Geotechnical Engineering

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Materials Testing

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Archaeological Studies

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Phase I Environmental Site Assessment

24 Chesapeake Crescent and 164 Maravista Drive Ottawa, Ontario

Prepared For

Claridge Homes

Paterson Group Inc.

Consulting Engineers 154 Colonnade Road South Ottawa (Nepean), Ontario Canada K2E 7J5

Tel: (613) 226-7381 Fax: (613) 226-6344 www.patersongroup.ca July 16, 2018 Report: PE4346-1

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EXECUTIVE SUMMARY

Assessment

A Phase I – Environmental Site Assessment was carried out for the properties addressed 24 Chesapeake Crescent and 164 Maravista Drive, in the City of Ottawa, Ontario. The aforementioned properties comprise the Phase I Property. The purpose of this environmental assessment was to research the past and current use of the subject site and adjacent properties and identify any environmental concerns with the potential to impact the subject property.

Based on a review of historical sources, the Phase I Property was used for agricultural purposes from as early as the 1940's through 2005/2006. No historical potentially contaminating activities (PCAs) were identified on the Phase I Property. Surrounding properties have historically been primarily used for agricultural purposes with some residential dwellings or farmsteads, until residential development began circa 2007. No historical off-site PCAs were identified.

Following the historical review, a site visit was conducted. The Phase I Property remains vacant, undeveloped land, currently used for storage for construction materials and supplies. Three (3) trailers (office and storage) are present on the Phase I Property, as well as a fenced area dedicated to the storage of propane tanks, building materials (brick pavers, scaffolding, plywood) and piles of concrete, granular material, topsoil and native soils consisting of a mixture of sand, silt and clay. The fill material reportedly originated from a local residential development owned by Claridge. No deleterious materials were noted in the fill; the fill material is not considered to pose a concern to the Phase I Property. No PCAs were identified on the Phase I Property at the time of the site visit.

The surrounding land use consisted primarily of residential with agricultural land to the southwest and a commercial development to the northwest. An offsite PCA, a retail fuel outlet, was identified within the commercial development. The retail fuel outlet is situated approximately 195m northwest of the Phase I Property. Based on the separation distance in combination with its recent construction, the retail fuel outlet is not considered to represent an APEC on the Phase I Property.

Conclusion

Based on the findings of the Phase I-ESA, it is our opinion that **a Phase II-ESA is not** required for the Phase I Property.

1.0 INTRODUCTION

At the request of Claridge Homes, Paterson Group (Paterson) conducted a Phase I - Environmental Site Assessment (Phase I ESA) for the properties addressed 24 Chesapeake Crescent and 164 Maravista Drive, in the City of Ottawa, Ontario. The purpose of this Phase I ESA was to research the past and current use of the site and study area and to identify any environmental concerns with the potential to have impacted the subject property.

Paterson was engaged to conduct this Phase I ESA by Mr. Vincent Denomme of Claridge Homes. Mr. Denomme can be reached by telephone at (613) 233-6030.

This report has been prepared specifically and solely for the above noted project which is described herein. It contains all of our findings and results of the environmental conditions at this site.

This Phase I ESA report has been prepared in general accordance with the requirements of Ontario Regulation 153/04 as amended by O.Reg. 269/11 (Environmental Protection Act), and also complies with the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

2.0 PHASE I PROPERTY INFORMATION

Address:	24 Chesapeake Crescent and 164 Maravista Drive, Ottawa, Ontario.	
Legal Description:	Plan 4M1335, Block 104 and 105, Nepean Township, in the City of Ottawa, Ontario.	
Property Identification		
Number (PIN):	0446-70437 and 0446-70436	
Location:	The Phase I Property is situated at the southeast corner of the intersection of Strandherd Drive and Maravista Drive.	
Latitude and Longitude:	45° 16' 8" N, 75° 46' 45" W	
Site Description:		
Configuration:	Rectangular (approximate)	
Site Area:	5,363 m ² (approximate)	
Zoning:	R5A H – Residential 5 th Density Zone	
Current Use:	The Phase I Property is undeveloped land currently used as a temporary storage area by Claridge Homes.	
Services:	The Phase I Property is situated in a municipally serviced area.	

3.0 SCOPE OF INVESTIGATION

The scope of work for this Phase I – Environmental Site Assessment was as follows:

- Determine the historical activities on the subject site and study area by conducting a review of readily available records, reports, photographs, plans, mapping, databases and regulatory agencies;
- Investigate the existing conditions present at the subject site and study area by conducting site reconnaissance;
- □ Conduct interviews with persons knowledgeable of current and historic operations on the subject property, and if warranted, neighbouring properties;
- Present the results of our findings in a comprehensive report in general accordance with the requirements of Ontario Regulation 269/11 amending O.Reg. 153/04 made under the Environmental Protection Act and in compliance with the requirements of CSA Z768-01;
- **D** Provide a preliminary environmental site evaluation based on our findings;
- Provide preliminary remediation recommendations and further investigative work if contamination is suspected or encountered.

4.0 **RECORDS REVIEW**

4.1 General

Phase I ESA Study Area Determination

A radius of approximately 250 m was determined to be appropriate as a Phase I ESA study area for this assignment. Properties outside the 250 m radius are not considered to have impacted the subject land, based on their significant distance from the site.

First Developed Use Determination

Based on a review of historically available information, the Phase I Property has never been developed.

National Archives

Fire insurance plans and city directories are not available for the Phase I Study Area.

Plan of Subdivision

A Plan of Subdivision prepared by Annis, O'Sullivan, Vollebekk Ltd. and dated June 13, 2007 was reviewed as part of this assessment. The plan depicts the Phase I Property in its current configuration.

4.2 Environmental Source Information

Environment Canada

A search of the National Pollutant Release Inventory (NPRI) was conducted electronically on June 15, 2018. No properties within the Phase I Study Area were listed in the NPRI database.

PCB Inventory

A search of national PCB waste storage sites was conducted. No PCB waste storage sites were identified on the Phase I Property or within the Phase I Study Area.

Ontario Ministry of Environment and Climate Change (MOECC) Instruments

A request was submitted to the MOECC Freedom of Information office for information with respect to certificates of approval, permits to take water, certificates of property use or any other similar MOECC issued instruments for the site. At the time of issuing this report, a response from the MOECC had not been received. Any pertinent information will be forwarded to the client upon receipt. A copy of the request form is provided in Appendix 2.

MOECC Coal Gasification Plant Inventory

The Ontario Ministry of Environment and Climate Change document titled "Municipal Coal Gasification Plant Site Inventory, 1991" was reviewed to reference the locations of former plants with respect to the site. No coal gasification plants were identified in the Phase I Study Area.

MOECC Incident Reports

A request was submitted to the MOECC Freedom of Information office for information with respect to records concerning environmental incidents, orders, offences, spills, discharges of contaminants or inspections maintained by the MOECC for the site or adjacent properties. At the time of issuing this report, a response from the MOECC had not been received. Any pertinent information will be forwarded to the client upon receipt. A copy of the request form is provided in Appendix 2.

MOECC Waste Management Records

A request was submitted to the MOECC Freedom of Information office for information with respect to waste management records. At the time of issuing this report, a response from the MOECC had not been received. Any pertinent information will be forwarded to the client upon receipt. A copy of the request form is provided in Appendix 2.

MOECC Submission

A request was submitted to the MOECC Freedom of Information office for information with respect to reports related to environmental conditions for the property. At the time of issuing this report, a response from the MOECC had not been received. Any pertinent information will be forwarded to the client upon receipt. A copy of the request form is provided in Appendix 2.

MOECC Brownfields Environmental Site Registry

A search of the MOECC Brownfields Environmental Site Registry (ESR) was conducted as part of this assessment for the site, neighbouring properties and the general area of the site. No Records of Site Condition (RSCs) were filed for the Phase I Property. There are no RSCs listed for properties within the Phase I Study Area.

MOECC Waste Disposal Site Inventory

The Ontario Ministry of Environment and Climate Change document titled "Waste Disposal Site Inventory in Ontario, 1991" was reviewed as part of the historical research. This document includes all recorded active and closed waste disposal sites, industrial manufactured gas plants and coal tar distillation plants in the Province of Ontario. No records were listed for the Phase I Property or for properties within the Phase I Study Area.

Areas of Natural Significance

A search for areas of natural significance and features within the Phase I study area was conducted on the web site of the Ontario Ministry of Natural Resources and Forestry (MNRF) on June 22, 2018. No areas of natural significance were identified on the Phase I Property or within the Phase I Study Area.

Technical Standards and Safety Authority (TSSA)

The TSSA, Fuels Safety Branch in Toronto was contacted electronically on June 22, 2018 to inquire about current and former underground storage tanks, spills and incidents for the site and neighbouring properties. Based on the TSSA response, no records were identified for the Phase I Property or the immediately adjacent lands. A copy of the TSSA correspondence is provided in Appendix 2.

City of Ottawa Landfill Document

The document entitled "Old Landfill Management Strategy, Phase I – Identification of Sites, City of Ottawa", was reviewed. No landfill sites were identified within the Phase I Study Area.

4.3 Physical Setting Sources

Aerial Photographs

Historical air photos from the National Air Photo Library were reviewed in approximate ten (10) year intervals. The review period dates to the first available air photos for the sites. Based on the review, the following observations have been made:

- 1945 The Phase I Property is vacant, agricultural land. Adjacent and neighbouring properties are also occupied by agricultural lands, with an apparent residential dwelling or farmstead to the southeast of the Phase I Property. Cedarview Road is present further to the east of the Phase I Property.
- 1956 The Phase I Property and neighbouring properties within the Phase I Study Area appear to remain unchanged from the previous photograph.
- 1963 No significant changes appear to have been made to the Phase I Property or to the adjacent and neighbouring lands.
- 1976 The Phase I Property remains unchanged from the previous photograph. The residential dwelling or farmstead noted in the 1945 picture is no longer present to the southeast of the Phase I Property, while an apparent barn has been constructed further to the east, along the west side of Cedarview Road. No other changes appear to have been made to the surrounding lands.
- 1991 No significant changes appear to have been made to the Phase I Property or to the adjacent and neighbouring properties. An apparent farmstead is present further to the northeast of the Phase I Property.
- 2002 The Phase I Property remains unchanged. Strandherd Drive is present to the west of the Phase I Property. Otherwise adjacent and neighbouring properties remain unchanged from the previous photograph.

2017 The Phase I Property is no longer used for agricultural purposes. While the land remains undeveloped, apparent storage trailers occupy the southwestern portion of the site. Apparent fill material is present on the northern and eastern portions of the site. This material is considered to be associated with the surrounding development that has occurred since the previous photograph in combination with gravel placed on site for temporary parking purposes.

> Maravista Drive, Chesapeake Cresecent and Cobble Hill Drive are now present. The properties to the north, east and south are now occupied by a residential subdivision. The property to the west, across Strandherd Drive, remains an agricultural field, while the property to the northwest has been developed for commercial purposes.

Laser copies of selected aerial photographs reviewed are included in Appendix 1.

Topographic Maps

Topographic information was obtained from Natural Resources Canada – The Atlas of Canada website. The topographic maps indicate that the elevation of the subject site is approximately 98 m above sea level. The regional topography slopes downward to the south and east towards the Jock River, approximately 2km south of the Phase I Property. An illustration of the referenced topographic map is presented on Figure 2 – Topographic Map, appended to this report.

Physiographic Maps

A Physiographic Map was reviewed from the Natural Resources Canada – The Atlas of Canada website, as a part of this assessment. According to the publication and mapping, the site is situated within the St. Lawrence Lowlands, Till Plains (Drumlinized) physiographic region. According to the mapping description provided: "The lowlands are plain-like areas that were all affected by the Pleistocene glaciations and are therefore covered by surficial deposits and other features associated with the ice sheets." The subject site is in the Central St. Lawrence Lowland, "where the land is rarely more than 150 m above sea level, except for the Monteregion Hills, which consist of intrusive igneous rocks."

Geological Maps

The Geological Survey of Canada website on the Urban Geology of the National Capital Area was consulted as part of this assessment. Based on this information, the bedrock in area of the Phase I Property consists of sandstone and dolomite of the March Formation. Overburden beneath the site reportedly consists of marine deposits of clay and silt or plain till, with a drift thickness of up to approximately 10m below grade.

Water Well Records

A search of the MOECCs web site for all drilled well records within 250 m of the subject site was conducted on June 22, 2018. Based on the search results, no wells are present on the Phase I Property or within the Phase I Study Area.

Water Bodies and Areas of Natural Significance

No areas of natural significances (ANSIs) or bodies of water were present on the Phase I Property or are known to exist within the Phase I Study Area. The Jock River is the closest water body at approximately 2 km to the south of the Phase I Property.

5.0 INTERVIEWS

Mr. Vincent Denomme with Claridge Homes, the current property owner, was interviewed via email. According to Mr.Denomme, limited amounts of broken concrete and excess fill material (consisting of excavated native soil) from the Bridlewood Trails residential development in Kanata, is stored on the Phase I Property. Mr. Denomme is unware of any potential environmental concerns on the Phase I Property or within the Phase I Study Area.

6.0 SITE RECONNAISSANCE

6.1 General Requirements

The site assessment was conducted on June 20, 2018. The weather condition was sunny, with a temperature of approximately 29°C. Personnel from the Environmental Department of Paterson Group conducted the site visit. In addition to the Phase I Property, the uses of neighbouring properties within the Phase I Study Area were also assessed at the time of the site visit.

6.2 Specific Observations at Phase I Property

Buildings and Structures

No buildings or permanent structures exist on the Phase I Property. A trailer used as a construction site office and two (2) trailers used for the storage of building materials and supplies are present on the southwestern portion of the site. Adjacent to the trailers is a fenced-in storage area containing propane tanks and construction materials. The Phase I Property is depicted on Drawing PE4346-1 – Site Plan, in the Figures section of this report.

Underground Utilities

The Phase I Property is situated in a municipally serviced area, although the Phase I Property itself is not currently serviced. It is our understanding that municipal services will be provided to the site at the time of development.

Site Features

As noted above, the Phase I Property is not developed with any buildings or permanent structures. The ground surface in the vicinity of the site office and storage trailers, is covered with gravel. The remainder of the site is partially covered with vegetation, while vegetation appears to have been stripped over a large portion of the site. Several stockpiles of fill material, broken concrete, gravel and topsoil are present on the southeastern portion of the Phase I Property.

Drainage on site consists primarily surficial infiltration with some sheet drainage to catch basins on surrounding roadways. No standing water or evidence of surficial staining was observed on the exterior of the Phase I Property at the time of the site visit.

Propane tanks were present on the Phase I Property at the time of the site visit. The tanks were properly stored and do not pose a concern to the subject land. No aboveground storage tanks (containing petroleum hydrocarbons) were noted on the Phase I Property. No signs of underground fuel storage tanks were observed at the time of the site visit.

No underground structures were noted on the Phase I Property. No wells or private sewage systems were observed onsite, nor are any expected to be present, as the site is located in a municipally-serviced area.

A waste storage bin was present at the time of the site visit, however waste is not currently being generated on the Phase I Property. As noted previously, construction materials including concrete blocks, scaffolding and plywood were stored on the Phase I Property, however these items are not considered to be waste materials. Broken concrete from a residential subdivision was also stored on the subject property. No hazardous waste materials or unidentified substances were present on the Phase I Property at the time of the site visit.

No evidence of recent excavation was observed on the Phase I Property. No evidence of current or former railway or spur lines on the subject land was observed at the time of the site visit. The above-noted site features are shown on Drawing PE4346-1 - Site Plan.

Fill Material

As noted above, stockpiles of broken concrete, gravel and topsoil are present on the southeastern portion of the Phase I Property, as well as soil stockpiles consisting of a mixture of sand silt and clay. According to the property owner representative, the fill material originated from a property in Kanata that was developed for residential purposes by Claridge. No deleterious materials were noted in the fill material. The fill material is not considered to pose a concern to the Phase I Property.

Phase I Study Area

An inspection of the neighbouring properties was conducted from publicly accessible roadways at the time of the site inspection. Land use adjacent to the subject site was as follows:

- □ North Maravista Drive followed by residential dwellings;
- Northwest Strandherd Drive followed by a commercial development (Costco store and retail fuel outlet, as well as a variety of other retail establishments and restaurants);
- South Chesapeake Crescent followed by residential dwellings;
- □ East Cobble Hill Drive following by residential dwellings; and
- □ West Strandherd Drive followed by agricultural land.

The current use of the immediately adjacent properties is not considered to pose an environmental concern to the Phase I Property. The aforementioned retail fuel outlet is situated approximately 195m northwest of the Phase I Property and is not considered to pose a concern to the subject land based on the separation distance. Land use within the Phase I Study Area is shown on Drawing PE4346-2 – Surrounding Land Use Plan in the Figures section of this report, following the text.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 Land Use History

The Phase I Property has always been vacant, undeveloped land, used for agricultural purposes from as early as the 1940's through 2005/2006. The Phase I Property was purchased by Claridge Homes circa 2007, in conjunction with the surrounding lands to the north, south and east, for development as a residential subdivision.

Potentially Contaminating Activities (PCAs)

No potentially contaminating activities (PCAs) were identified on the Phase I Property. Fill material identified on site consists of native soils excavated from a local property developed by Claridge, gravel or concrete and is not considered to pose a concern to the property.

One (1) off-site PCA was identified within the Phase I Study Area: a retail fuel outlet situated approximately 195m northwest of the Phase I Property, at 4225 Strandherd Drive. Based on the separation distance and the recent construction of the retail fuel outlet, this PCA is not considered to represent an Area of Potential Environmental Concern on the Phase I Property. Property use within the Phase I study area is presented on Drawing PE4346-2 – Surrounding Land Use Plan.

Areas of Potential Environmental Concern (APECs)

No Areas of Potential Environmental Concern (APECs) were identified on the Phase I Property.

Contaminants of Potential Concern (CPCs)

No contaminants of concern (CPCs) were identified on the Phase I Property.

7.2 Conceptual Site Model

Existing Buildings and Structures

A trailer used as a construction site office and two (2) trailers used for the storage of building materials and supplies, are present on the southwestern portion of the site

Geological and Hydrogeological Setting

According to mapping provided on the Geological Survey of Canada website, the Phase I Property is in an area of sandstone and dolomite bedrock with an overburden of plain till in the central, northern and eastern sections of the property, and offshore marine deposits in the southwest of the site. Drift thickness is 5 to 10 m. Groundwater flow is expected to flow in a southerly direction, toward the Jock River.

Fill Material

Stockpiles of broken concrete, gravel and topsoil are present on the southeastern portion of the Phase I Property, as well as soil stockpiles consisting of a mixture of sand silt and clay. According to the property owner representative, the fill material originated from a property in Kanata that was developed for residential purposes by Claridge. No deleterious materials were noted in the fill material. The fill material is not considered to pose a concern to the Phase I Property.

Water Bodies

There are no bodies of water on the Phase I Property. The closest water body is the Jock River, located approximately 2 km to the south of the Phase I Property.

Areas of Natural Significance

No areas of natural significance were identified on the Phase I Property or on other properties within the Phase I Study Area.

Water Wells

A search of the MOECC's web site for all drilled well records within 250 m of the subject site was conducted on June 22, 2018. Based on the search results, there are no well records for the Phase I Property or for other properties within the Phase I Study Area.

Neighbouring Land Use

Neighbouring land use in the Phase I Study Area is primarily residential, with agricultural land to the west/southwest and a commercial development to the northwest.

Potentially Contaminating Activities and Areas of Potential Environmental Concern

As per Section 7.1 of this report, no PCAs were identified on the Phase I Property. An off-site PCA, a retail fuel outlet situated approximately 195m northwest of the Phase I Property, is not considered to represent an APEC on the subject land. No other PCAs were identified within the Phase I Study Area.

Contaminants of Potential Concern

No CPCs were identified on the Phase I Property.

Assessment of Uncertainty and/or Absence of Information

The information available for review as part of the preparation of this Phase I ESA is considered to be sufficient to conclude that there are no on on-site PCAs resulting in APECs on the Phase I Property. There are also no off-site PCAs considered to have resulted in APECs on the Phase I Property. The absence of PCAs and APECs was confirmed by a variety of independent sources, and as such, the conclusions of this report are not affected by uncertainty which may be present with respect to the individual sources.

8.0 CONCLUSION

Assessment

A Phase I – Environmental Site Assessment was carried out for the properties addressed 24 Chesapeake Crescent and 164 Maravista Drive, in the City of Ottawa, Ontario. The aforementioned properties comprise the Phase I Property. The purpose of this environmental assessment was to research the past and current use of the subject site and adjacent properties and identify any environmental concerns with the potential to impact the subject property.

Based on a review of historical sources, the Phase I Property was used for agricultural purposes from as early as the 1940's through 2005/2006. No historical potentially contaminating activities (PCAs) were identified on the Phase I Property. Surrounding properties have historically been primarily used for agricultural purposes with some residential dwellings or farmsteads, until residential development began circa 2007. No historical off-site PCAs were identified.

Following the historical review, a site visit was conducted. The Phase I Property remains vacant, undeveloped land, currently used for storage for construction materials and supplies. Three (3) trailers (office and storage) are present on the Phase I Property, as well as a fenced area dedicated to the storage of propane tanks, building materials (brick pavers, scaffolding, plywood) and piles of concrete, granular material, topsoil and native soils consisting of a mixture of sand, silt and clay. The fill material reportedly originated from a local residential development owned by Claridge. No deleterious materials were noted in the fill; the fill material is not considered to pose a concern to the Phase I Property. No PCAs were identified on the Phase I Property at the time of the site visit.

The surrounding land use consisted primarily of residential with agricultural land to the southwest and a commercial development to the northwest. An offsite PCA, a retail fuel outlet, was identified within the commercial development. The retail fuel outlet is situated approximately 195m northwest of the Phase I Property. Based on the separation distance in combination with its recent construction, the retail fuel outlet is not considered to represent an APEC on the Phase I Property.

Conclusion

Based on the findings of the Phase I-ESA, it is our opinion that **a Phase II-ESA is not required for the Phase I Property.**

9.0 STATEMENT OF LIMITATIONS

This Phase I - Environmental Site Assessment report has been prepared in general accordance with O.Reg. 153/04 as amended by O.Reg. 269/11, and meets the requirements of CSA Z768-01. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program. The findings of the Phase I ESA are based on a review of readily available geological, historical and regulatory information and a cursory review made at the time of the field assessment. The historical research relies on information supplied by others, such as, local, provincial and federal agencies and was limited within the scope-of-work, time and budget of the project herein.

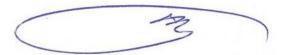
Should any conditions be encountered at the subject site and/or historical information that differ from our findings, we request that we be notified immediately in order to allow for a reassessment.

This report was prepared for the sole use of Claridge Homes. Permission and notification from Claridge Homes and Paterson Group will be required to release this report to any other party.

Paterson Group Inc.

augn Munch

Karyn Munch, P.Eng., QPESA



Mark S. D'Arcy, P.Eng., QPESA

Report Distribution:

- Claridge Homes
- Paterson Group Inc.



10.0 REFERENCES

Federal Records

Air photos at the Energy Mines and Resources Air Photo Library. National Archives. Maps and photographs (Geological Survey of Canada surficial and subsurface). Natural Resources Canada – The Atlas of Canada. Environment Canada, National Pollutant Release Inventory. PCB Waste Storage Site Inventory.

Provincial Records

MOECC Freedom of Information and Privacy Office. MOECC Municipal Coal Gasification Plant Site Inventory, 1991. MOECC document titled "Waste Disposal Site Inventory in Ontario". MOECC Brownfields Environmental Site Registry. Office of Technical Standards and Safety Authority, Fuels Safety Branch. MNRF Areas of Natural Significance. MOECC Water Well Inventory. Chapman, L.J., and Putnam, D.F., 1984: 'The Physiography of Southern Ontario, Third Edition', Ontario Geological Survey Special Volume 2.

Municipal Records

City of Ottawa Document "Old Landfill Management Strategy, Phase I -Identification of Sites", prepared by Golder Associates, 2004. The City of Ottawa Historical Land Use Inventory. Intera Technologies Limited Report "Mapping and Assessment of Former Industrial Sites, City of Ottawa", 1988. The City of Ottawa eMap website.

Local Information Sources

Previous Engineering Reports. Plan of Subdivision, Annis, O'Sullivan, Vollebeek Ltd. (June 13, 2007)

Public Information Sources

Google Earth. Google Maps/Street View.

FIGURES

FIGURE 1 – KEY PLAN

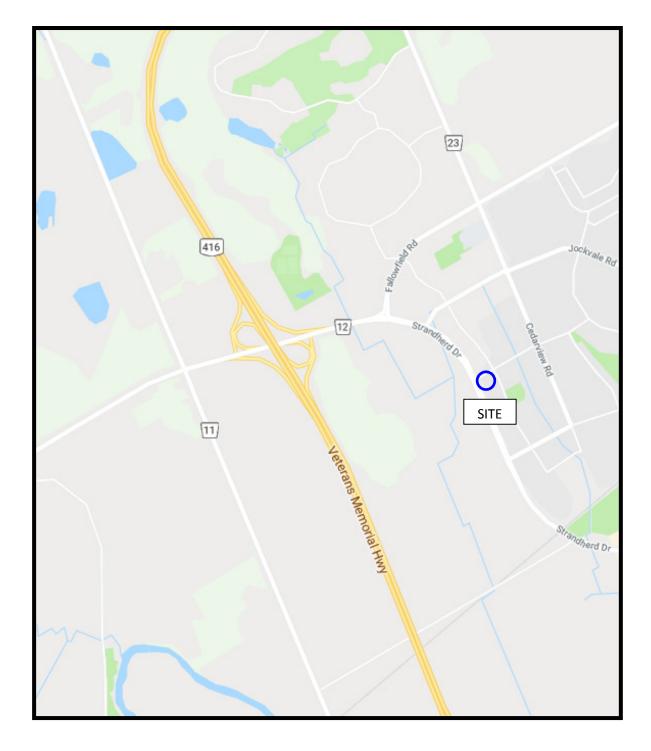
FIGURE 2 – TOPOGRAPHIC MAP

DRAWING PE4346-1 – SITE PLAN

DRAWING PE4346-2 – SURROUNDING LAND USE PLAN

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<u>figure 1</u> KEY PLAN



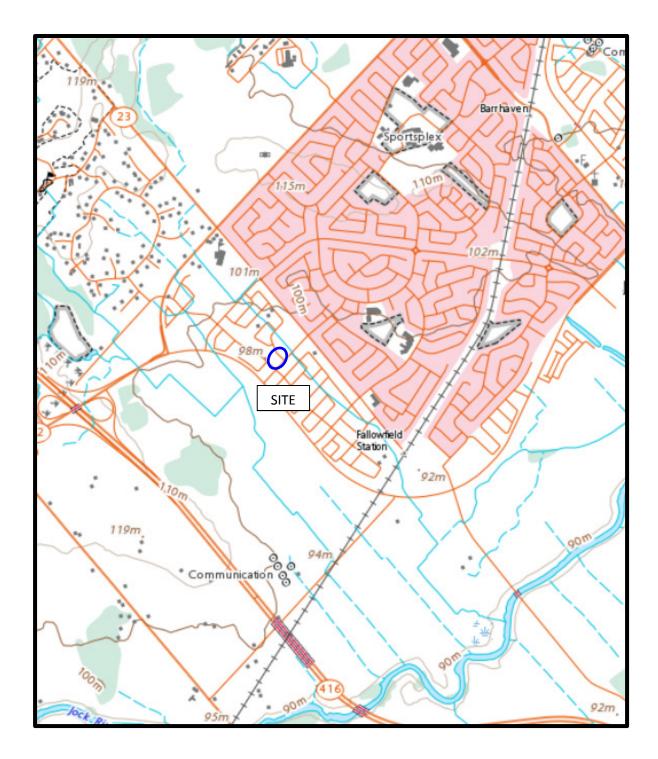
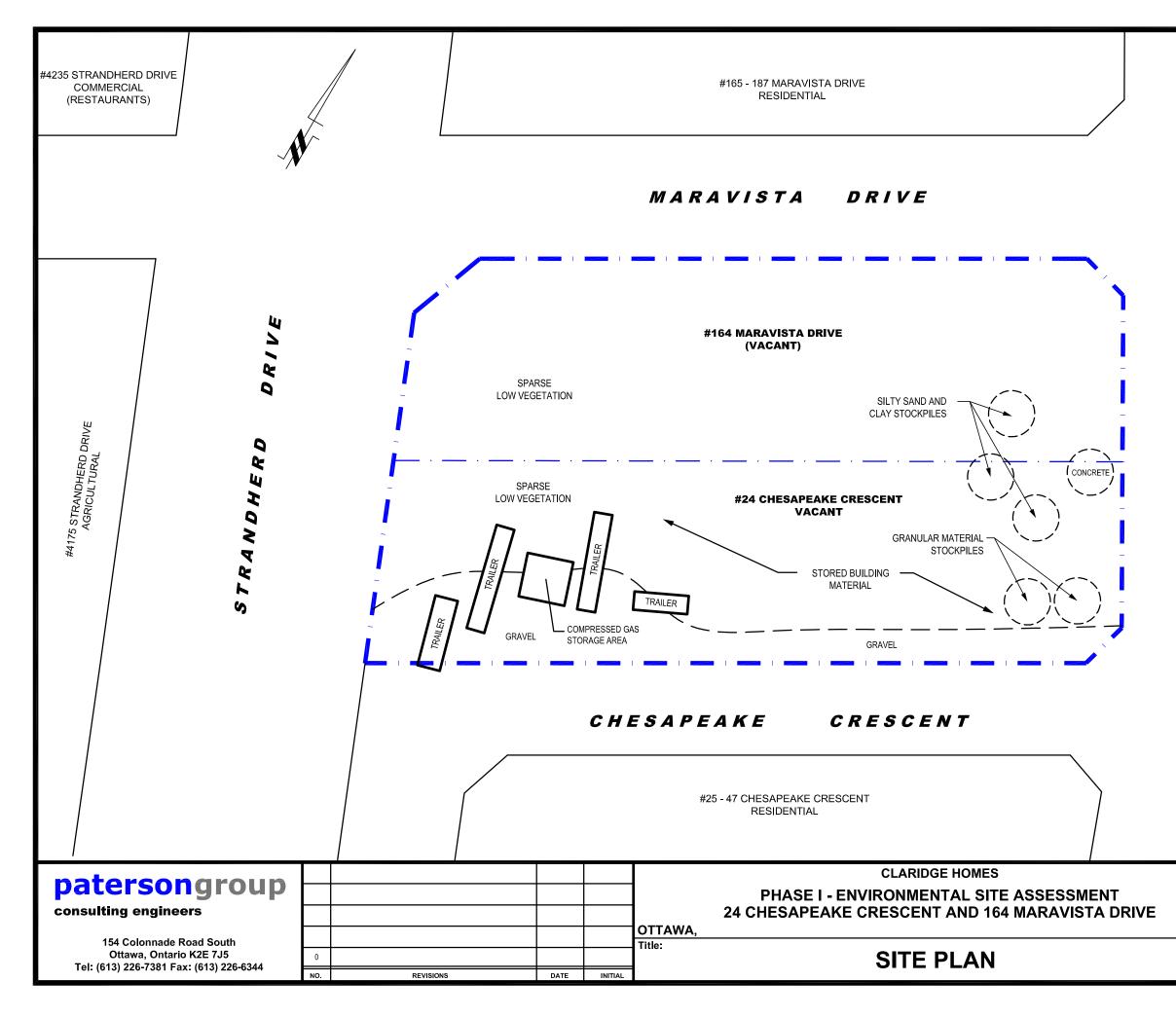
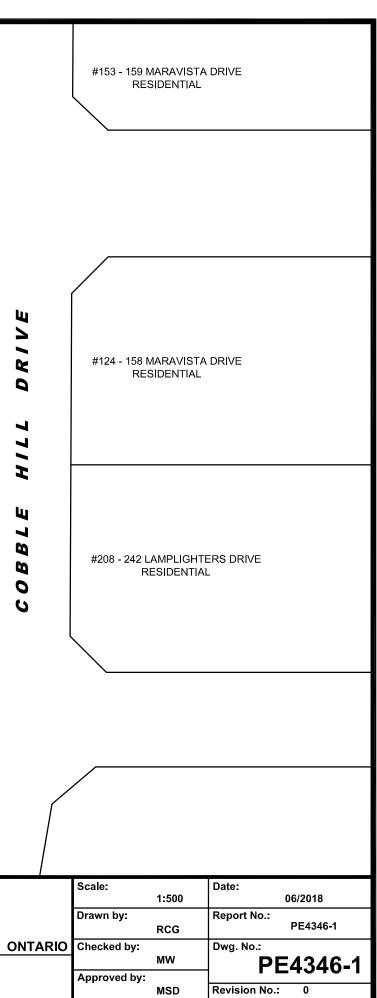
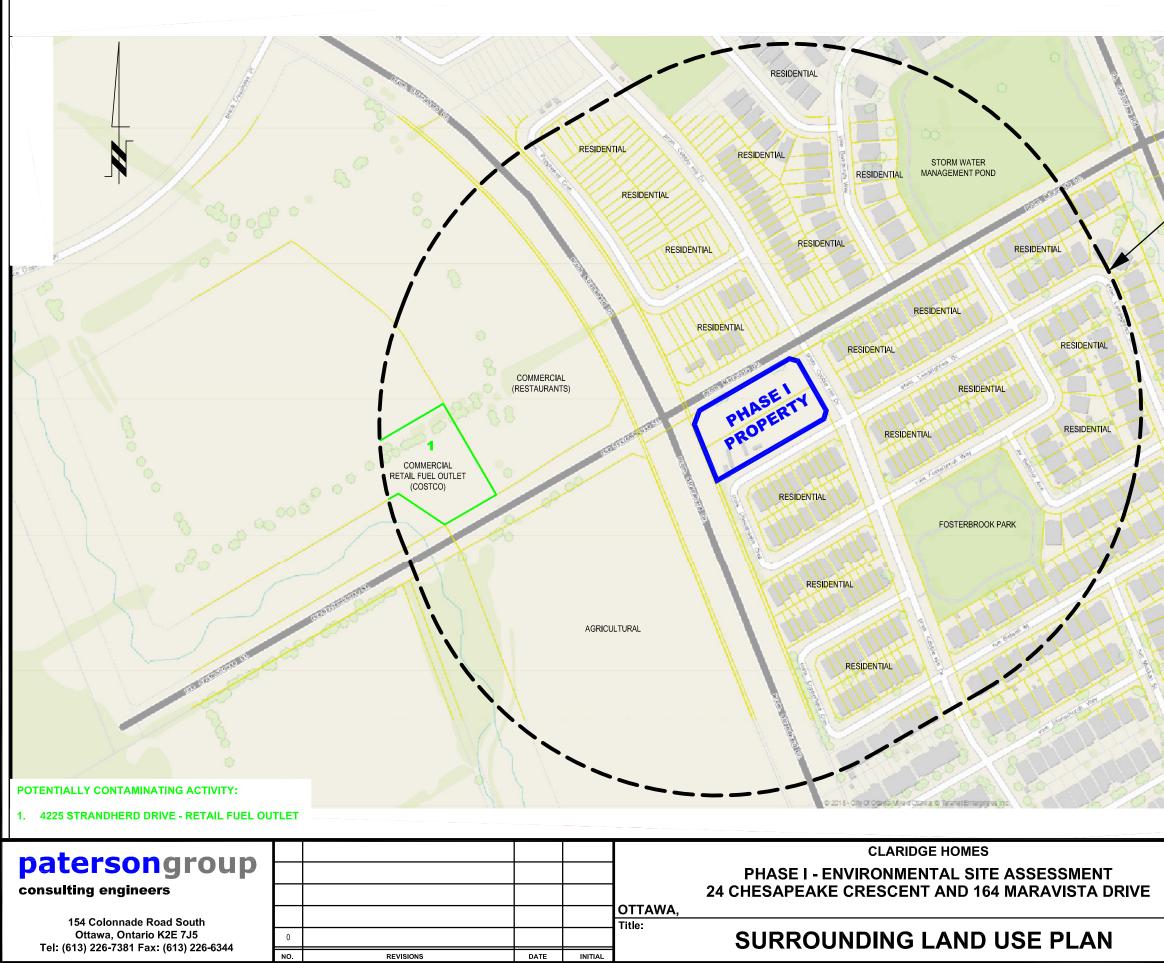


FIGURE 2 TOPOGRAPHIC MAP





itocad drawings/environmental/pe43xx/pe4346/pe4346-1 site plan





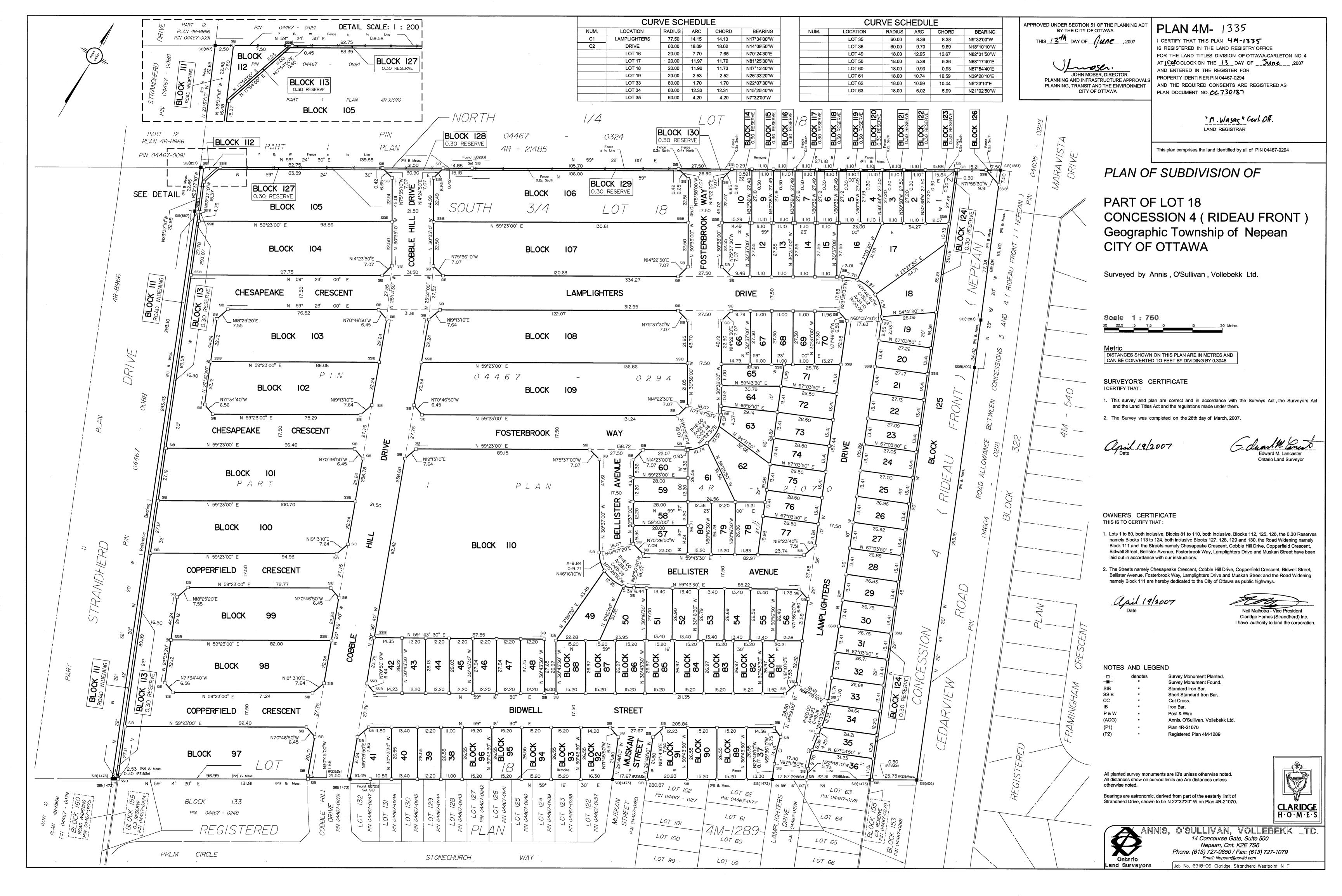
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APPENDIX 1

PLAN OF SUBDIVISION

AERIAL PHOTOGRAPHS

SITE PHOTOGRAPHS







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AERIAL PHOTOGRAPH 1963











Site Photographs

PE4346

24 Chesapeake Crescent and 164 Maravista Drive, Ottawa, ON

July 16, 2018



Photograph 1: View of the southwestern portion of the Phase I Property, facing northeast. The photo depicts a site office trailer, storage trailers and the propane storage area.



Photograph 2: View of the central portion of the Phase I Property, facing north. Photograph illustrates storage of construction materials and fill material; also depicted are residential dwellings to the north.

Site Photographs

24 Chesapeake Crescent and 164 Maravista Drive, Ottawa, ON

July 16, 2018



Photograph 3: View of the eastern portion of the Phase I Property, facing northeast. Photo illustrates on-site storage of construction materials and fill material, as well as residential dwellings to the east.



Photograph 4: View of the northwestern portion of the Phase I Property, facing northwest. Photograph illustrates commercial development to the northwest, across Strandherd Drive.

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PE4346

APPENDIX 2

MOECC FREEDOM OF INFORMATION SEARCH

CITY OF OTTAWA HLUI SEARCH

TSSA CORRESPONDENCE



Ministry of Environment and Energy

Freedom of Information Request

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

Requester Data			For Ministry Use Only	
Name, Company Name, Mailing Address and Email Address of Requester Karyn Munch Paterson Group Inc.			FOI Request No.	Date Request Received
154 Colonnade Road Ottawa, ON K2E 7J5 Email address: kmunch@patersongroup.ca			Fee Paid	UISA/MC 🗆 CASH
Telephone/Fax Nos. Tel. 613-226-7381 Fax 613-226-6344	Your Project/Reference No. PE4346	Signature/Print /Name of Requester Karyn Munch	□ CNR □ ER □ N □ SAC □ IEB □ E	
		Request Parameter	S	
Municipal Address / Lot, Concession, Geographic Township (Municipal address essential for cities, towns or regions) 24 Chesapeake Crescent and 164 Maravista Drive (adjacent vacant lots, same property owner), Ottawa (Barrhaven), Ontario				
Present Property Owner(s) and Date(s) of Own	ership			
Claridge Homes Previous Property Owner(s) and Date(s) of Ownership				
Present/Previous Tenant(s),(if applicable)				
Search Parameters Specify Year(s) Requested Files older than 2 years may require \$60.00 retrieval cost. There is no guarantee that records responsive to your request will be located. Specify Year(s) Requested				
Environmental concerns (General correspondence, occurrence reports, abatement) all				
Orders			all	
Spills all			all	
Investigations/prosecutions > Owner AND tenant information must be provided all			all	
Waste Generator number/classes all			all	
	Certificate	s of Approval > Proponent info	rmation must be provided	
1985 and prior records are searched manually. Search fees in excess of \$300.00 could be incurred, depending on the types and years to be searched. Specify Certificates of Approval number(s) (if known). If supporting documents are also required, mark SD box and specify type e.g. maps, plans, reports, etc.				
			SD	Specify Year(s) Requested
air - emissions 1986-pre			1986-present	
Water - mains, treatment, ground level, standpipes & elevated storage, pumping stations (local & booster)			1986-present	
Sewage - sanitary, storm, treatment, stormwater, leachate & leachate treatment & sewage pump stations				1986-present
waste water - industrial discharges				1986-present
waste sites - disposal, landfill sites, transfer stations, processing sites, incineratosites 1986-present				1986-present
waste systems - PCB destruction, mobile waste processing units, haulers: sewage, non-hazardous & hazardous waste			1986-present	
pesticides - licenses	ation fee navable to	the Minister of Finance, is manda	tory. The cost of leasting a	1986-present

A \$5.00 non-refundable application fee, payable to the Minister of Finance, is mandatory. The cost of locating on-site and/or preparing any record is \$30.00/hour and 20 cents/page for photocopying and you will be contacted for approval for fees in excess of \$30.00.

Application Number:	Ward Number:	Application Received: (dd/mm/yyyy):
Client Service Centre Staff:		Fee Received: \$



Historic Land Use Inventory

Application Form

Notice of Public Record

All information and materials required in support of your application shall be made available to the public, as indicated by Section 1.0.1 of *The Planning Act*, R.S.O. 1990, C.P.13.

Municipal Freedom of Information and Protection Act

Personal information on this form is collected under the authority the *Planning Act*, RSO 1990, c. P. 13 and will be used to process this application. Questions about this collection may be directed by mail to Manager, Business Support Services, Planning Infrastructure and Economic Development Department, 110 Laurier Avenue West, Ottawa, K1P 1J1, or by phone at (613) 580-2424, ext. 24075

	Background Information
*Site Address or Location:	24 Cheoapeake Cre Ocent, 144 maravista Drive.
	* Mandatory Field
Applicant/Agent	Information:
Name:	Paterson Group Inc.
Mailing Address:	154 Colonnade Rd S.
Telephone:	UB-226.7381 Email Address: CMUNCH@patersongroup.ca
Registered Prope	rty Owner Information: Same as above
Name:	Claridg Homes (Vincent Renomme).
Mailing Address:	210 Gladstone Auc., Ottawa ON,
Telephone:	Email Address:

	Site Details
Legal Description and PIN:	Plan 4M1335, Blocks 164, 105 Township of Napean
What is the land currently used for?	vacant
	$m Lot depth: m Lot area: m^2$ area: (irregular lot) $5,303$ m ² area have Full Municipal Services: Yes \swarrow No
	Required Fees e to visit <u>the Historic Land Use Inventory</u> website ees must be paid in full at the time of application submission.
Planning Fee	\$102.00
	Submittal Requirements
The following are re	equired to be submitted with this application:

- 1. Consent to Disclose Information: Consultants and other third parties may make requests for information on behalf of an individual or corporation. However, if the requester is not the owner of the property, the requester must provide the City of Ottawa with a 'consent to disclose information' letter, signed by the property owner. This will authorize the City of Ottawa to release any relevant information about the property or its owner(s) to the requester. Consent for disclosure is required in the event that personal information or proprietary company information is found concerning the property and its owner. All consents must clearly indicate the name of the property owner as well as the name of the requester, and must be signed and dated.
- 2. Disclaimer: Requesters must read and understand the conditions included in the attached disclaimer and submit a signed disclaimer to the City of Ottawa's Planning, Infrastructure and Economic Development Department. This disclaimer is related to the Historic Land Use Inventory and must be received by the City of Ottawa, signed and dated by the requestor, before the process can begin.
- 3. A site plan or key plan of the property, its location and particular features.
- 4. Any significant dates or time frames that you would like researched.

Disclaimer For use with HLUI Database

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

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

- The HLUI may contain erroneous information given that such records and sources of information may be flawed. Changes in municipal addresses over time may have introduced error in such records and sources of information. The City is not responsible for any errors or omissions in the HLUI and reserves the right to change and update the HLUI without further notice. The City does not, however, make any commitment to update the HLUI. Accordingly, all information from the HLUI is provided on an "as is" basis with no representation or warranty by the City with respect to the information's accuracy or exhaustiveness in responding to the request.
- 2. City staff will perform a search of the HLUI based on the information given by the Requester. City staff will make every effort to be accurate, however, the City does not provide an assurance, guarantee, warranty, representation (express or implied), as to the availability, accuracy, completeness or currency of information which will be provided to the Requester. The HLUI in no way confirms the presence or absence of contamination or pollution of any kind. The information provided by the City to the Requester is provided on the assumption that it will not be relied upon by any person whatsoever. The City denies all liability to any such persons attempting to rely on any information provided from the HLUI database.
- 3. The City, its employees, servants, agents, boards, officials or contractors take no responsibility for any actions, claims, losses, liability, judgments, demands, expenses, costs, damages or harm suffered by any person whatsoever including negligence in compiling or disseminating information in the HLUI.
- 4. Copyright is reserved to the City.
- 5. Any use of the information provided from the HLUI which a third party makes, or any reliance on or decisions to be based on it, are the responsibilities of such third parties. The City, its employees, servants, agents, boards, officials or contractors accept no responsibility for any damages, if any, suffered by a third party as a result of decisions made as a result of an information search of the HLUI.
- 6. Any use of this service by the Requestor indicates an acknowledgement, acceptance and limits of this disclaimer.
- 7. All information collected under this request and all records provided in response to this request are subject to the provisions of the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M.56, as amended.

Signed: Dated (dd/mm ne) <u>Manase</u>v inson Group Inc. (Please print na Company:

patersongroup

Consulting Engineers

154 Colonnade Road South Ottawa, Ontario Canada, K2E 7J5 Tel: (613) 226-7381 Fax: (613) 226-6344

June 4, 2018 File: PE4346-LET.HLUI

City of Ottawa 110 Laurier Avenue W Ottawa, Ontario K1P 1J1 Geotechnical Engineering Environmental Engineering Hydrogeology Geological Engineering Materials Testing Building Science Archaeological Services

www.patersongroup.ca

Authorization Letter, HLUI Search Phase I-Environmental Site Assessment 24 Chesapeake Crescent Ottawa, Ontario

Dear Sir or Madame,

Please consider this letter as confirmation that Paterson Group has been retained to conduct a Phase I-Environmental Site Assessment at the aforementioned property.

With this letter, the property owner authorizes the City of Ottawa and other regulatory bodies to release, to Paterson Group, information requested for the purpose of completing an environmental assessment of the property.

Name of Company/Property Owner:

Name of Representative

Authorization of Representative

Date

Claridge homes
Vincent Denomme
Virgenti izenastire
1-1-1-1

2018-06-05

K1P 1J1 Subject:

Mandy Witteman

From:	Public Information Services < publicinformationservices@tssa.org >
Sent:	June-22-18 12:25 PM
То:	Mandy Witteman
Subject:	NO RECORD FOUND (FUEL STORAGE TANKS ONLY): Records Search Request - PE4346

NO RECORD FOUND (FUEL STORAGE TANKS ONLY)

Hello Mandy. Thank you for your request for confirmation of public information.

We confirm that there are no records in our database of any fuel storage tanks at the subject addresses.

For a further search in our archives please complete our release of public information form found at <u>https://www.tssa.org/en/about-tssa/release-of-public-information.aspx? mid =392</u> and email the completed form to <u>publicinformationservices@tssa.org</u> or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

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

Kind regards,

Gaya

From: Mandy Witteman <MWitteman@Patersongroup.ca> Sent: June 22, 2018 9:21 AM To: Public Information Services <publicinformationservices@tssa.org> Subject: Records Search Request - PE4346

Good morning,

Could you please complete a search of your records for **underground/aboveground storage tanks**, **historical spills or other incidents/infractions** for the following addresses in the City of Ottawa:

Thank you very much.

Chesapeake Crescent#: 164, 47, 25 Mavavista Drive#: 24, 187, 165, 158, Strandherd Drive#: 4235

Best Regards,

Mandy Witteman



APPENDIX 3

QUALIFICATIONS OF ASSESSORS

Karyn Munch, P.ENG.

patersongroup

Geotechnical Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Services

POSITION

Intermediate Environmental Engineer

EDUCATION

Carleton University, B.Eng. 2002 Environmental Engineering

MEMBERSHIPS AND AWARDS

Professional Engineers of Ontario Ottawa Geotechnical Society

EXPERIENCE

2011-present Paterson Group Inc. Consulting Engineers Geotechnical and Environmental Division Intermediate Engineer

2009-2010 Department of Indian and Northern Affairs Contaminated Sites Division Environment Officer (PC-02)

2003 to 2009 **Paterson Group Inc.** Consulting Engineers Geotechnical and Environmental Division Intermediate Engineer

2002 to 2003 Dessau Soprin Inc. Consulting Engineers Environmental Division Junior Engineer

SELECT LIST OF PROJECTS

Billings-Hurdman Interconnect Watermain - Ottawa Telus Building Remediation - Ottawa Block D Lands Remediation and Redevelopment - Kingston Gladstone Avenue Reconstruction - Ottawa Lees Avenue Coal Tar Site - City of Ottawa Nortel Networks Environmental Monitoring Program 3W Zone Feedermain - Ottawa Bank Street Reconstruction - Ottawa Lees Avenue Remediation Program - Ottawa Colonnade Road North Development - Ottawa Montreal Road Reconstruction - Ottawa Designated Substance Surveys - Residential and Commercial Sites - Ottawa Phase I & II Environmental Site Assessments - Residential, Commercial and Industrial Sites -Ottawa (CSA Z768-01 and O.Reg 269/11) Brownfields Applications and Records of Site Condition - Residential and Commercial Redevelopment

Mark S. D'Arcy, P. Eng.

patersongroup

Geotechnical Engineering

Environmental Engineering

Hydrogeology

Geological Engineering

Materials Testing

Building Science

Archaeological Services

POSITION

Associate and Supervisor of the Environmental Division Senior Environmental/Geotechnical Engineer

EDUCATION

Queen's University, B.A.Sc.Eng, 1991 Geotechnical / Geological Engineering

MEMBERSHIPS

Ottawa Geotechnical Group Professional Engineers of Ontario

EXPERIENCE

1991 to Present **Paterson Group Inc.** Associate and Senior Environmental/Geotechnical Engineer Environmental and Geotechnical Division Supervisor of the Environmental Division

SELECT LIST OF PROJECTS

Mary River Exploration Mine Site - Northern Baffin Island Agricultural Supply Facilities - Eastern Ontario Laboratory Facility - Edmonton (Alberta) Ottawa International Airport - Contaminant Migration Study - Ottawa **Richmond Road Reconstruction - Ottawa** Billings Hurdman Interconnect - Ottawa Bank Street Reconstruction - Ottawa Environmental Review - Various Laboratories across Canada - CFIA Dwyer Hill Training Centre - Ottawa Nortel Networks Environmental Monitoring - Carling Campus - Ottawa Remediation Program - Block D Lands - Kingston Investigation of former landfill sites - City of Ottawa Record of Site Condition for Railway Lands - North Bay Commercial Properties - Guelph and Brampton Brownfields Remediation - Alcan Site - Kingston Montreal Road Reconstruction - Ottawa Appleford Street Residential Development - Ottawa Remediation Program - Ottawa Train Yards Remediation Program - Bayshore and Heron Gate Gladstone Avenue Reconstruction - Ottawa Somerset Avenue West Reconstruction - Ottawa