0013124	2.0013124	BROWN	GRAVEL, FILL																				

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality																																																									
WWIS-6		BARRIE CITY	5700255				SIMCOE	BARRIE CITY																																																									
			<p>Easting Nad83: 604849.4 Northing Nad83: 4914124 Zone: 17 Utm Reliability: unknown UTM Construction Date: 10/11/1960 Primary Water Use: Not Used Secondary Water Use: Well Depth (ft): 284 Pump Rate (gpm): 75 Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: CLEAR Specific Capacity: 75 Final Well Status: Test Hole Construction Method: Rotary (Convent.) Flowing (y/n): Y Elevation (ft): 750 Elevation Reliability: Unknown elevation Depth to Bedrock (ft): Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: STEEL </p> <table> <thead> <tr> <th><u>Thickness (ft)</u></th> <th><u>Original Depth (ft)</u></th> <th><u>Material Colour</u></th> <th><u>Material</u></th> </tr> </thead> <tbody> <tr> <td>4</td> <td>4</td> <td></td> <td>MEDIUM SAND, GRAVEL</td> </tr> <tr> <td>9</td> <td>13</td> <td></td> <td>MEDIUM SAND</td> </tr> <tr> <td>13</td> <td>26</td> <td></td> <td>MEDIUM SAND, GRAVEL, BOULDERS</td> </tr> <tr> <td>2</td> <td>28</td> <td>BLUE</td> <td>CLAY</td> </tr> <tr> <td>5</td> <td>33</td> <td></td> <td>CLAY, SILT</td> </tr> <tr> <td>7</td> <td>40</td> <td>BLUE</td> <td>CLAY</td> </tr> <tr> <td>9</td> <td>49</td> <td>BLUE</td> <td>CLAY, GRAVEL</td> </tr> <tr> <td>6</td> <td>55</td> <td></td> <td>GRAVEL, MEDIUM SAND, BOULDERS</td> </tr> <tr> <td>10</td> <td>65</td> <td>BLUE</td> <td>CLAY, MEDIUM SAND, GRAVEL</td> </tr> <tr> <td>9</td> <td>74</td> <td>BLUE</td> <td>CLAY</td> </tr> <tr> <td>25</td> <td>99</td> <td>BLUE</td> <td>CLAY, MEDIUM SAND</td> </tr> <tr> <td>34</td> <td>133</td> <td>BLUE</td> <td>CLAY, SILT</td> </tr> <tr> <td>17</td> <td>150</td> <td></td> <td>CLAY, MEDIUM SAND</td> </tr> <tr> <td>56</td> <td>206</td> <td></td> <td>FINE SAND, GRAVEL, CLAY</td> </tr> </tbody> </table>	<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>	4	4		MEDIUM SAND, GRAVEL	9	13		MEDIUM SAND	13	26		MEDIUM SAND, GRAVEL, BOULDERS	2	28	BLUE	CLAY	5	33		CLAY, SILT	7	40	BLUE	CLAY	9	49	BLUE	CLAY, GRAVEL	6	55		GRAVEL, MEDIUM SAND, BOULDERS	10	65	BLUE	CLAY, MEDIUM SAND, GRAVEL	9	74	BLUE	CLAY	25	99	BLUE	CLAY, MEDIUM SAND	34	133	BLUE	CLAY, SILT	17	150		CLAY, MEDIUM SAND	56	206		FINE SAND, GRAVEL, CLAY		
<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>																																																														
4	4		MEDIUM SAND, GRAVEL																																																														
9	13		MEDIUM SAND																																																														
13	26		MEDIUM SAND, GRAVEL, BOULDERS																																																														
2	28	BLUE	CLAY																																																														
5	33		CLAY, SILT																																																														
7	40	BLUE	CLAY																																																														
9	49	BLUE	CLAY, GRAVEL																																																														
6	55		GRAVEL, MEDIUM SAND, BOULDERS																																																														
10	65	BLUE	CLAY, MEDIUM SAND, GRAVEL																																																														
9	74	BLUE	CLAY																																																														
25	99	BLUE	CLAY, MEDIUM SAND																																																														
34	133	BLUE	CLAY, SILT																																																														
17	150		CLAY, MEDIUM SAND																																																														
56	206		FINE SAND, GRAVEL, CLAY																																																														

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
			4	210	BLUE		CLAY, MEDIUM SAND	
			18	228			FINE SAND, GRAVEL	
			16	244	BLUE		CLAY	
			1	245	BLUE		CLAY, MEDIUM SAND, GRAVEL	
			8	253	BLUE		CLAY	
			11	264	BLUE		CLAY, MEDIUM SAND, GRAVEL	
			8	272			GRAVEL, MEDIUM SAND, BOULDERS	
			12	284		GREY	CLAY	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-7		BARRIE CITY	5717576				SIMCOE	BARRIE CITY
					Easting Nad83: 604414.4 Northing Nad83: 4914423 Zone: 17 Utm Reliability: margin of error : 100 m - 300 m Construction Date: 5/19/1981 Primary Water Use: Secondary Water Use: Well Depth (ft): 289 Pump Rate (gpm): Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: 0 Final Well Status: Test Hole Construction Method: Rotary (Convent.) Flowing (y/n): Elevation (ft): 725 Elevation Reliability: Read from topographic map, contour interval - 25 ft Depth to Bedrock (ft): 269 Overburden/Bedrock: Bedrock Water Type: Casing Material:			
					<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
					1	1		FILL
					20	21	GREY	CLAY, SAND, LAYERED
					20	41	GREY	CLAY, SAND, SILT
					11	52	GREY	CLAY, FINE SAND
					2	54		WOOD FRAGMENTS
					6	60	GREY	CLAY, LAYERED, SILTY
					5	65	GREY	CLAY, SANDY, SOFT
					3	68		FINE GRAVEL
					3	71		GRAVEL, SAND, BOULDERS
					13	84		CLAY, SAND, HARD
					9	93	GREY	CLAY, COARSE SAND, SILT
					3	96	GREY	CLAY, SILTY
					12	108	GREY	CLAY, SANDY, LAYERED
					18	126		CLAY, SILTY, SOFT
					12	138	GREY	CLAY, SILT

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
			9	147			SILT, FINE SAND, CLAY	
			47	194	GREY		CLAY, SILTY	
			36	230	GREY		CLAY, SANDY	
			15	245			CLAY, FINE GRAVEL, MARL	
			5	250			CLAY, GRAVEL, CEMENTED	
			5	255	GREY		CLAY	
			6	261			CLAY, GRAVEL, MARL	
			8	269			CLAY, SANDY	
			20	289			CLAY, GRAVEL, MARL	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-8		BARRIE CITY	5711799				SIMCOE	BARRIE CITY
					Easting Nad83: 604894.4 Northing Nad83: 4913989 Zone: 17 Utm Reliability: margin of error : 30 m - 100 m Construction Date: 10/28/1974 Primary Water Use: Public Secondary Water Use: Municipal Well Depth (ft): 235 Pump Rate (gpm): 800 Static Water Level (ft): 5 Flow Rate (gpm): Clear/Cloudy: CLEAR Specific Capacity: 1.4 Final Well Status: Water Supply Construction Method: Rotary (Reverse) Flowing (y/n): N Elevation (ft): 750 Elevation Reliability: Read from topographic map, contour interval - 25 ft Depth to Bedrock (ft): Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: STEEL			
					<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
					1	1	BROWN	TOPSOIL
					2	3	BROWN	CLAY
					23	26	BROWN	SAND, GRAVEL, CLAY
					20	46	GREY	CLAY, GRAVEL
					13	59	BROWN	GRAVEL, SAND, CLAY
					18	77	GREY	CLAY, GRAVEL
					5	82	GREY	GRAVEL, SAND, CLAY
					53	135	GREY	CLAY, GRAVEL
					60	195	GREY	MEDIUM SAND
					16	211	GREY	SAND, GRAVEL, CLAY
					18	229	GREY	COARSE SAND, GRAVEL
					6	235	GREY	CLAY

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality																	
WWIS-9		BARRIE CITY	5738379				SIMCOE	BARRIE CITY																	
			<p>Easting Nad83: 604205 Northing Nad83: 4914324 Zone: 17 Utm Reliability: unknown UTM Construction Date: 9/22/2003 Primary Water Use: Not Used Secondary Water Use: Well Depth (ft): 16 Pump Rate (gpm): Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Not Known Flowing (y/n): Elevation (ft): Elevation Reliability: Unknown elevation Depth to Bedrock (ft): Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: PLASTIC</p> <table> <thead> <tr> <th><u>Thickness (ft)</u></th> <th><u>Original Depth (ft)</u></th> <th><u>Material Colour</u></th> <th><u>Material</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1</td> <td></td> <td>FILL</td> </tr> <tr> <td>6</td> <td>7</td> <td>BROWN</td> <td>SILT, SANDY</td> </tr> <tr> <td>5</td> <td>12</td> <td>GREY</td> <td>SILT</td> </tr> <tr> <td>4</td> <td>16</td> <td>GREY</td> <td>SILT, SAND</td> </tr> </tbody> </table>	<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>	1	1		FILL	6	7	BROWN	SILT, SANDY	5	12	GREY	SILT	4	16	GREY	SILT, SAND		
<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>																						
1	1		FILL																						
6	7	BROWN	SILT, SANDY																						
5	12	GREY	SILT																						
4	16	GREY	SILT, SAND																						

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-10		240 BRADFORD ST BARRIE CITY	7053403				SIMCOE	BARRIE CITY

Easting Nad83:
Northing Nad83:
Zone:
Utm Reliability: margin of error : 10 - 30 m
Construction Date: 5/22/2007
Primary Water Use:
Secondary Water Use:
Well Depth (ft): 25
Pump Rate (gpm):
Static Water Level (ft):
Flow Rate (gpm):
Clear/Cloudy:
Specific Capacity:
Final Well Status: Observation Wells
Construction Method: Boring
Flowing (y/n):
Elevation (ft):
Elevation Reliability:
Depth to Bedrock (ft):
Overburden/Bedrock:
Water Type:
Casing Material: PLASTIC

<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
15	15	BROWN	SAND, HARD, DRY
10	25	BROWN	SAND, SILT, SOFT

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-11		lot 26 con 10 SIMCOE	5740565	026	10		SIMCOE	

Easting Nad83:
Northing Nad83:
Zone:
Utm Reliability: unknown UTM
Construction Date: 3/6/2006
Primary Water Use: Domestic
Secondary Water Use:
Well Depth (ft): 59.4816292
Pump Rate (gpm): 56
Static Water Level (ft): 2.74
Flow Rate (gpm):
Clear/Cloudy: CLOUDY
Specific Capacity:
Final Well Status: Water Supply
Construction Method: Cable Tool
Flowing (y/n):
Elevation (ft):
Elevation Reliability:
Depth to Bedrock (ft): 58
Overburden/Bedrock: Bedrock
Water Type:
Casing Material: STEEL

Thickness (ft)	Original Depth (ft)	Material Colour	Material
1.968504	1.968504	BROWN	FILL, STONES, SAND
18.0118116	19.9803156	BROWN	SAND, CLAY, STONES
26.0170612	45.9973768	GREY	CLAY, SAND, GRAVEL
4.0026248	50.0000016	GREY	GRAVEL, COARSE SAND, FINE SAND
7.9724412	57.9724428	WHITE	CLAY, COARSE SAND, COARSE GRAVEL
0.984252	58.9566948	WHITE	LIMESTONE, HARD
0.5249344	59.4816292	WHITE	GRAVEL, COARSE SAND, COARSE GRAVEL

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality			
WWIS-12		BARRIE CITY	7111775				SIMCOE	BARRIE CITY			
			<p>Easting Nad83: 604241 Northing Nad83: 4914398 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 9/8/2008 Primary Water Use: Secondary Water Use: Well Depth (ft): Pump Rate (gpm): Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: Final Well Status: Construction Method: Flowing (y/n): Elevation (ft): Elevation Reliability: Depth to Bedrock (ft): Overburden/Bedrock: Water Type: Casing Material:</p> <table> <thead> <tr> <th><u>Thickness</u> <u>(ft)</u></th> <th><u>Original</u> <u>Depth (ft)</u></th> <th><u>Material Colour</u></th> <th><u>Material</u></th> </tr> </thead> </table>	<u>Thickness</u> <u>(ft)</u>	<u>Original</u> <u>Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>				
<u>Thickness</u> <u>(ft)</u>	<u>Original</u> <u>Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>								

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-13		BARRETT TOWNSHIP (UNSURVEYED)	7117039				KENORA	BARRETT TOWNSHIP (UNSURVEYED)

Easting Nad83: 604237
Northing Nad83: 4914400
Zone: 17
Utm Reliability: margin of error : 10 - 30 m
Construction Date: 9/18/2008
Primary Water Use:
Secondary Water Use:
Well Depth (ft):
Pump Rate (gpm):
Static Water Level (ft):
Flow Rate (gpm):
Clear/Cloudy:
Specific Capacity:
Final Well Status:
Construction Method:
Flowing (y/n):
Elevation (ft):
Elevation Reliability:
Depth to Bedrock (ft):
Overburden/Bedrock:
Water Type:
Casing Material:

<u>Thickness</u> <u>(ft)</u>	<u>Original</u> <u>Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
---------------------------------	--------------------------------------	------------------------	-----------------

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-14		BARRIE CITY (INNISFIL) L4N 3G2	5740517				SIMCOE	BARRIE CITY (INNISFIL)

Easting Nad83: 604079
Northing Nad83: 4914148
Zone: 17
Utm Reliability: margin of error : 10 - 30 m
Construction Date: 12/1/2005
Primary Water Use: Municipal
Secondary Water Use:
Well Depth (ft): 271
Pump Rate (gpm):
Static Water Level (ft): 23.5
Flow Rate (gpm):
Clear/Cloudy:
Specific Capacity:
Final Well Status: Observation Wells
Construction Method: Rotary (Convent.)
Flowing (y/n):
Elevation (ft):
Elevation Reliability:
Depth to Bedrock (ft):
Overburden/Bedrock: Overburden
Water Type:
Casing Material: PLASTIC

<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
31	31	BROWN	FINE SAND, MEDIUM SAND
8	39	BROWN	SAND, CLAY, LAYERED
63	102	BROWN	MEDIUM SAND, MEDIUM GRAVEL, LOOSE
9	111	GREY	CLAY, HARD
52	163	BROWN	FINE SAND
108	271	BROWN	COARSE SAND, COARSE GRAVEL

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-15		BARRIE CITY (INNISFIL) L4N 3G2	5740516				SIMCOE	BARRIE CITY (INNISFIL)

Easting Nad83: 604071
Northing Nad83: 4914154
Zone: 17
Utm Reliability: margin of error : 10 - 30 m
Construction Date: 12/3/2005
Primary Water Use: Municipal
Secondary Water Use:
Well Depth (ft): 210
Pump Rate (gpm):
Static Water Level (ft): 23.5
Flow Rate (gpm):
Clear/Cloudy: CLEAR
Specific Capacity:
Final Well Status: Observation Wells
Construction Method: Rotary (Convent.)
Flowing (y/n):
Elevation (ft):
Elevation Reliability:
Depth to Bedrock (ft):
Overburden/Bedrock: Overburden
Water Type:
Casing Material:

<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
31	31	BROWN	FINE SAND, MEDIUM SAND
8	39	BROWN	SAND, CLAY, LAYERED
63	102	BROWN	MEDIUM SAND, MEDIUM GRAVEL, LOOSE
9	111	GREY	CLAY, HARD
52	163	BROWN	FINE SAND
47	210	BROWN	COARSE SAND, COARSE GRAVEL

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-16		BARRIE CITY	5717393				SIMCOE	BARRIE CITY
					Easting Nad83: 604414.4 Northing Nad83: 4914573 Zone: 17 Utm Reliability: margin of error : 100 m - 300 m Construction Date: 4/1/1981 Primary Water Use: Not Used Secondary Water Use: Well Depth (ft): 291 Pump Rate (gpm): 600 Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: CLEAR Specific Capacity: 0 Final Well Status: Test Hole Construction Method: Rotary (Convent.) Flowing (y/n): N Elevation (ft): 725 Elevation Reliability: Read from topographic map, contour interval - 25 ft Depth to Bedrock (ft): Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: STEEL			
					<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
					12	12		FILL
					4	16	BLACK	MUCK
					5	21		CLAY, SAND, SILTY
					6	27		SAND, GRAVEL, CLAY
					19	46	GREY	CLAY, SOFT
					5	51	GREY	CLAY, STONEY
					17	68	GREY	CLAY, SOFT, STONEY
					17	85	GREY	CLAY, SOFT
					6	91	GREY	CLAY, HARD
					2	93	GREY	CLAY, SOFT
					7	100	GREY	CLAY, HARD
					10	110		CLAY, SILTY, SOFT
					58	168		FINE SAND
					47	215		GRAVEL, SAND, BOULDERS
					10	225		SAND, GRAVEL

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality	
			66	291			GRAVEL, SAND, BOULDERS		
WWIS-17		BARRIE CITY	7122332				SIMCOE	BARRIE CITY	
					Easting Nad83: 604389 Northing Nad83: 4914584 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 4/4/2009 Primary Water Use: Secondary Water Use: Well Depth (ft): Pump Rate (gpm): Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: Final Well Status: Construction Method: Flowing (y/n): Elevation (ft): Elevation Reliability: Depth to Bedrock (ft): Overburden/Bedrock: Water Type: Casing Material:				

<u>Thickness</u> (ft)	<u>Original</u> <u>Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
--------------------------	--------------------------------------	------------------------	-----------------

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality						
WWIS-18		BARRIE CITY	7105808				SIMCOE	BARRIE CITY						
			<p>Easting Nad83: 604112 Northing Nad83: 4914382 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 4/22/2008 Primary Water Use: Monitoring Secondary Water Use: Well Depth (ft): 25 Pump Rate (gpm): Static Water Level (ft): Flow Rate (gpm): Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Boring Flowing (y/n): Elevation (ft): Elevation Reliability: Depth to Bedrock (ft): Overburden/Bedrock: Water Type: Casing Material: PLASTIC</p> <table> <thead> <tr> <th><u>Thickness (ft)</u></th> <th><u>Original Depth (ft)</u></th> <th><u>Material Colour</u></th> <th><u>Material</u></th> </tr> </thead> <tbody> <tr> <td>25</td> <td>25</td> <td>BROWN</td> <td>PEAT, SOFT, WATER-BEARING</td> </tr> </tbody> </table>	<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>	25	25	BROWN	PEAT, SOFT, WATER-BEARING			
<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>											
25	25	BROWN	PEAT, SOFT, WATER-BEARING											

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 9 BARRIE TOWNSHIP	2214393	009			FRONTENAC	BARRIE TOWNSHIP

Easting Nad83:
Northing Nad83:
Zone: 18
Utm Reliability: unknown UTM
Construction Date: 5/19/1993
Primary Water Use: Domestic
Secondary Water Use:
Well Depth (ft): 350
Pump Rate (gpm):
Static Water Level (ft):
Flow Rate (gpm):
Clear/Cloudy:
Specific Capacity:
Final Well Status: Abandoned-Supply
Construction Method: Rotary (Air)
Flowing (y/n): N
Elevation (ft):
Elevation Reliability: Unknown elevation
Depth to Bedrock (ft): 0
Overburden/Bedrock: Bedrock
Water Type:
Casing Material: OPEN HOLE

<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
124	124	RED	GRANITE
3	127	RED	GRANITE, SOFT
223	350	GREY	GRANITE

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 8 BARRIE TOWNSHIP	2216840	008			FRONTENAC	BARRIE TOWNSHIP

Easting Nad83:
Northing Nad83:
Zone: 18
Utm Reliability: unknown UTM
Construction Date: 6/7/2000
Primary Water Use: Domestic
Secondary Water Use:
Well Depth (ft): 80
Pump Rate (gpm): 10
Static Water Level (ft): 10
Flow Rate (gpm):
Clear/Cloudy: CLEAR
Specific Capacity:
Final Well Status: Water Supply
Construction Method: Rotary (Air)
Flowing (y/n): N
Elevation (ft):
Elevation Reliability: Unknown elevation
Depth to Bedrock (ft): 2
Overburden/Bedrock: Bedrock
Water Type: FRESH
Casing Material: GALVANIZED

<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
2	2	BROWN	SAND
52	54	GREY	GRANITE
11	65	RED	ROCK, FRACTURED
15	80	RED	GRANITE

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 26 BARRIE CITY	5721240	026			SIMCOE	BARRIE CITY

Easting Nad83:
Northing Nad83:
Zone: 17
Utm Reliability: unknown UTM
Construction Date: 11/27/1986
Primary Water Use: Domestic
Secondary Water Use:
Well Depth (ft): 200
Pump Rate (gpm): 20
Static Water Level (ft): 120
Flow Rate (gpm):
Clear/Cloudy: CLEAR
Specific Capacity:
Final Well Status: Water Supply
Construction Method: Rotary (Convent.)
Flowing (y/n): N
Elevation (ft):
Elevation Reliability: Unknown elevation
Depth to Bedrock (ft):
Overburden/Bedrock: Overburden
Water Type: FRESH
Casing Material: STEEL

<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
2	2		TOPSOIL
5	7	BROWN	SAND
17	24	GREY	CLAY
10	34		MEDIUM SAND
102	136	GREY	CLAY
24	160		FINE SAND, SILT
25	185		FINE SAND
15	200		FINE SAND, SILT

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 26 BARRIE CITY	5724047	026			SIMCOE	BARRIE CITY

Easting Nad83:
Northing Nad83:
Zone: 17
Utm Reliability: unknown UTM
Construction Date: 10/17/1988
Primary Water Use: Domestic
Secondary Water Use:
Well Depth (ft): 58
Pump Rate (gpm): 12
Static Water Level (ft): 28
Flow Rate (gpm):
Clear/Cloudy: CLEAR
Specific Capacity:
Final Well Status: Water Supply
Construction Method: Cable Tool
Flowing (y/n): N
Elevation (ft):
Elevation Reliability: Unknown elevation
Depth to Bedrock (ft):
Overburden/Bedrock: Overburden
Water Type: FRESH
Casing Material:

<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
52	52	BROWN	SAND
6	58	BROWN	MEDIUM SAND, WATER-BEARING

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 9 INDIAN RESERVE RAMA 32	5724321	009			SIMCOE	INDIAN RESERVE RAMA 32

Easting Nad83:
Northing Nad83:
Zone: 17
Utm Reliability: unknown UTM
Construction Date: 11/26/1988
Primary Water Use: Public
Secondary Water Use:
Well Depth (ft): 29
Pump Rate (gpm): 12
Static Water Level (ft): 11
Flow Rate (gpm):
Clear/Cloudy: CLOUDY
Specific Capacity:
Final Well Status: Water Supply
Construction Method: Cable Tool
Flowing (y/n): N
Elevation (ft):
Elevation Reliability: Unknown elevation
Depth to Bedrock (ft): 20
Overburden/Bedrock: Bedrock
Water Type: FRESH
Casing Material: STEEL

<u>Thickness (ft)</u>	<u>Original Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
2	2	BLACK	TOPSOIL
18	20	BROWN	HARDPAN, STONEY
9	29		LIMESTONE

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 9 BARRIE CITY	5736892	009			SIMCOE	BARRIE CITY

Easting Nad83:
Northing Nad83:
Zone: 17
Utm Reliability: unknown UTM
Construction Date: 4/4/2002
Primary Water Use:
Secondary Water Use:
Well Depth (ft):
Pump Rate (gpm):
Static Water Level (ft):
Flow Rate (gpm):
Clear/Cloudy:
Specific Capacity:
Final Well Status: Abandoned-Other
Construction Method: Not Known
Flowing (y/n):
Elevation (ft):
Elevation Reliability: Unknown elevation
Depth to Bedrock (ft):
Overburden/Bedrock:
Water Type:
Casing Material:

<u>Thickness</u> <u>(ft)</u>	<u>Original</u> <u>Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
---------------------------------	--------------------------------------	------------------------	-----------------

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 26 con SIMCOE	5740977	026			SIMCOE	

Easting Nad83:
Northing Nad83:
Zone:
Utm Reliability: unknown UTM
Construction Date: 5/6/2006
Primary Water Use:
Secondary Water Use:
Well Depth (ft):
Pump Rate (gpm):
Static Water Level (ft):
Flow Rate (gpm):
Clear/Cloudy:
Specific Capacity:
Final Well Status:
Construction Method:
Flowing (y/n):
Elevation (ft):
Elevation Reliability:
Depth to Bedrock (ft):
Overburden/Bedrock:
Water Type:
Casing Material: CONCRETE

<u>Thickness</u> <u>(ft)</u>	<u>Original</u> <u>Depth (ft)</u>	<u>Material Colour</u>	<u>Material</u>
---------------------------------	--------------------------------------	------------------------	-----------------

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.

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 Mar 2008

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.

Ontario Borehole 1875-Jul 2009

BORE

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc.

For all water well data or oil and gas well data for Ontario please refer to WWIS and OGW.

Certificates of Approval 1985-Sept 2002* (for current CofA info please check the EBR Database)

CA

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. For more current Certificate of Approval information please see the EBR database, which will include information such as 'Approval for discharge into the natural environment other than water (i.e. Air) (EPA s.9)', and Approval for sewage works (OWRA s.53(1)).

TSSA Commercial Fuel Oil Tanks 1948-2009

CFOT

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (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.

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-Oct 2009**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.

Drill Holes 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-Oct 2009**EBR**

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen 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. Data includes things like; Approval for discharge into the natural environment other than water (i.e. Air), Permit to Take Water (PTTW), Certificate of Property Use (CPU), Approval for a waste disposal site, Order for preventative measures.(EPA s. 18), Order for conformity with Act for waste disposal sites.(EPA s. 44), Order for remedial work.(EPA s. 17) and many more.

TSSA Fuel Storage Tanks Current to Dec 2008**FST**

The Technical Standards & Safety Authority (TSSA), under the *Technical Standards & Safety Act* of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

Ontario Regulation 347 Waste Generators Summary 1986-Jun 2009**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. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. 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-Sept 2008**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), 1994-2007**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-Aug 2009**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.

Pesticide Register 1988-Nov 2008**PES**

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

Private and Retail Fuel Storage Tanks 1989-1996***PRT**

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

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, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Record of Site Condition 1997-Sept 2001, Oct 2004-Oct 2009**RSC**

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use, such as residential, proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up. Information available includes Registration Number, Filing Owner, Property Address, Filing Date and Municipality.

Ontario Spills 1988-2008**SPL**

This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

Wastewater Discharger Registration Database 1990-2008**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. For more current information for Waste Disposal Sites please see the EBR database, which will include information such as 'Approval for a waste disposal site (EPA s.27)' and 'Approval for use of a former waste disposal site (EPA s.46)'.

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 30th, 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-May 2009**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 only are now also included in the database and is no longer provided as a separate report.

Federal Government Source Databases:**Diagram Identifier:****Environmental Effects Monitoring 1992-2007*****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***EIS**

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-Jun 2007**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-Sept 2009**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. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

National Defence & Canadian Forces Spills Mar 1999-Jul 2009**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-April 2007**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 1993-2007**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-March 2007**TCFT**

With the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. This inventory will also include The Pickering Lands, which refers to the 7,530 hectares (18,600 acres) of land in Pickering, Markham and Uxbridge - owned by the Government of Canada since 1972. Properties on this land has been leased by the government since 1975, falls under the Site Management Policy of Transport Canada, but administered by Public Works and Government Services Canada. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

Private Source Databases:**Anderson's Waste Disposal Sites 1860s-Present****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 authoritative. The information was collected for research purposes only.*

Automobile Wrecking & Supplies 2001-Feb 2009**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.

Chemical Register 1992, 1999-Feb 2009**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-Oct 2009**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 1998-2009**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-Sept 2009**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, 2009**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 2000-Feb 2009**RST**

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks. Information is provided on company name, location and type of business.

Scott's Manufacturing Directory 1992-Sept 2009**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.*



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO

APPENDIX E

Site Photographs



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 1 – View of Site looking south from across Lakeshore Drive.



Photo 2 – Office building looking northeast.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO



Photo 3 – View of former passenger station looking northeast.



Photo 4 – North side of former restaurant/freight storage building looking east.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 5 – View of on-Site buildings looking west. Note the metal pipe likely formerly used as a flagpole or light standard.



Photo 6 – View of the former lawn bowling property looking east from Essa Road.



**PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO**



Photo 7 – View of area to the north of the buildings looking east.



Photo 8 – Area to the east of the buildings, note debris pile.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 9 – East portion of the Site looking south from Lakeshore Drive. Currently utilized as an entrance by GO Train.



Photo 10 – View of metal pipe to the east of the buildings (unknown use).



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO



Photo 11 – Potential former well located to the east of the former passenger depot.



Photo 12 – South portion of the property looking west from south of the buildings.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 13 – View of metal pipe adjacent to the former restaurant/freight storage building.



Photo 14 – Stairwell in the office building. Note peeling paint.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 15 – Office area in the office building. Note floor tiles.



Photo 16 – Exterior of the south side of the former restaurant/freight storage building looking northwest. Note peeling paint.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 17 – View of a portion of the interior north wall of the former restaurant/freight storage building.



Photo 18 – Water damage on the ceiling in the former passenger station.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 19 – Typical copper piping throughout the buildings.



Photo 20 – Vehicle maintenance to the south (17 Gowan Street).



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO



Photo 21 –Adjacent property to the south. Vehicle maintenance (9 Gowan Street).



Photo 22 – Property to southwest on Essa Road.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 23 – Adjacent property to the west looking northwest across Essa Road.



Photo 24 – Vacant commercial property to the northwest of the Site looking southeast from Bradford Street.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE, ONTARIO



Photo 25 – Commercial properties to the northwest of the Site looking west along Tiffin Street (Shutter's Restaurant is in the foreground).



Photo 26 – Adjacent property to the northeast looking east from the north of the buildings.



**PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO**



Photo 27 – View of adjacent properties to the northwest (WPCC) looking north from Tiffin Street.



Photo 28 – Adjacent property to the east looking east from southeast corner of the Site.



PHASE I ESA, ALLANDALE STATION LANDS, BARRIE,
ONTARIO



Photo 29 – View of adjacent properties to the south (CN Railway) looking east from Essa Road.

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

Golder Associates Ltd.
121 Commerce Park Drive, Unit L
Barrie, Ontario, L4N 8X1
Canada
T: +1 (705) 722 4492