

REPORT ON

PHASE I ENVIRONMENTAL SITE ASSESSMENT 5574 ROCKDALE ROAD CITY OF OTTAWA, ONTARIO

(REPORT REVISED AS PER CITY OF OTTAWA MARCH 14, 2014)

Submitted to:

A. Rollin Development 880 Smith Road Navan, Ontario K4B 1N9

Attention: Mr. A. Rollin

DISTRIBUTION

2 copies – A.Rollin Development 2 copies – Morey Associates Ltd.

September 2013 013337



September 2013 -i- 013337

EXECUTIVE SUMMARY

This Phase I Environmental Site Assessment was carried out by Morey Associates Ltd. for A. Rollin Development. The subject site for this assessment consists of a property located at 5574 Rockdale Road, Vars, in the City of Ottawa, Ontario.

The purpose of the Phase I Environmental Site Assessment was to identify, if possible, through non-intrusive investigation, consisting of a review of current and historical information and observations of site conditions during a site reconnaissance visit, the existence of any significant, actual or potential environmental liabilities associated with the property. The Phase I Environmental Site Assessment (ESA) has been prepared in general conformity with our interpretation of the requirements of CSAZ768 for conducting environmental site assessments and in general conformity with our interpretation of Ontario Regulation 153/04 as applicable in view of the environmental setting for the site.

The Phase I ESA was based on a site reconnaissance visit carried out on August 8, 2013, together with a review of available geological, topographical and historical information for the site.

Currently, the site is vacant. Adjacent land uses consist of residential development and woodlands.

The results of this Phase I ESA indicate that the most significant environmentally related issues identified at the site are the possible presence of pesticide and herbicide residue from past agricultural use of the site. There is a potential for vehicular noise, dust and vibrations, associated with Rockdale Road which is located at the east side of the site. A furnace fuel storage tank(s) may have existed at the site in association with possible former building(s) at the site.

Based on the results of this study, no major environmental concerns were identified at the subject site.

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1.0 INTRODUCTION

The subject site for this assessment consists of a property located at 5574 Rockdale Road, in the City of Ottawa, Ontario (see Key Plan, Figure 1. A Site Plan is provided (see Figure 2) showing a 250 metre distance out beyond the site.

For the purposes of this assessment, project north lies in a direction parallel to Rockdale Road which is located at the east side of the subject site.

The subject property for this assessment consists of an area of about 1.8 hectares (4.4 acres). The site is bordered on the north by woodland and on the south, east and west by single family dwelling development. Rockdale Road borders a portion of the east side of the site. The property is currently vacant.

The primary objective of this Phase I ESA is to document the site conditions on the day of a walk-through site reconnaissance and, if possible, to identify former operations or practices that may present potential environmental risks. The study is based on current and historical information and observations of site conditions during a site reconnaissance visit conducted on August 8, 2013. The historical information consisted of a chronology of ownership of the site, historical air photograph review, information from the Ontario Ministry of the Environment and from the City of Ottawa on zoning and old landfill management, as well as a discussion with the present owner.

The scope of the Phase I ESA is sufficient to identify existing and/or potential environmental liabilities which are obvious from visual examination of surface features and from available sources of information. This level of work is a method of risk reduction, not risk elimination. No building materials, soil, water, liquid, gas, or chemical product sampling and/or testing on or in the vicinity of the subject site were carried out as part of this assessment. This assessment included only a cursory overview of the present neighbouring land uses and does not constitute a complete assessment of the adjacent facilities.

Sections 2.0 and 3.0 of this report provide details of the site and information review. Section 4.0 outlines the site reconnaissance findings. Section 5.0 outlines issues of potential environmental concerns which were identified. Sections 6.0 and 7.0 present a summary of the assessment and limitations of the report, respectively.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The subject property for this assessment consists of an area of about 1.8 hectares (4.4 acres). The site is bordered on the north by woodland and on the south, east and west by single family dwelling development. Rockdale Road borders a portion of the east side of the site. The property is currently vacant.

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The municipal address for the site is 5574 Rockdale Road, Navan, City of Ottawa, Ontario.

The legal description for the property based on a title search provided by Wentzell Titles Ltd. is Part of Lot 24, Concession 7, designated as Part 5 on Plan 4R-20412, formerly City of Cumberland, City of Ottawa, PIN 14553-0565.

2.2 Site and Area Characteristics

The attached Key Plan, Figure 1 and air photographs show the relative location of the subject site with respect to the surrounding land and the existing roadway network. Adjacent land uses consist of woodland and single family dwelling development.

The site is bordered on the north by woodland and on the south, east and west by single family dwelling development. Rockdale Road borders a portion of the east side of the site. The property is currently vacant.

The ground surface across the site is relatively flat. The site presently consists of an open grassed field. A roadside drainage ditch exists along Rockdale Road which borders a portion of the east side of the site.

Based on a review of the topographical map for the site area, it is expected that the upper groundwater flow at the site is to the west towards Shaw's creek which exists approximately 900 metres west of the subject site.

-3-

2.3 Sewage Disposal

No sewage disposal exists at the site. No storm sewers exist at the site. No sanitary sewers exist at the site.

2.4 Water Supply

No evidence of any water supply system exists at the site. The Village of Vars is serviced by a municipal water main.

2.5 Past and Present Property Uses and Activities

A chain of title for this property (see Attachment A) was provided by Wentzell Titles Ltd. Based on a review of the title search information, the property is indicated to have been owned by individuals and one company. The company is listed as 561572 Ontario Inc, which is the current owner.

3.0 HISTORICAL INFORMATION REVIEW

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

- Topographical and geological maps
- National Air Photo Library Energy Mines and Resources, Ottawa, Ontario
- Ministry of Environment (MOE), Ottawa, Ontario
- City of Ottawa Website for Zoning
- Morey Associates Ltd. Geotechnical Investigation, 5574 Rockdale Road, Vars, Ontario, dated September 2013.
- Other Reports and Records

3.1 Geological, Topographical and Hydrogeological Setting

Based on a review of the surficial geology map for the site area, it is expected that the site is underlain by deposits of sand followed by glacial till. Bedrock geology maps indicate that the

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bedrock underlying the site consists of grey sand shale limestone with some dolomite layers of the Carlsbad formation.

Based on a review of the topographical map for the site area, it is expected that the upper groundwater flow at the site is to the west towards Shaw's Creek which exists approximately 900 metres west of the subject site.

3.2 Air Photograph Review

A review of air photographs of the site for the years 1960, 1971, 1979 and 2002 was carried out as part of this Phase I ESA (see Attachment B). The 1960, 1971 and 1979 air photographs indicate the site is farmland with possibly one or two buildings at the site. The 2002 air photograph indicates the site as vacant with residential development at the west south and northeast sides.

3.3 Ministry of the Environment (MOE) Records

The MOE office in Ottawa, Ontario, was contacted to determine if the Ministry has maintained a file with respect to the subject property. Specifically, the MOE was asked to respond (in writing) with information concerning any historical or existing incidents at or in the vicinity of the subject site (see Appendix C). The response received from the MOE is provided in Appendix C and indicates no Active Orders are outstanding for the site and no Certificate of Approvals have been issued for the site.

3.4 City of Ottawa

The City of Ottawa Website was reviewed for the zoning designation of the subject site. The website indicates that the site is currently zoned V1 – Village Residential First Density Zone. This zoning permits development of detached dwellings as well as a limited range of compatible uses.

3.5 Morey Associates Ltd. Geotechnical Report

The results of test pits put down for the Morey Associates Ltd. Geotechnical report for the subject site encountered, in general, topsoil overlying sand then glacial till. A relatively thin layer of sandy

-5-

fill materials was encountered at two of the test pits. Based on visual and olfactory testing no obvious hydrocarbon was detected at the test pits.

3.6 Other Reports and Records

Fire records for the site were not obtained as there are no buildings at the site for fire records to be provided. Fire records sometimes show the type of heating system for a building which is of significance if indicated to be oil burning. We have indicated in Section 5 that a furnace fuel storage tank(s) may have existed at the site in association with possible former building(s) at the site. No previous environmental assessments are known to have been carried out for the site. The above mentioned information received from the MOE indicates no previous Certificates of Approval or Orders regarding the site.

An Environmental Risk Information Service (ERIS) report provides information for all federal, provincial and private source environmentally significant databases for a site and 250 metres out beyond a site and satisfies the Records Review Requirements Table 3-1, for Ontario Regulation 153/04. The City of Ottawa has indicated that an ERIS report is not necessary for this site in an email dated March 3, 2014.

4.0 SITE RECONNAISSANCE

On August 8, 2013 a walk-through site reconnaissance was conducted at the subject property by a member of Morey Associates Ltd. engineering staff.

The site is located within an area of single family dwelling development. The site is bordered on the north by woodland and on the south, east and west by single family dwelling development. Rockdale Road borders a portion of the east side of the site. The property is currently vacant.

No service stations or existing or previous landfills exist within 250 metres of the site.

The site was observed to consist of open space covered with grass and a few trees. A gravel laneway exists on the property extending from Rockdale Road westward into the site. The ground surface across the site is relatively flat with a lower area in about the centre of the site and a higher

area in the north portion of the site. At the time of the site visit no surface staining or distressed vegetation was observed. No drainage ditches or watercourse exist at the site.

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Some wood and plastic debris was observed within the lower central portion of the site.

The existing neighbouring single family dwellings are serviced by private wells and septic systems.

4.1 Storage

No storage of hazardous materials was observed. Based on the indicated past usage of the property, past storage of hazardous materials is considered unlikely.

4.2 Storage Tanks

No underground or above ground storage tanks were observed at the site. In view that a building(s) probably existed at the site it is possible that a furnace oil storage tank may have existed at the site.

4.3 Polychlorinated Biphenyls (PCB)

No evidence of any PCB's was observed. Based on the indicated past usage of the property, the presence of PCB's is considered unlikely.

4.4 Suspect Asbestos Containing Materials (ACM)

No ACM's were observed. Based on the indicated past usage of the property, the presence of ACM's materials is considered unlikely.

4.5 Solid Waste Disposal Practices

No disposal of solid waste was observed at the site. The Village of Vars is serviced by municipal waste pick up and disposal.

4.6 Adjacent Properties

The site is located within an area of single family dwelling development not typically associated with significant environmental concern. An estimated eighty or more dwellings exist within a 250 metre radius of the sit.

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4.7 Noise, Dust and Vibrations

There is potential for some vehicular noise, dust and vibrations to exist at the site from the use of Rockdale Road, a major arterial roadway located at the east side of the subject site.

4.8 General Storage and Debris (Housekeeping)

At the time of the site reconnaissance, housekeeping at the site is considered to be good.

4.9 Ozone-Depleting Substances (ODS)

No evidence of any ozone-depleting substances were observed at the site. Based on the indicated past usage of the property, the presence of ozone-depleting substances is considered unlikely.

4.10 Lead

No evidence of any lead was observed at the site. Based on the indicated past usage of the property, the presence of lead substances is considered unlikely.

4.11 Urea Formaldehyde Foam Insulation (UFFI)

No evidence of any UFFI was observed at the site. Based on the indicated past usage of the property, the presence of UFFI is considered unlikely.

5.0 POTENTIAL ENVIRONMENTAL ISSUES

In summary, based on the information gathered during this Phase I ESA, the following issues of potential environmental concern have been identified.

- Possible presence of pesticide and herbicide residue from past agricultural use of the site.
- There is potential for some vehicular noise, dust and vibrations to exist at the site from the use of Rockdale Road, a major arterial roadway located at the east side of the subject site.
- A furnace fuel storage tank(s) may have existed at the site in association with possible former building(s) at the site.

6.0 CONCLUSIONS

The results of this Phase I ESA suggest that the potential risks associated with this site are limited to those outlined in Section 5 above. Based on the results of this Phase I ESA, it is considered that no further investigation is warranted at this time.

7.0 LIMITATIONS AND USE OF REPORT

The results of this Phase I ESA should in no way be construed as a warranty that the subject property is free from any and all contaminants other than those noted in this report, nor that all compliance issues have been addressed.

This report was prepared for the exclusive use of A. Rollin Development and is based on data and information collected during the Phase I ESA of the property conducted by Morey Associates Ltd. This report may not be relied upon by any other person or entity without the express written consent of A. Rollin Devlopemnt and Morey Associates Ltd. In evaluating this site, Morey Associates Ltd. has relied in good faith on information provided by others. The assessment of environmental conditions and possible site hazards presented have been made using available technical data collected and provided by others. We accept no responsibility for any deficiencies, or inaccuracies in this report as a result of omission, misinterpretations, or fraudulent acts of others.

C.R. Morey, M.Sc. (Eng.), P. Eng.

The conclusions provided herein represent the best judgement of Morey Associates Ltd. based on current environmental standards. Due to the nature of the investigation and the limited data available, we cannot warrant against undiscovered environmental liabilities. If new information is discovered during future work, including excavations, borings or other studies, Morey Associates Ltd. should be requested to re-evaluate the conclusions presented in this report and provide

We trust that this report is sufficient for your present requirements. If you have any questions concerning this report, please do not hesitate to contact our office.

Yours truly,

Morey Associates Ltd.

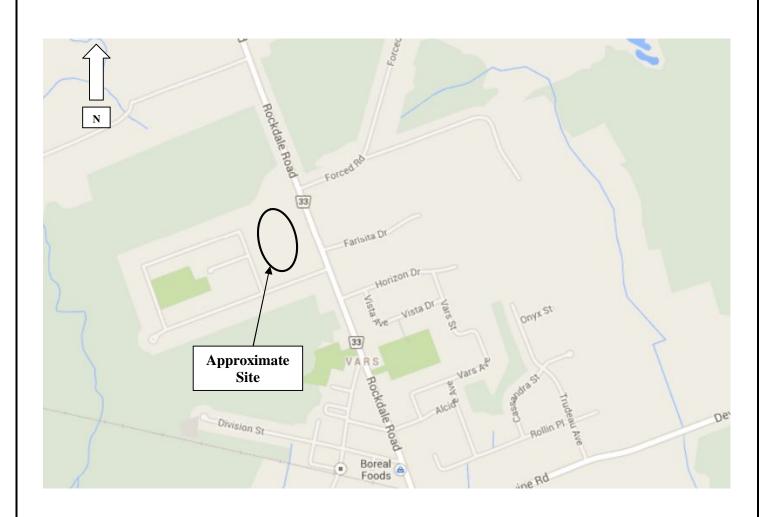
amendments as required.

D.G. Morey B.A.Sc. (Civil Eng.)

D. Gopfant

File 013337

KEY PLAN FIGURE 1



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SITE PLAN FIGURE 2





ATTACHMENT A

TITLE SEARCH DOCUMENTATION

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ATTACHMENT B

AIR PHOTOGRAPHS



1960





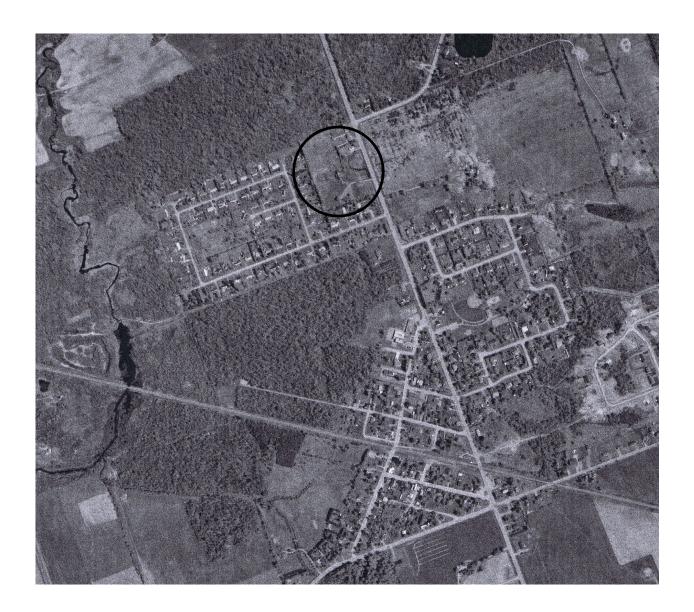
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1979





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ONTARIO MINISTRY OF THE ENVIRONMENT CORRESPONDENCE

2280 Abbott Road, PO Box 184 Kemptville, Ontario, K0G 1J0 T:613.215.0605 • F:613.258.0605

September 18, 2013 013337

Ontario Ministry of the Environment 2430 Don Reid Drive Ottawa, Ontario K1H 1E1

Attention: Abatement Officer

RE: 5574 ROCKDALE ROAD VILLAGE OF VARS

CITY OF OTTAWA, ONTARIO

Dear Sirs/Madam:

We have been retained by A. Rollin Development to carry out a Phase I Environmental Site Assessment for the above noted site. Accordingly, we would be pleased if you would provide us with information concerning any historical or existing incidents at or in the vicinity of the above site on file with the Ontario Ministry of the Environment.

Yours truly, Morey Associates Ltd.,

D. G. Morey, B.A.Sc. (Civil Eng.) Director

File: 013337

Ministry of the Environment

Ottawa District Office

2430 Don Reid Drive Ottawa ON K1H 1E1

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

Ministère de l'Environnement

Bureau du district d'Ottawa

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

(613) 521-3450 Téléc: (613) 521-5437



OTT File No: 10204

INDEX REVIEW REPORT COMMERCIAL/INDUSTRIAL/AGRICULTURAL

Attention:

D. G. Morey

Your File:

013337

Morey Associates Ltd.

Date Received: September 20, 2013

PROPERTY OWNER AND LOCATION

Present Owner:

Past Owners:

Location:

Municipality:

Vars

Address:

5574 Rockdale Road

Lot

Concession

INDEX OF NAMES FOR ORDERS

We have searched the Ottawa District Index Record of Active Orders under the Environmental Protection Act (EPA), Ontario Water Resources Act (OWRA) and the Pesticides Act (PA) issued to: and the following information has been found:

 \boxtimes

Check here if no Active Orders are outstanding

Date of Search: November 7, 2013

INDEX OF NAMES FOR APPROVALS

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

Type Number Issued To Issue Date

Section 9 EPA (Air)

Section 39 EPA (Waste Management)

Section 52 OWRA (Water)

Section 53 OWRA (Municipal/Private/ Industrial Sewage)

Other

Date of Search: October 18, 2013

Please note that all Environmental Compliance Approvals (ECAs) can be viewed on the ministry's web page at http://www.accessenvironment.ene.gov.on.ca/AEWeb/ae/GoSearch.action?search=basic&lang=en

Please Note:

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

Signature:

Contact Name:

Johanne Veilleux

Title:

Administrative Assistant

Address:

Ministry of the Environment

2430 Don Reid Drive Ottawa, ON K1H 1E1

Phone:

(613) 521-3450 Ext 221

Date:

November 7, 2013

ATTACHMENT D

QUALIFICATIONS OF ASSESSOR



C.R. MOREY, P.Eng

LANGUAGE: English

EDUCATION: B.Sc., Geological Engineering, Queen's University, Kingston,

Ontario, 1973.

M.Sc., (Eng.), Civil Engineering, Queen's University, Kingston,

Ontario, 1977.

Graduate courses in Civil and Geotechnical Engineering, Windsor

and Carleton Universities, 1980 and 1982.

PROFESSIONAL

AFFILIATIONS: Registered Professional Engineer Ontario

Designated Consulting Engineer

EXPERIENCE:

2012 – PRESENT Morey Associates (Kemptville, Ontario)

Senior Engineer

Responsible for supervision of all technical aspects of projects

carried out by the firm.

2010 - 2012 Levac Robichaud Leclerc Associates Ltd. (Rockland &

Kemptville, Ontario)

Director of Geotechnical Department

Responsible for senior level supervision of geotechnical investigations, hydrogeological impact assessments and environmental site assessments and providing QA/QC for the

related project letters, memos, reports and drawings.

2005 – 2010 Kollaard Associates Inc. (Kemptville, Ontario)

Principal

Responsible for mentoring of professional staff, project letter and report reviews, senior level project supervision, business

development, and assisting in office administration.

1994 – 2005 Morey Houle Chevrier Engineering Ltd. (Kemptville,

Ontario)
President

Responsible for the managerial and technical aspects of the operation of the firm carrying out geotechnical and hydrogeological investigations, environmental site assessments, and construction inspection and testing. Geotechnical and hydrogeological expert witness for Ontario Municipal Board hearings and Ontario Court Provincial Division trials.



1980 - 1994 Golder Associates Ltd. (Windsor & Ottawa, Ontario)
Geotechnical Engineer then Associate

Responsible for subsurface investigations and design of roadways, retaining walls, airport runways, residential and commercial developments, buried services, septic systems, wharves, building foundations, dams, municipal drains, stormwater management facilities, building flood proofing.

PUBLICATIONS: Co-author of two papers regarding retrogressive landslides in sensitive marine deposited silty clay of the Ottawa Valley area,

published by the Geological Survey of Canada.