

Phase I Environmental Site Assessment Report  
1350 Pembina Highway  
Winnipeg, Manitoba  
April 5, 2018



## 1350 Pembina Highway, Winnipeg, Manitoba

### Phase I Environmental Assessment Report



Provided To:  
City of Winnipeg.  
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## EXECUTIVE SUMMARY

HLC Consulting Ltd. was retained by City of Winnipeg (“Client”) to conduct a Phase I Environmental Site Assessment (ESA) of 1350 Pembina Highway located in Winnipeg, Manitoba (the “Site”).

The purpose of the Phase I ESA was to identify actual or potential environmental concerns at the Site. The Phase I ESA was completed in accordance with the Canadian Standard Association (“CSA”) document entitled “*Phase I Environmental Site Assessment, CSA Standard Z768-01*” dated 2001 and reaffirmed in 2012, including a review of readily available historical records, a review of readily accessible regulatory records, an inspection of the Site, interviews, an evaluation of information and reporting, subject to the limitations outlined in Section 8.0 of this report. Site observations consisted of a visual inspection performed during a walkthrough and did not include sampling or testing, a process consistent with industry standard.

Based on the results of the Phase I ESA completed by HLC, the following could result in potential subsurface impacts at the Site:

- The historical on-Site presence of an UST and the presence of a decommissioned petroleum storage.

HLC recommends that a Phase II ESA be conducted to assess the potential of petroleum hydrocarbon contamination (PHC) in the soil.

The following issues have also been identified as representing a potential environmental concern to the Site, but only prior to any renovation or demolition activities given the potential for disturbances at that time:

- Potential asbestos-containing materials in building products not sampled in previous asbestos survey report;
- Potential lead-containing paints in areas of the building;
- Potential mercury in switches, lead-containing paints and fluorescent lamps; and
- Potential of mould-impacted materials.

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## **1 INTRODUCTION**

### **1.1 PROJECT BACKGROUND**

HLC Consulting Ltd. (“HLC”) was retained on February 21, 2018 by City of Winnipeg (“Client”) to conduct a Phase I Environmental Site Assessment (ESA) of 1350 Pembina Highway located in Winnipeg, Manitoba (the “Site”).

The Site is developed with a partial two-storey building, which comprises of office spaces on both floors, and paved parking area located on the north and east sides of the Site. The Site Building was previously used as a police station.

HLC was advised by the client that the purpose of the Phase I ESA was to assess potential environmental issues in relation to financing purposes.

### **1.2 SCOPE OF WORK**

The Phase I ESA was completed in accordance with the Canadian Standard Association (“CSA”) document entitled “Phase I Environmental Site Assessment, CSA Standard Z768-01” dated 2001 and reaffirmed in 2012, including a review of readily available historical records, a review of readily accessible regulatory records, an inspection of the Site, interviews, an evaluation of information and reporting, subject to the limitations outlined in Section 8.0 of this report. Site observations consisted of a visual inspection performed during a walkthrough and did not include sampling or testing, a process consistent with industry standard.

A Site inspection was conducted by HLC on March 14, 2018 and was accompanied by Mr. Julien Roberts, subsequently referred to as the “Site Representative”.

## **2 SITE DESCRIPTION**

### **2.1 SITE LOCATION AND PHYSICAL DESCRIPTION**

As indicated in the appended Appendix I Figure 1, the Site is located at 1350 Pembina Highway, which is located at the northeast corner of the intersection of Pembina Highway and Dowker Avenue. The Site is situated in an area that consists predominantly of commercial land use. The Site and surrounding area is provided in Appendix I, Figure 1.

<b>Topic</b>	<b>Findings</b>
Approx. Site Area	1.2 acres
Building On-Site	One
Approx. Year of Construction and Significant Additions or Renovations	1954

Number of Floors (including ground level)	Two (partial second floor)
Subsurface Levels	One (partial with crawlspace)
Approx. Footprint Area of Building	9,630 ft <sup>2</sup>
Approx. Total Area of Building	12,000 ft <sup>2</sup>
Heating and Cooling	Heating is provided hot water boiler. Cooling is provided by rooftop air handling units.
Elevators	None.
Emergency Generators	None observed and none reported by Site Representative.
Landscaped/Grassed/Bare Ground Areas	The Site is paved on the north, east and south sides and was grassed on the west side but the area was covered by snow at the time of the site visit.
Paved or Other Sealed Surface Materials	Majority of the Site is complete with asphalt paved parking located on the north, south and east sides of Site Building; however, it should be noted that snow cover present at the time of the Site Inspection limited observations of ground conditions.

A summary of the physical description of the Site, including the Site Building, is provided in the following table.

## 2.2 TOPOGRAPHIC, GEOLOGIC AND HYDROGEOLOGICAL SETTING

Topic	Findings
Topography of Site and Surrounding Area	The topography of the Site is flat and is similar surrounding areas.
Site Grade Relative to the Adjoining Properties	Adjacent buildings are at similar grade to the Site Building.
Subsurface Soils	Glacial Lake Agassiz clay of Pleistocene age with possible inclusions of silt layers based on location of the Site.
Fill Materials	None observed.
Bedrock Type	Palaeozoic carbonate formations consisting of limestone and dolomitic limestone.
Inferred Bedrock Depth	Approximately 15 to 25 meters below ground surface.
Inferred Groundwater Depth	Unknown based on information reviewed.
Nearest Open Water Body	Red River to the east of the Site (approx. 970 metres)
Inferred Groundwater Flow Direction	Groundwater flow would likely be to the east, towards the Red River and regional drainage patterns

## 2.3 SITE OPERATIONS

The Site Building is a partial two-storey commercial building that is presently vacant. Interior finishes throughout Site Building include various flooring finishes (i.e. ceramic tiles, vinyl floor tiles, carpeting) drywall and plaster walls, and lay-in acoustical ceiling tiles and plaster ceiling with texture coat located in the ceiling plenum. The building has an office section, a front reception, a kitchen,

a washroom, an exercise room and garage with three overdoor located on the west side. A hot water boiler system is in the basement which is also comprised of a partial crawlspace area.

### 3 HISTORICAL RECORDS REVIEW

#### 3.1 SITE INTERVIEWS AND RECORDS

The Site Representative advised HLC of the following with respect to the historical occupancy and operations at the Site:

- Site building was constructed in the 1954;
- No dry-cleaning services have historically taken place at the Site; and,
- No retail fuel outlet (RFO) have operated at the Site and no associated USTs at the Site.

#### 3.2 AERIAL PHOTOGRAPHS

Copies of aerial photographs dated 1948, 1960, 1968, 1979, 1988 and 1993 were reviewed by HLC at Manitoba Sustainable Development’s Air Photo Library. In addition, HLC reviewed Google Earth™ Satellite Imagery dated 2002 and 2017. A summary of information with respect to the Site is provided in the following table:

Year of Photograph	Site
1948	The Site appeared undeveloped and vacant.
1954	The Site Building is visible and appeared similar in size and configuration to present day building.
1968, 1979 and 1993	The Site appears to be occupied by a building that is similar in size and shape to present day building.
2002 - 2017	Similar to 1993 aerial photograph

A summary of information obtained with respect to the surrounding area is provided in the following table:

Year of Photograph	North	South	East	West
1948	Vacant	Vacant	Vacant	Pembina Highway followed by buildings (which appeared to be commercial properties)
1954	Building which appeared to be commercial property	Building but different from the present property	Appeared to be activity on the property probably agriculture.	Similar to 1948 aerial photograph

1968, 1979 and 1993	Commercial property which appeared similar to present day property (hotel)	Commercial/public buildings which appeared similar to present day building (library)	Commercial/public buildings which appeared similar to present day building (school and swimming pool)	Similar to 1948 aerial photograph
2002 – 2017	Similar to 1993 aerial photograph	Similar to 1993 aerial photograph	Similar to 1993 aerial photograph	Similar to 1993 aerial photograph

Based on HLC’s review of the above-noted aerial photographs, nothing was observed that is likely to result in potential subsurface impacts at the Site.

### 3.3 FIRE INSURANCE PLAN AND REVIEW SUMMARY

HLC contacted Opta Information Intelligence (“Opta”) to review Fire Insurance Plans (“FIPs”) related to the Site and surrounding area, as well as Property Underwriters’ Reports (“PURs”), Property Underwriters’ Plans (“PUPs”) and Construction, Occupancy, Protection, Exposure (COPE) reports for the Site.

A response was received from Opta indicated that there is a FIPs for the Site but no PURs and no COPE were located for Site. A copy of the report has found in Appendix II.

Based on HLC’s review of the FIPs, the following was noted:

In 1960:

- The Site Building was present, similar in shape and size to the present-day structure but was known as “Fort Garry Municipal Hall and Fire Hall”. An UST is shown located at the Site near the Site Building.
- The surrounding areas consisted of primarily of commercial properties;
  - North - Vacant
  - Northwest – Canadian Safeway Supermarket (located approximately 140 m at 1330 Pembina Highway), Department of Public Works with two USTs (located approximately 170m at 1313 Pembina Highway), Gasoline Service Station & Garage with two USTs (located approximately 190 m at 1305 Pembina Highway), Gasoline Service Station with two USTs (located approximately 250 m at 1280 Pembina Highway) and Self Service Laundry and Machine Shop (located approximately 155 m at 1335 Pembina Highway)
  - South – Fort Garry Public Library and
  - Southeast - Gasoline Service Station & Garage located approximately 118 m at 1382 Pembina Highway.
  - West –and Pembina Curling Club (located approximately 140 m at 1341 Pembina Highway)
  - Southwest – Unknown properties (located approximately 74 m at 1345 and 1349 Pembina Highway), an Electrician Shop located at 1355 Pembina Highway.

- East – Fort Garry High School

These adjacent properties with the associated USTs were located hydraulically transgradient in relation to the inferred groundwater flow direction and to the Site. Based on this information, it is HLC’s opinion that the presence of a historical underground storage tank (UST) on these properties could not result in potential subsurface impacts at the Site.

### 3.4 CITY DIRECTORIES

City directories for the years from 1930 to 2000 were reviewed by HLC at the Manitoba Archives Library in Winnipeg, Manitoba. It should be noted that no city directories were available for the City of Winnipeg after 2000. A summary of information obtained with respect to the Site is provided in the following table:

Year(s)	Occupant Listings for Site Addresses
2000	City of Winnipeg Police Department District 6, Fort Garry Lion Outdoor Pool
1990	Fort Garry Community Office Tax Department & Finance Assiniboine Park, City of Winnipeg Police Department Division 6, City of Winnipeg Social Services, Assiniboine Park
1980	Fort Garry Community Office, Fort Garry Fire Department, Fort Garry Police Department, Fort Garry Tax Department, Fort Garry Welfare Department
1970	Fort Garry Municipal Office, Public Work Department, Park Department, Fire Department, Police Department, Tax Department, Pound
1960	Municipality of Fort Garry, Fort Garry Health Unit
1953	No Listing

In general, the city directories indicated that the Site has been historically occupied by commercial land uses since the 1950s. No historical dry-cleaning operations, RFOs or other operations of potential environmental concern were identified.

Based on HLC’s review of the above-noted city directories, nothing was identified that is likely to result in potential subsurface impacts at the Site.

The Site is located in an urban area that is developed with commercial and residential land uses. A description of the adjacent properties is summarized in the following table.

	North	South	East	West
Operation or Activity	Commercial (Hotel)	Commercial/ Public Building (Library)	Commercial/ Public Building (School & City of Winnipeg swimming pool)	Pembina Highway followed by Commercial Building
Direction with respect to inferred	Transgradient	Transgradient	Downgradient	Upgradient

groundwater flow				
Visible Emissions	None observed	None observed	None observed	None observed
Visible Outdoor Storage of Hazardous Materials	None observed	None observed	None observed	None observed

A search of city directories of adjacent properties was also completed. A summary of information obtained with respect to adjacent properties is provided in the following table:

Year(s)	Occupant Listings for Adjacent Site Addresses
2000	1305 Pembina Highway – Toronto Dominion Bank 1319 Pembina Highway – Canada Safeway Ltd., Domo Gas Bar 1330 Pembina Highway – Holiday Inn Winnipeg South, Southfork Restaurant 1330 Pembina Highway – Pembina Curling Club 1345 Pembina Highway – Ryan Gateway Insurance Brooker Inc, Richard’s CEC Barber shop, Shear Designs and Unisex Hairstyling, Liberty Tax Service 1349 Pembina Highway – Chicken Delight of Canada Ltd. 1382 Pembina Highway – Mac’s Convenience Store, Subway Restaurant 1383 Pembina Highway – Action Consulting Engineers Ltd, Buckmasters Whitetail Magazine, Gilbert International Admn office food processing
1990	1280 Pembina Highway – Curtis Carpet Ltd. 1288 – Medical Centre Building 1305 Pembina Highway – Toronto Dominion Bank 1315 Pembina Highway – McKnight’s Pharmacies 1319 Pembina Highway – Canada Safeway Ltd, Domo Gas Bar 1330 Pembina Highway – Holiday Inn Winnipeg 1341 Pembina Highway – Pembina Curling Club 1345 Pembina Highway – Ryan Gateway Insurance Brooker Inc, Kilkenny Group, CEC Richards Barber Stylists, Shear Design & Unisex Hair styling, U&R Tax Service 1349 Pembina Highway – Chicken Delight of Canada Ltd. 1355 Pembina Highway – Wareham & Crowe Electrical Contractors 1382 Pembina Highway – Mac’s Convenience Store, Esso Self Service 1383 Pembina Highway – Office Building
1980	1305 Pembina Highway – Toronto Dominion Bank 1315 Pembina Highway – Pembina Pharmacy 1319 Pembina Highway – Canada Safeway Ltd, Domo Gas Bar 1321 Pembina Highway – Imperial Cleaners 1330 Pembina Highway – Holiday Inn 1341 Pembina Highway – Pembina Curling Club 1345 Pembina Highway – Office Building 1349 Pembina Highway – Dairy Town Ice Cream Parlor 1355 Pembina Highway – Wareham & Crowe Electrical Ltd., Johnston Erie E Watch Repair 1382 Pembina Highway – Star Texaco Centre

	1383 Pembina Highway – Pemrad Building 1392 Balcaen J M & Sons Ltd. 1393 Pembina Highway – Mac’s Convenience Store
1970	1280 Pembina Highway – Riverwood Esso Service Station 1288 Pembina Highway – Medical Centre 1305 Pembina Highway – Toronto Dominion Bank 1315 Reid Marshall Pharmacy Ltd. 1319 Pembina Highway – Canada Safeway Ltd. 1321 Pembina Highway – Imperial Cleaner 1330 Pembina Highway – Brooks Ovis Ltd 1341 Pembina Highway – Pembina Curling Club 1345 Pembina Highway – Leslie B Real Est & Development Co. Ltd, Macdonald JH & Associates Ltd Consulting Engineers, Miller JR Co Ltd, Fort Garry Hair Stylists, Neon Plastic Sign Service, Richard Barber Shop, Howard’s Building Supplies 1349 Pembina Highway – Dairy Way 1355 Pembina Highway – Wareham & Crowe Electrical Ltd, Fort Garry Refrigerator & Air Conditioning Ltd, Johnston Erin E Watch Repairs 1382 Pembina Highway – Star Texaco Centre 1383 Pembina Highway – Pemrad Building 1392 & 1394 Pembina Highway – Balcaen JM & Sons
1960	1280 Pembina Highway – Riverwood Esso Service 1292 Pembina Highway – Marshall Pharmacy, Croto Drug Co. 1330 Pembina Highway – Canada Safeway Store 1345 Pembina Highway – Kellas FJ Building Ltd, Richards Barber Shop 1349 Pembina Highway – Fort Garry Supply 1382 Pembina Highway – Gateway Services 1392 & 1394 Pembina Highway – Balcaen JM & Sons
1953	1292 Pembina Highway – Marshall Pharmacy, Croto Drug Co. 1305 Pembina Highway – Barrack Machine Shop 1313 Municipal of Fort Garry Public Work 1341 Pembina Highway – Pembina Curling 1349 Pembina Highway – Fort Garry Supply 1382 Pembina Highway – Fort Garry Auto Service 1392 – Pembina Highway – Balcaen JM & Sons

As noted in Section 3.3, some operations adjacent to the Site consisted of underground storage tank (UST). These operations were located at the following locations:

- 1382 Pembina Highway (from 1953 – 1990 under the names, Fort Garry Auto Service, Gateway Services, Star Texaco Centre and Esso Self Service) located approximately 73 m south-southeast adjacent property of the Site;
- 1280 Pembina Highway (from 1960 – 1970 under the name Riverwood Esso Services) located approximately 245 m northwest adjacent property from the Site;
- 1313 Pembina Highway (in 1953 under the name Fort Garry Public Work) located approximately 140 m northwest adjacent property from the Site; and,

- 1305 Pembina (in 1953 under the name Barrack Machine Shop) located approximately 183 m northwest adjacent property from the Site. These adjacent properties are located hydraulically transgradient relative to the inferred groundwater flow direction of the Site.

Based on these findings, it is HLC's opinion that this historical off-Site operation could not result in potential subsurface impacts at the Site.

### **3.5 PREVIOUS ENVIRONMENTAL REPORTS**

No other previous reports (i.e. Phase I ESAs, geological or geotechnical reports) were provided to HLC's review, and according the Client, none are available.

### **3.6 HISTORICAL SUMMARY**

Based on the results of the historical review, nothing was observed at the Site or with respect to surrounding properties that would represent items of potential environmental concern.

## **4 REGULATORY INFORMATION AND CORRESPONDENCE**

### **4.1 SITE REGULATORY INFORMATION**

HLC requested copies of permits, approvals and registrations from the Site Representative, and was advised that there was not regulatory information with respect to the Site.

### **4.2 MANITOBA SUSTAINABLE DEVELOPMENT**

An inquiry request was made with Manitoba Sustainable Development with respect to any orders, violations or spills. The Manitoba Sustainable Development Environmental response stated that the Site was registered as a decommissioned petroleum storage site (EMS OP ID: 29098),

Manitoba Sustainable Development also provided a "Storage Tank System Registration Form" which showed the tank was an underground storage tank (UST) and was located close to the building on the east corner of the Site. The form also indicated that the tank was of steel construction with a capacity of 1000 gallon. The tank was on site for 15 years and was removed on November 21, 1988. The Site was not listed on the Contaminated/Impacted Site Program and the Site is not a designated contaminated or impacted site pursuant to the Contaminated Sites Remediation Act. Copies of the report and registration form has been appended (Appendix III).

HLC completed a 200-metre search radius for properties listed on Manitoba Sustainable Development's Designated Impacted Sites List updated January 1, 2017. The Site was not identified on this list, but the following adjacent property was listed:

- Mac's Convenience Store (file number 20331) at 1382 Pembina Highway located approximately 73 m south-south east (SSE) from the Site.

HLC completed a 200-metre search radius for properties listed on the Manitoba Sustainable Development Hazardous Waste Generation Registrations data updated January 2017. The Site was not identified on the registration database, but the following adjacent properties were listed:

- Holiday Inn (registration number MBG 12894) at 1330 Pembina Highway, located about 117 m north-north west (NNW) of the Site
- Balcaen & Son Ltd (registration number MBG 12992) at 1392 Pembina Highway, located about 142 m south-south east (SSE) of the Site
- Vincent Massey Collegiate (registration number MBG 11707) at 975 Dowker Ave., located about 88 m east (E) of the Site

These adjacent properties are located hydraulically transgradient and downgradient relative to the Site. Given the distances (about 88 m and 142 m) between these properties and the Site as well as the inferred groundwater flow direction, it is HLC's opinion that these properties are not likely to result in potential subsurface impacts at the Site. However due to the present of a decommissioned petroleum storage site (EMS OP ID: 29098) on the Site, it is HLC's opinion that could be potential subsurface impacts at the Site.

#### **4.3 LOCAL AND MUNICIPAL GOVERNMENT**

The City of Winnipeg maintains records regarding sewer-use infractions and other information related to sewer use. Given that the present activities at the Site as identified in this Phase 1 ESA are not expected to result in sewer discharges outside those permitted by the City of Winnipeg bylaws, HLC did not contact the City of Winnipeg as part of this Phase I ESA.

In addition, HLC reviewed the City of Winnipeg's map entitled "Boundaries of Landfills and Dumps in the Winnipeg Area", which indicates the approximate boundaries of former and current landfills and dump sites in the City of Winnipeg. Landfill materials have the potential to produce methane gas during the decomposition of organic matter, which can subsequently migrate into buildings through pathways in building foundations. However, no landfills or dump sites were observed within 200 metres of the Site. As such, it is HLC's opinion that former and present landfills and dump sites are not likely to give rise to potential impacts in connection with the Site.

#### **4.4 EcoLog ERIS**

HLC submitted a request to EcoLog Environmental Risk Information Services Ltd. ("ERIS") for a review of the following databases, as they pertain to the Site and surrounding properties located at distance of 250 metres from the Site:

- “ERIS Historical Searches” dated 1999 to August 2016;
- “Contaminated/Impacted Sites” dated up to May 2017;
- “Fuel Storage Tanks” dated 1905 to February 2003;
- “Bulk Fuel Distributors” dated 2006 to October 2017;
- “Waste Generators Summary” dated 1988 to June 2017;
- “Scott’s Manufacturing Directory” dated 1992 to March 2011;
- “Water Well Inventory” dated 1880 to May 2015.

A copy of the EcoLog ERIS report has been appended in Appendix IV. Based on a review of the information obtained from the above-noted sources, HLC notes the following:

- The Site was identified in the “Fuel Storage Tanks” database. The report also indicated that the tank was an UST, listed as being used for fleet purposes. It was installed on January 1, 1972 and was removed on November 21, 1988, had a capacity of 4545 litres and did not have a spill protection.

The following adjacent properties were listed in the Ecolog ERIS report:

- 1382 Pembina Highway (Mac’s Convenience Store) was listed in the contaminated/ Impacted Site and Fuel Storage Tank databases. The report showed that there were eleven UST tanks on this site owned by Imperial Oil and were used for retail/ used oil;
  - Two tanks with capacity of 22730 litres were installed on July 1, 1976 and removed on September 29, 1983. These tanks were not spill protected;
  - Two tanks with capacity of 13635 litres were installed on July 1, 1976 and removed on September 29, 1983. These tanks were not spill protected;
  - Three tanks with capacity of 2270 litres were installed on July 1, 1976 and removed on September 13, 1995. These tanks were not spill protected;
  - Four tanks with capacity of 25000 litres were installed on October 7, 1983, tested on April 23, 1992 and removed on September 11, 1995. The spill protection for these tanks was a sacrificial anode;

This site is located approximately 87 m south-southeast of the Site and is situated hydraulically transgradient from the Site relative to the groundwater flow direction. It is HLC’s opinion that this property is not likely to result in potential subsurface impacts at the Site;

- 1330 Pembina Highway (Holiday Inn South) was listed in the Contaminated/ Impacted Site, Waste Generator Summary and ERIS Historical Searches databases. This site is located approximately 117 m north-northwest of the Site and is situated hydraulically transgradient from the Site relative to the inferred groundwater flow direction. It is HLC’s opinion that this property is not likely to result in potential subsurface impacts at the Site;
- 1319 Pembina Highway (Domo Gasoline Corporation Ltd and Domo Gas Bar) was listed in the Contaminated/ Impacted Site, ERIS Historical Searches, Fuel Storage Tank, Bulk Fuel Distributor and Waste Generation Summary databases. The report showed that there were

five UST tanks on this site (still active) owned by Domo Gasoline Corp. Ltd and were used for retail;

- One tank with a capacity of 9090 litres was installed on July 28, 1982 and removed on June 1, 1989. The spill protection of this tank was sacrificial anode.
- Two tanks with capacity of 22730 litres were installed on January 1, 1971 and removed on June 19, 1984. These tanks were not spill protected;
- Two tanks with capacity of 22730 litres were installed on June 20, 1984 and was tested on April 6, 1992 and September 30, 1996. The spill protection for these tanks was a sacrificial anode;

This site is located approximately 141 m north-northwest of the Site and is situated hydraulically transgradient from the Site. Given this distance with respect to the inferred groundwater flow direction, it is HLC's opinion that this property is not likely to result in potential subsurface impacts at the Site;

- 1349 Pembina Highway (Unknown property) was listed in the ERIS Historical Searches database and is located approximately 70 m west-southwest of the Site. The site is hydraulically transgradient from the Site relative to the inferred groundwater flow direction. Given this distance as well as the inferred groundwater flow direction, it is HLC's opinion that this property is not likely to result in potential subsurface impacts at the Site;
- 1392 Pembina Highway (Balcaen & Sons Ltd) was listed in the ERIS Historical Searches and Waste Generator Summary databases. The site is located approximately 142 m south-southwest of the Site and is inferred to be hydraulically transgradient relative to the Site. Given this distance, it is HLC's opinion that this property is not likely to result in potential subsurface impacts at the Site.
- 1305 Pembina Highway (Barrack Machine Shop) was listed in the Fuel Storage Tank database. The report showed that there were two UST tanks on this site owned by Alex Barrack (an independent owner) and were used for retail purposes. The two tanks which had a capacity of 4545 litres were installed on January 1, 1960 and removed on January 1, 1962. These tanks were not spill protected. This site is located approximately 183 m west-northwest of the Site. The site is hydraulically transgradient from the Site relative to the inferred groundwater flow direction. Given this information, it is HLC's opinion that this off-Site property could not result in subsurface impacts at the Site.
- 975 Dowker Avenue (Vincent Massey Collegiate) was listed in the Waste Generator Summary database. The site is located approximately 88 m east of the Site and is hydraulically downgradient relative to the Site. Given this information, it is HLC's opinion that this off-Site property could not result in subsurface impacts at the Site.
- 1315 Pembina Highway (McKnight's Pembina Pharmacy) was listed in the Waste Generator Summary database and is located approximately 160 m northwest of the Site. The site is hydraulically transgradient of the Site relative to the inferred groundwater flow direction. Given this information, it is HLC's opinion that this off-Site property could not result in subsurface impacts at the Site.

- 1288 Pembina Highway (Manitoba X-Ray Clinic) was listed in the Waste Generators Summary database. This site is located approximately 245 m north-northwest of the Site and is inferred to be hydraulically transgradient relative to the Site. Given its location, it is HLC's opinion that this property could not result in subsurface impacts at the Site.
- 1383 Pembina Highway (Gilbert International Inc.) was listed in the Scott's Manufacturing Directory database. This site is located approximately 137 m south of the Site and is inferred to be hydraulically transgradient relative to the Site. Given its location, it is HLC's opinion that this property could not result in subsurface impacts at the Site.
- 1399 Pembina Highway (Prairie Oven Inc.) was listed in the Scott's Manufacturing Directory database. This site is located approximately 173 m south of the Site and is inferred to be hydraulically transgradient relative to the Site. Given its location, it is HLC's opinion that this property could not result in subsurface impacts at the Site.
- Two water wells were located approximately 200 m east-northeast of the Site.

Based on the review of the information provided in the ERIS report, the following could result in potential subsurface impacts at the Site:

- The historical on-Site presence of Fuel Storage Tank from 1972 to 1988.

#### **4.5 REGULATORY INFORMATION SUMMARY**

Based on the regulatory information reviewed, the following could result in potential subsurface impacts at the Site:

- The historical on-Site presence of 4545 litres Fuel Storage Tank from 1972 to 1988.

### **5 Site Inspection**

HLC completed a Site Inspection on March 14, 2018 and was accompanied by a Site Representative. The Site Inspection included a walkthrough of accessible areas of the interior of the Site Building and exterior areas of the Site. The Site Inspection was documented with notes and photographs. The results of the Site inspection are discussed below. At the time of the Site Inspection, the ground surface was covered with snow and the weather was clear.

#### **5.1 HAZARDOUS MATERIALS**

No spills or evidence of historical spills (i.e. visible staining) were observed at the Site at the time of the Site Inspection; however, the Site was snow covered at the time of Site Inspection. No chemicals, compressed gas or hazardous materials were found or stored on Site at time of inspection.

## **5.2 ABOVEGROUND AND UNDERGROUND STORAGE TANKS (ASTs AND USTs)**

No aboveground storage tanks (“ASTs”) were observed on-Site, and none were reported by the Site Representative. No evidence of former ASTs was observed by HLC at the time of the site visit.

No evidence of underground storage tanks (“USTs”) was observed on-Site (i.e. fill/vent pipes), and none were reported by the Site Representative. No evidence of former USTs was observed by HLC at the time of the site visit.

## **5.3 WATER AND WASTEWATER**

The water supply source is from the City of Winnipeg. Groundwater is not used as a source of potable water. Water is primarily used for domestic-related activities, as well as in the fire suppression system. Liquid effluent (i.e. system process water and discharges to sewers or other disposal systems) were limited to domestic sewage, which was directed to the municipal sewer system.

There are no known groundwater wells currently in use at the Site. There are two (2) water wells located within 250 metres of the Site, as identified in Section 4.4.

## **5.4 POLYCHLORINATED BIPHENYLS (PCBs)**

The use of PCBs as dielectric fluids in electrical equipment such as transformers, fluorescent lamp ballasts and capacitors was common up to about 1980. Other uses included heat transfer fluid, hydraulic, fluid, dye carriers in carbonless copy paper, plasticizers in paints, adhesives, and caulking compounds. In Canada, PCBs were prohibited from being used in products, equipment, machinery, electrical transformers and capacitors that were manufactured or imported in the country after July 1980.

Where possible, labelling or other forms of identification on electrical and other equipment are compared to summary documents prepared by Manitoba Hydro. Manitoba Hydro may therefore be contacted to determine the PCB content of electrical transformers based on their serial numbers.

Given the age of the Site Building, the dielectric fluid located in fluorescent light ballasts may contain PCBs.

## **5.5 ASBESTOS-CONTAINING MATERIALS (ACMs)**

ACMs are commonly found in building construction materials in buildings constructed in the mid-1980s. In Manitoba, ACM is defined as being either non-friable (i.e. containing 1.0% or greater of asbestos fibres) or friable (i.e. containing 0.1% or greater asbestos fibres). Friable asbestos, which is a material that can be crumbled, powdered or pulverized by hand pressure, was widely used in

sprayed fireproofing until 1973, and in decorative or finished plasters, and thermal systems insulation until the early 1980s. Non-friable asbestos, which is a material that cannot be crumbled, powdered or pulverized by hand pressure, was widely used in building construction including in vinyl floor tiles, sheeting flooring, ceiling tiles, cement boards, gaskets, and several other products until the mid-1980s.

Given the year of construction of the Site Building, there is a potential for ACMs to be present within the Site Building. The Municipal Accommodation Division of the City of Winnipeg prepared an Asbestos Inventory Control Report dated December 13, 2017. The report stated that the following materials in the building were tested and the material condition were recorded as “Good”.

- Sheet flooring located in the front entrance, hallway and waiting room
- Drywall compound located in the front entrance, hallway, waiting room and lunch room
- 12” x 12” flooring tile located in the interview room (1, 2, 3 and 4), sergeant office, clerk office, superintendent office, lunch room, gymnastic room and storage area in the basement
- 12” x 12” flooring tile under floor located in the sergeant office.
- Texture wall located in the vault
- Plaster & scratch coat- window jamb located in the general office and on the second floor in the crime station room hallway and men’s locker area
- Plaster ceiling located in the east washdown area
- Plaster wall located in the traffic room and gymnastic room
- Stucco ceiling located in the garage and east wall
- 9” x 9” floor tile located on the second floor in the hallway and men’s locker area and on the basement in the storage area
- Window caulking located in the south wall and on the second floor in the west hall
- Mastic duct located on the second floor on the roof top unit

The following material was not tested in the Asbestos Inventory Control report, but their condition was recorded as “Good”;

- 12” x 12” flooring tile located in the storage/ electrical room, breathalyzer room, women’s shower/ locker room, detective interview room (5 & 6), janitor room and traffic room
- 12” x 12” flooring tile under carpet located in the clerk office, inspector office and superintendent office
- 12” x 12” flooring tile under flooring located in the sergeant office, general office
- Pipe fitting located in the storage/ electrical room
- Texture wall located in the stairwell
- Plaster ceiling located in the women’s shower/ locker
- Plaster wall located in the garage
- 9 x 9 floor tile located on the second floor in the crime station room

The following material were tested but their condition was recorded “Need Repair”;

- Plaster ceiling located in the east hallway and washdown area
- Stucco ceiling located in the garage and front entrance
- Plaster wall & ceiling at the east window located in the gymnastic area
- Plaster and scratch coat – window jamb located in the men’s locker area and hallway

The report stated that the Asbestos inspection and inventory updates were conducted annually but there may be asbestos containing materials that were not located during asbestos inspections. The report also noted that floor tile and sheet flooring installed before 1990 may contain asbestos and must be treated as an asbestos containing material and all vermiculite insulation must be treated as an asbestos containing material since vermiculite insulation may contain pockets of asbestos.

ACMs that may be present within the building, but which were not observed or reported during the Site Inspection, may include roofing materials and mastics, joint compounds associated with various types of concrete block, vermiculite insulation within wall cavities, and thermal insulating materials such as fire door insulation, and gaskets associated with mechanical equipment.

HLC did not conduct an asbestos survey as part of this Phase I ESA, nor was destructive or intrusive sampling performed as part of this Phase I ESA. Prior to any demolition or renovation activities, an asbestos survey of the building would be required.

## **5.6 LEAD-CONTAINING PAINTS (LCPS)**

Lead was extensively used for pigmentation, sealing, and as a drying agent in oil-based paints up until the early 1950s. Exterior paints can typically contain up to 60% lead by weight. A decrease in content of lead used in paints began in 1960s. Although paints containing lead were banned from use on both exterior and interior surfaces of buildings, furniture or household products in the 1970s, various commercial paints are still known to contain lead.

Given the year of construction of the Site Building, there is potential for paints containing lead to be present at the Site, including interior surfaces. HLC did not conduct a survey of lead in painted surfaces as part of this Phase I ESA.

Prior to any demolition or renovation activities, a designated substance survey (DSS), including lead, would be required.

## **5.7 OZONE-DEPLETING SUBSTANCES (ODS)**

ODS, such as chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and halons, may be used as refrigerants, propellants and in the manufacture of items such as packaging, insulation, solvents and halon-based fire extinguishing agents.

Sources of ODS were limited to refrigerants that may be present within the roof top units, which could be noted within the phase-out schedules for elimination in both Provincial and Federal regulations.

## **5.8 RADON**

Radon is a radioactive gas that is formed by naturally occurring radioactive breakdown of uranium in soil, rock and water. Radon escapes from the ground and is mixed with outdoor air forming concentrations that are too low to be of concern. If radon enters a building, its concentration can accumulate to higher levels. Based on information presented by the Canadian Centre for Occupational Health and Safety, the area in which the Site is located (i.e. Winnipeg) is known to have elevated radon levels. Health Canada has developed guidelines for acceptable levels of radon in buildings; however, there are currently no regulations governing acceptable levels of radon within buildings, and no requirements for testing or mitigation if levels are measured to exceed the current Health Canada guideline. Testing for radon in the Site Building was beyond the scope of this Phase I ESA. The Site Representative was unaware of any radon survey performed within the Site Building.

## **5.9 MERCURY**

Mercury has historically been used in the construction of thermostats, switches and lamps. Mercury was also commonly added to paint coatings as a fungal retardant but is not normally tested as the proper handling and disposal of lead-containing paints would typically minimize any safety or disposal issues related to mercury.

Potential sources of mercury observed at the Site were limited to small commercial switches (see site photographs).

## **5.10 MOULD**

The presence of mould or other microbiological contamination in buildings has become a concern to building tenants and owners due to potential health effects on occupants and users. Provincial labour departments have recently issued guidelines on enforced regulations to protect the health of construction workers who are exposed to mould in the course of building renovation. The presence of water leaks or high humidity can cause the growth or amplification of mould within indoor building environments.

Suspected visible mould growth on building materials is identified by visual growth or evidence of water intrusion and/or damage. There was evidence of suspected water staining/damage on the building on both floors (see site photographs). It is important to note that mould growth may occur within enclosed spaces and may not be evident from a walkthrough building assessment, as was performed as part of this Phase I ESA.

### **5.11 AIR EMISSIONS**

Washroom vents are exhausted to the exterior of the Site Building. No kitchen vents were observed, and none were reported by the Site Representative. No electricity emergency generator was observed, and none was reported by the Site Representative.

### **5.12 STAINING AND STRESSED VEGETATION**

No staining or stressed vegetation was observed at the Site. The parking lot areas were observed to be in good condition (i.e. no cracking or pitting); however, the Site was snow covered at the time of Site Inspection. No evidence of historical chemical discharges or releases was observed during the Site Inspection. The Site Representative reported that no known historical chemical spills have occurred on-Site.

### **5.13 HAZARDOUS AND NON-HAZARDOUS WASTE**

Manitoba Sustainable Development generally defines hazardous waste, with certain exceptions, as “waste dangerous goods” from the use of familiar products that households and businesses use every day. Hazardous waste can include paint thinners, waste paint, oil, oil filters, batteries, and cleaning chemicals. If the product has a dangerous goods safety label on its packaging, the waste product is more than likely a hazardous waste. There was no hazardous waste observed at the Site.

### **5.14 SUMMARY OF SITE INSPECTION FINDINGS**

The following issues have been identified as representing a potential environmental concern to the Site, but only prior to any renovation or demolition activities given the potential for disturbances at that time:

- Potential asbestos-containing materials in building products not sampled in previous asbestos survey report;
- Potential lead-containing paints in areas of the building;
- Potential mercury in switches, lead-containing paints and fluorescent lamps; and
- Potential of mould-impacted materials.

## **6 Conclusion and Recommendations**

Based on the results of the Phase I ESA completed by HLC, the following could result in potential subsurface impacts at the Site:

- The historical on-Site presence of a UST (based on the Ecolog ERIS report) and the presence of a decommissioned petroleum storage (based on the Manitoba Sustainable Development Response).

HLC recommends that a Phase II ESA be conducted to assess the potential of petroleum hydrocarbon contamination (PHC) in the soil.

## **7 Standard Limitations**

This Phase I ESA was performed in order to identify potential issues of environmental concern associated with the Site located at 1350 Pembina Highway, Winnipeg, Manitoba, at the time of the Site Inspection. This Phase I ESA was completed in general compliance with currently acceptable practices for environmental site investigations, and specific Client requests, as applicable to this Site. This report was prepared for the exclusive use of the Client, subject to the conditions and limitations contained within the duly authorized work plan. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third parties. If additional parties require reliance on this report, written authorization from HLC will be required. Such reliance will only be provided by HLC following written authorization from the Client. HLC disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs. No other warranties are implied or expressed.

HLC will not be responsible for any consequential or indirect damages. HLC will only be held liable to damages resulting from negligence of HLC. HLC will not be liable for any losses or damage if the Client has failed, within a period of two (2) years following the date upon which the claim is discovered within the meaning of the *Manitoba Limitation of Actions Act RSM 1987*, to commence legal proceedings against HLC to recover such losses or damage.

The information provided in this report is based upon analysis of available documents, records and drawings, and personal interviews. In evaluating the Site, HLC has relied in good faith on information provided by other individuals noted in this report. HLC has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. HLC accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts or persons interviewed or contacted, or contained in reports that were reviewed.

The scope of work for this Phase I ESA did not include an intrusive investigation for designated substances (i.e. asbestos, mould, lead, etc.) and, therefore, these materials may be present in concealed areas.

HLC makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and their interpretations may change over time.

The CSA document entitled “Phase I Environmental Site Assessment, CSA Standard Z768-01” dated November 2001, does not apply to environmental auditing or environmental management systems. Therefore, with respect to Site operations and conditions, compliance with applicable Federal, Provincial or Municipal acts, regulations, laws and/or statutes was not evaluated as part of the Phase I ESA.

## 8 Closure

The conclusions and recommendations represent the best judgement of the assessor based on the Site conditions observed on March 14, 2018, and current environmental standards.

We trust that the information presented in this report meets your current requirements. Please do not hesitate to contact the undersigned if you have any questions or concerns.

Regards,

### HLC Consulting Ltd.

Written by:

Per



Jonathan Ota, PhD, P. Geo.  
Geoenvironmental Scientist  
Ph: (431) 335-3775  
Email: [Jota@hlconsultingltd.ca](mailto:Jota@hlconsultingltd.ca)

Reviewed by:

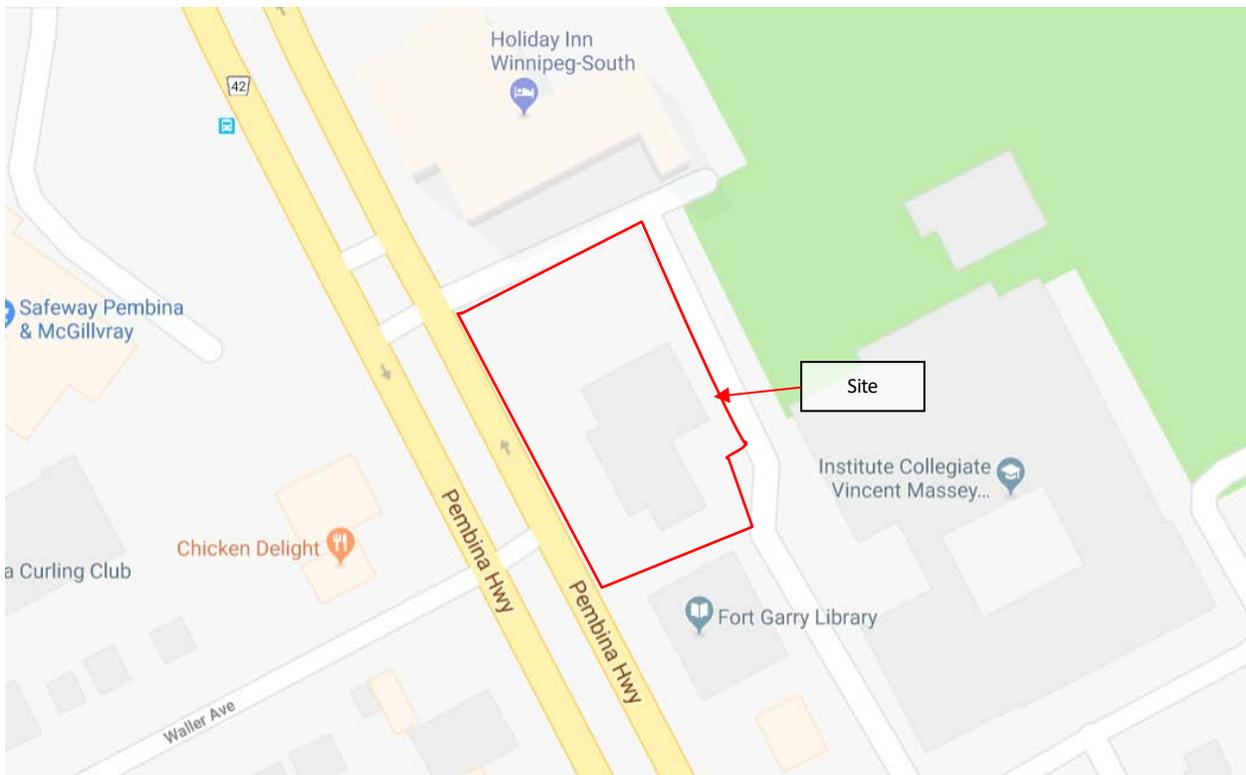
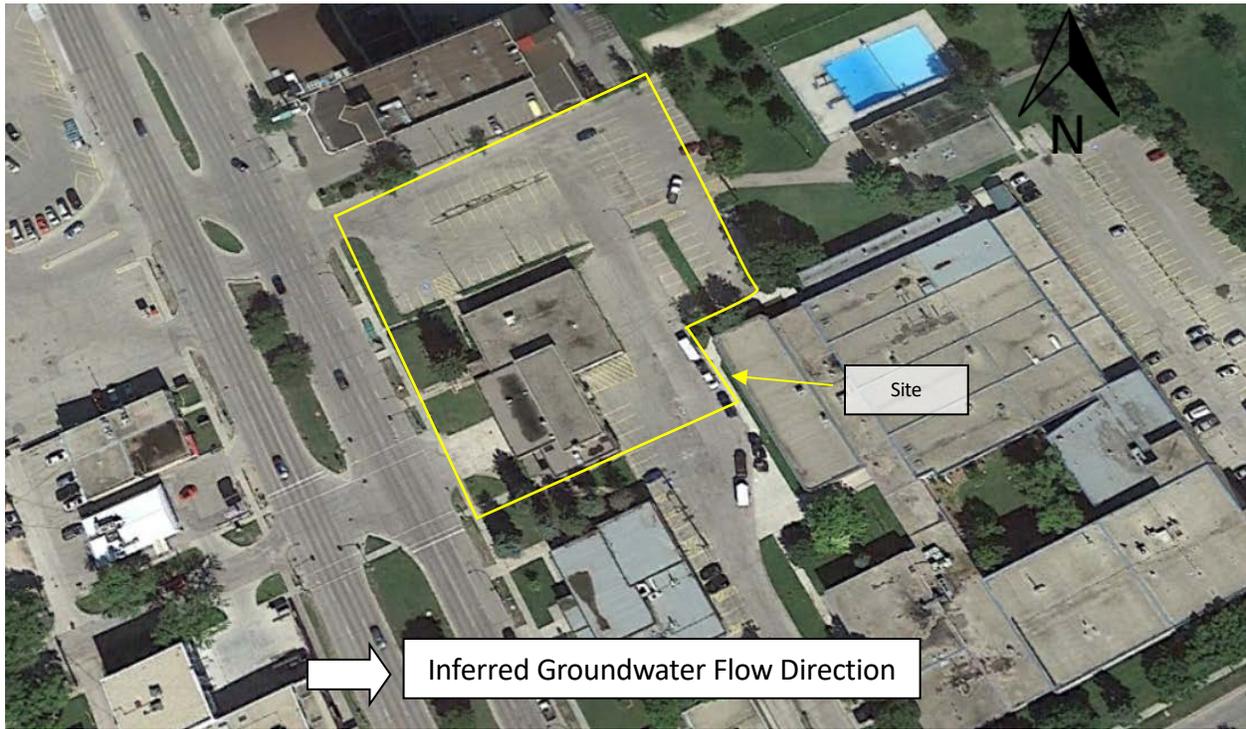
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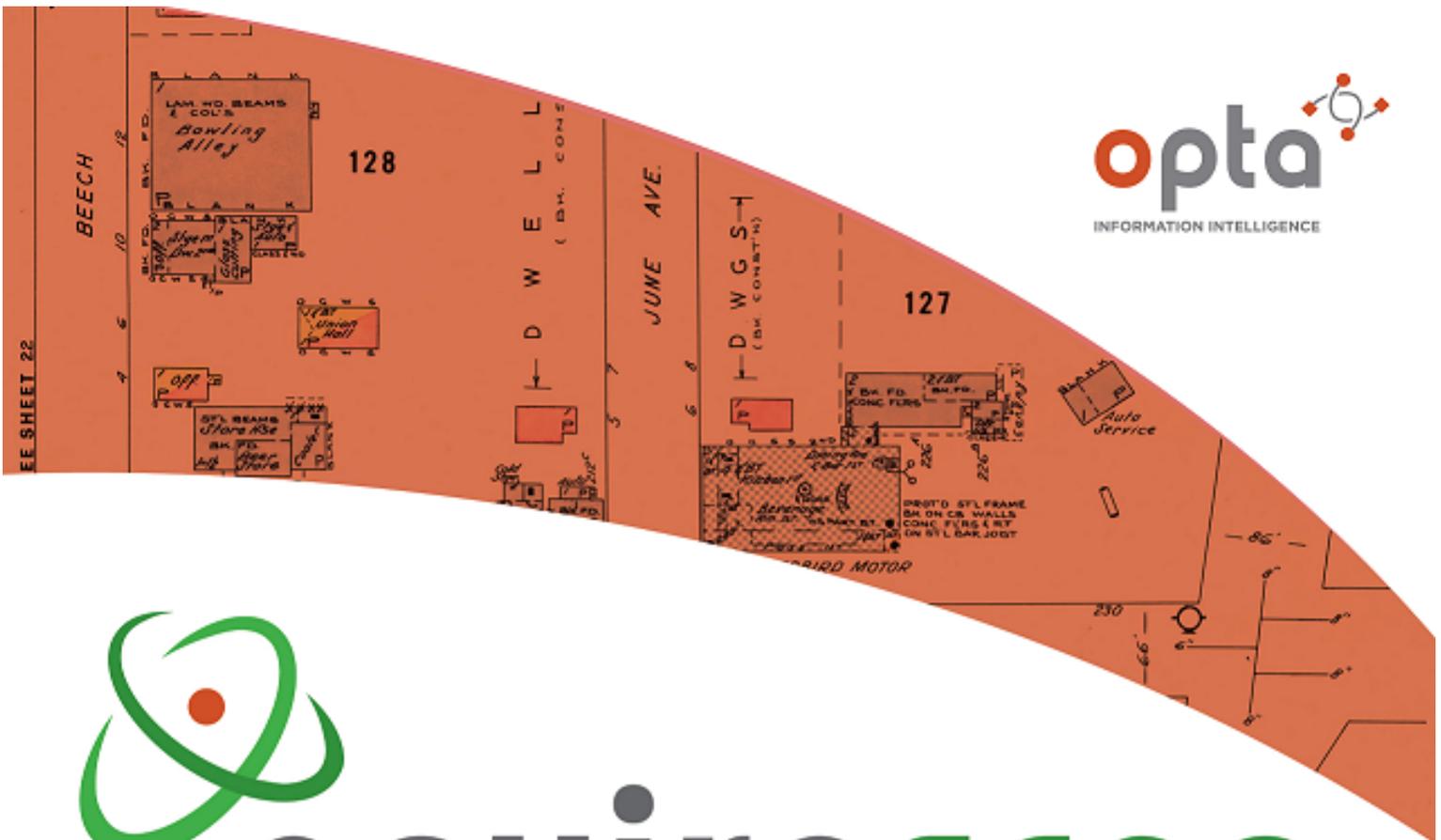
Léo Jr. Nicolas, M.Sc, P.Ag, CIH  
Partner / Occupational Hygienist  
Ph: (204) 793-9762  
Email: [lnicolas@hlconsultingltd.ca](mailto:lnicolas@hlconsultingltd.ca)

**APPENDIX I**  
**SITE FIGURES**

Figure 1. Site and Surrounding Land Use Plan.



**APPENDIX II**  
**OPTA RESPONSE**



# enviroscan



An SCM Company

175 Commerce Valley Drive W  
Markham, Ontario L3T 7Z3

T: 905-882-6300  
W: [www.optaintel.ca](http://www.optaintel.ca)

Report Completed By:

**Anthony**

Site Address:

**1350 Pembina Hwy Winnipeg MB**

Project No:

**20180307175**

Opta Order ID:

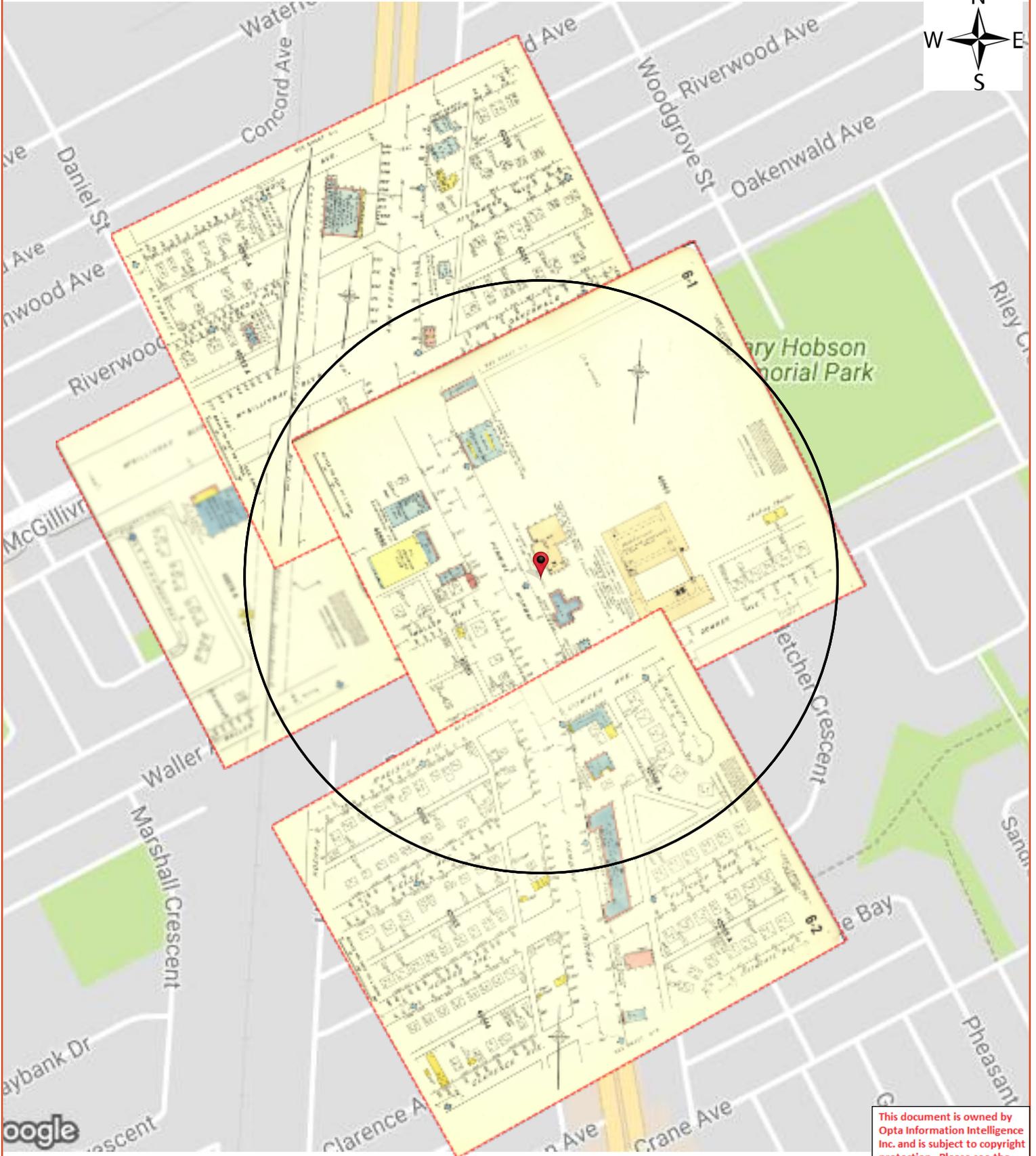
**46573**

Requested by:

**Eleanor Goolab  
Ecolog ERIS**

Date Completed:

**3/16/2018 7:18:30 PM**



## **Opta Historical Environmental Services Enviroscan<sup>TM</sup> 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 Opta's records relating to the described property (hereinafter referred to as the "Property"). Opta 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 or in Opta's possession at the time of Report delivery to the purchaser. 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. Opta 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**

Opta 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 Opta Reports or from any tortious acts or omissions of Opta'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 Ontario and the laws of Canada applicable therein.

**Page: 4**

Project Name: 1350 Pembina  
Highway Winnipeg

Project #: 20180307175  
P.O. #: 20180144

**ENVIROSCAN Report**

**Report Index**

**Requested by:**  
Eleanor Goolab

Date Completed: 03/16/2018 19:18:30



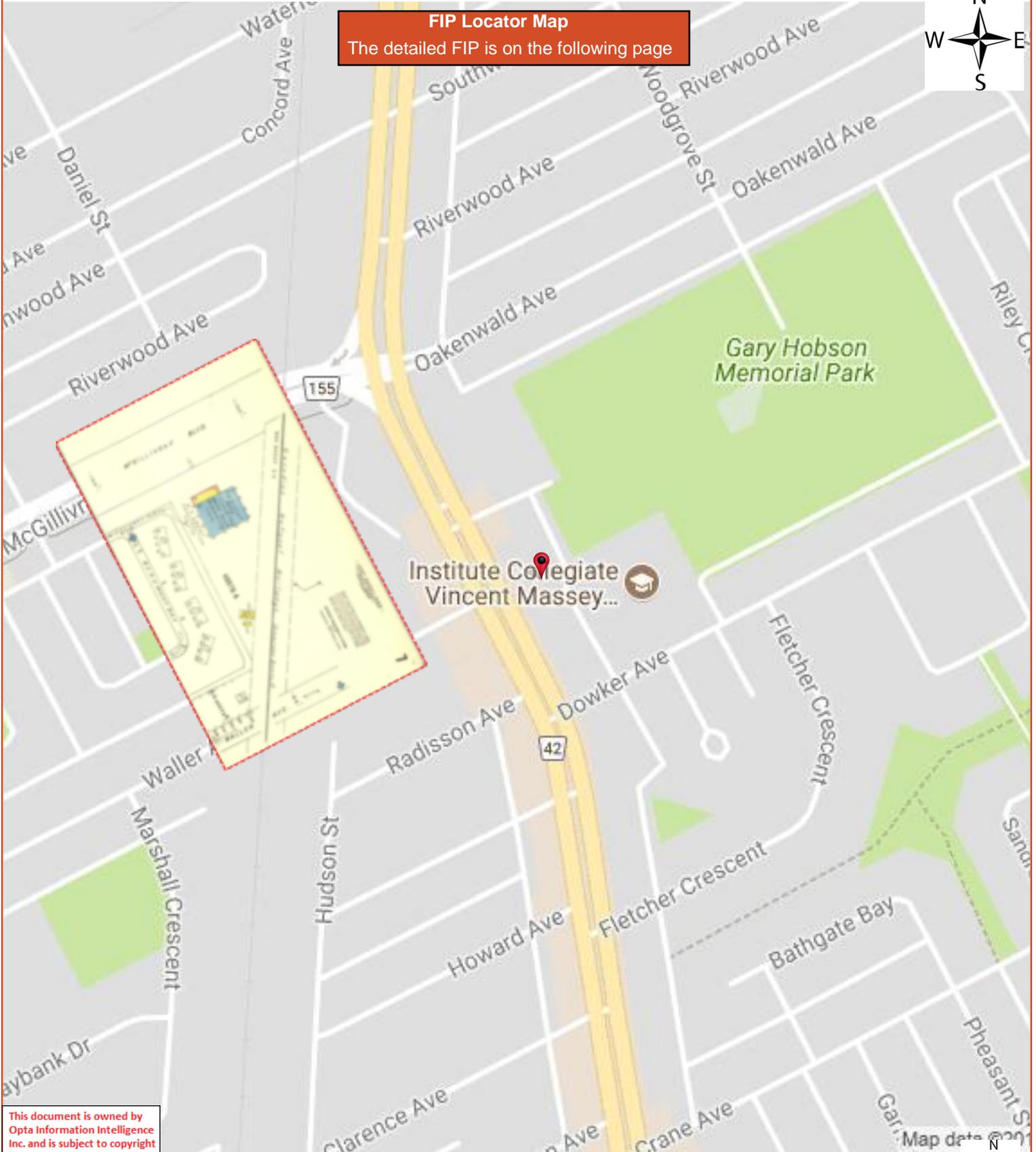
OPTA INFORMATION INTELLIGENCE

<b>Page</b>	<b>Report Title</b>
6	(1960) Volume: Fort Garry Firemap: 7
8	(1960) Volume: Fort Garry Firemap: 5-2
10	(1960) Volume: Fort Garry Firemap: 6-1
12	(1960) Volume: Fort Garry Firemap: 6-2

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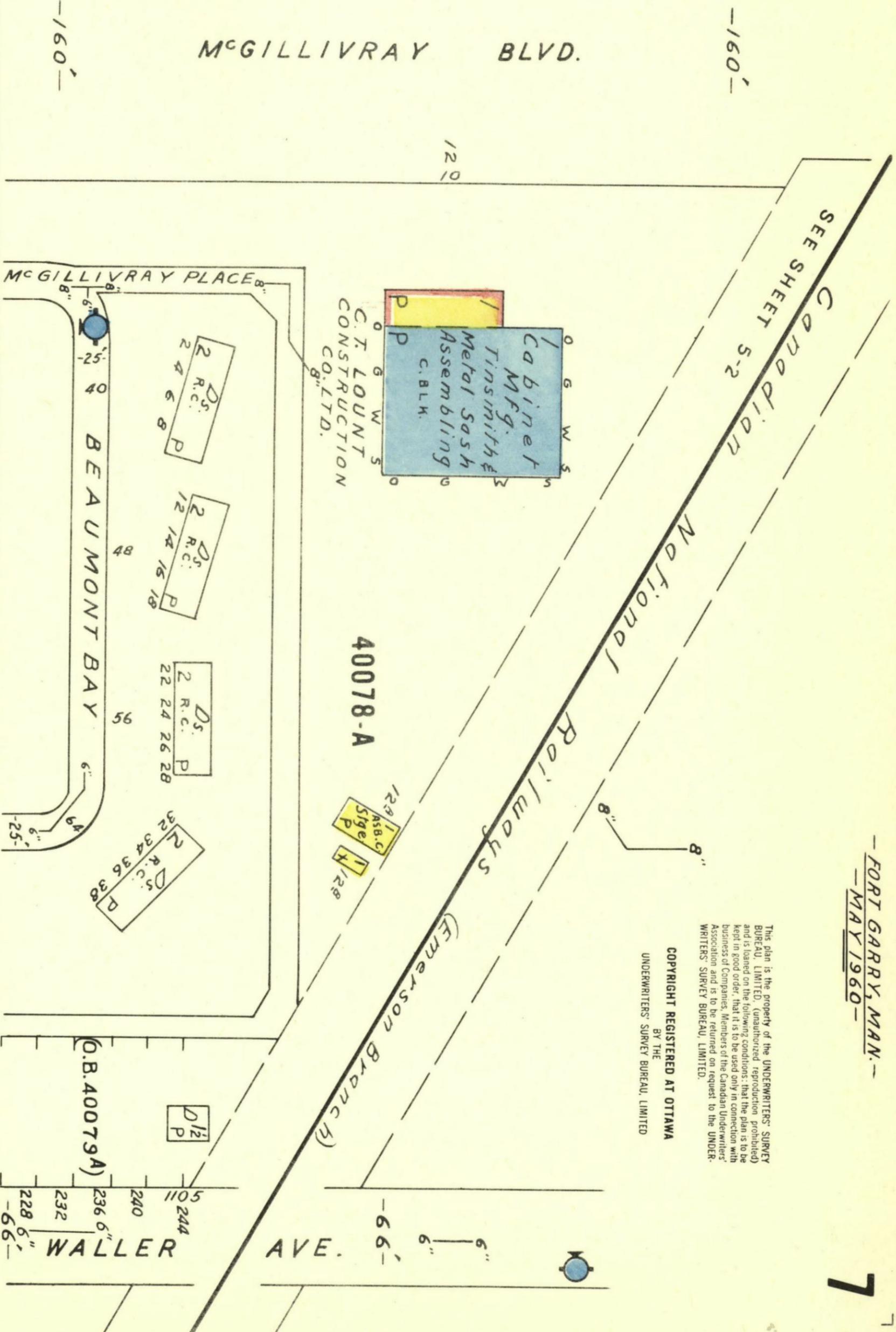
**FIP Locator Map**  
The detailed FIP is on the following page



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Map data © 2018

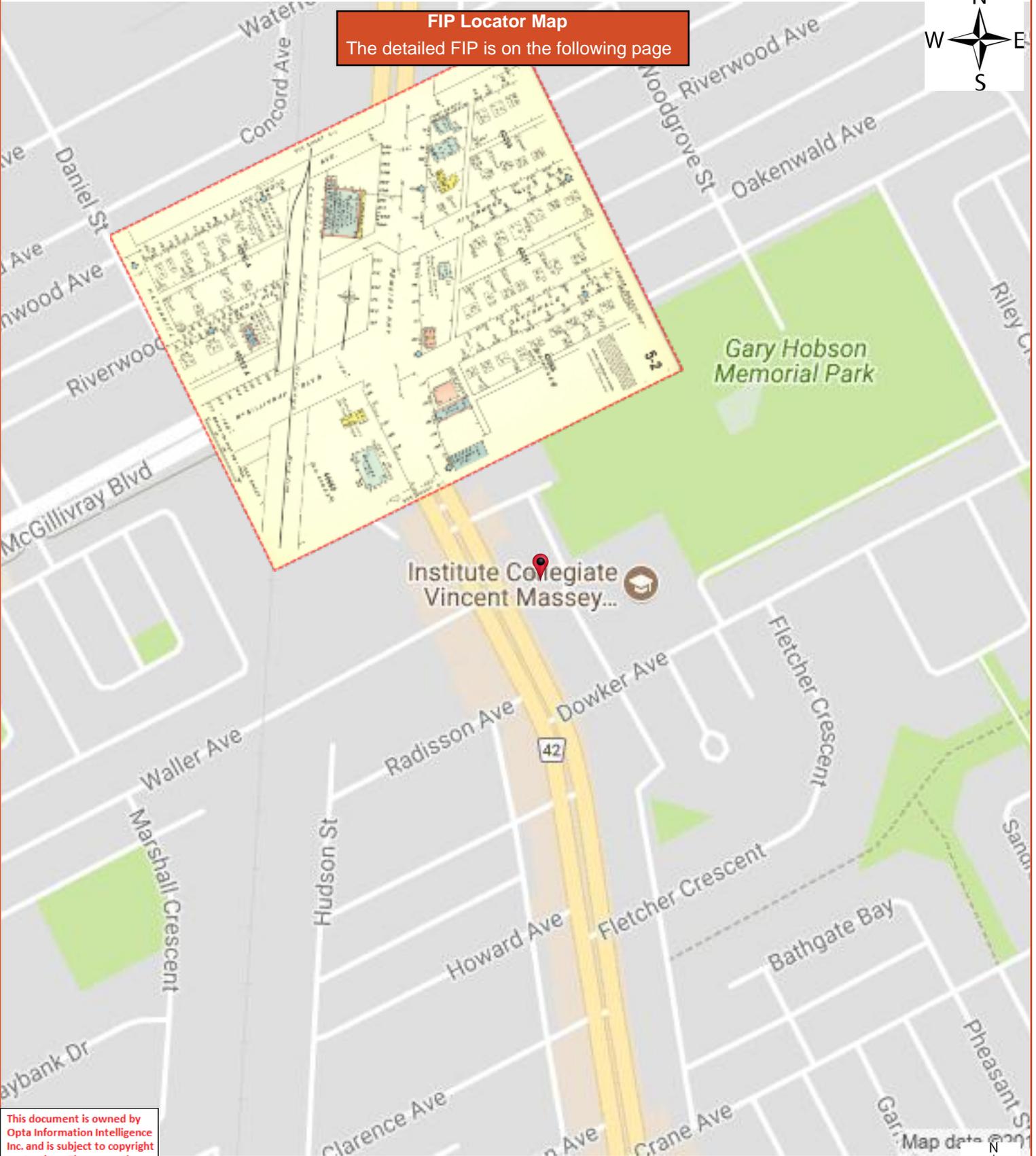




— FORT GARRY, MAN. —  
— MAY 1960 —

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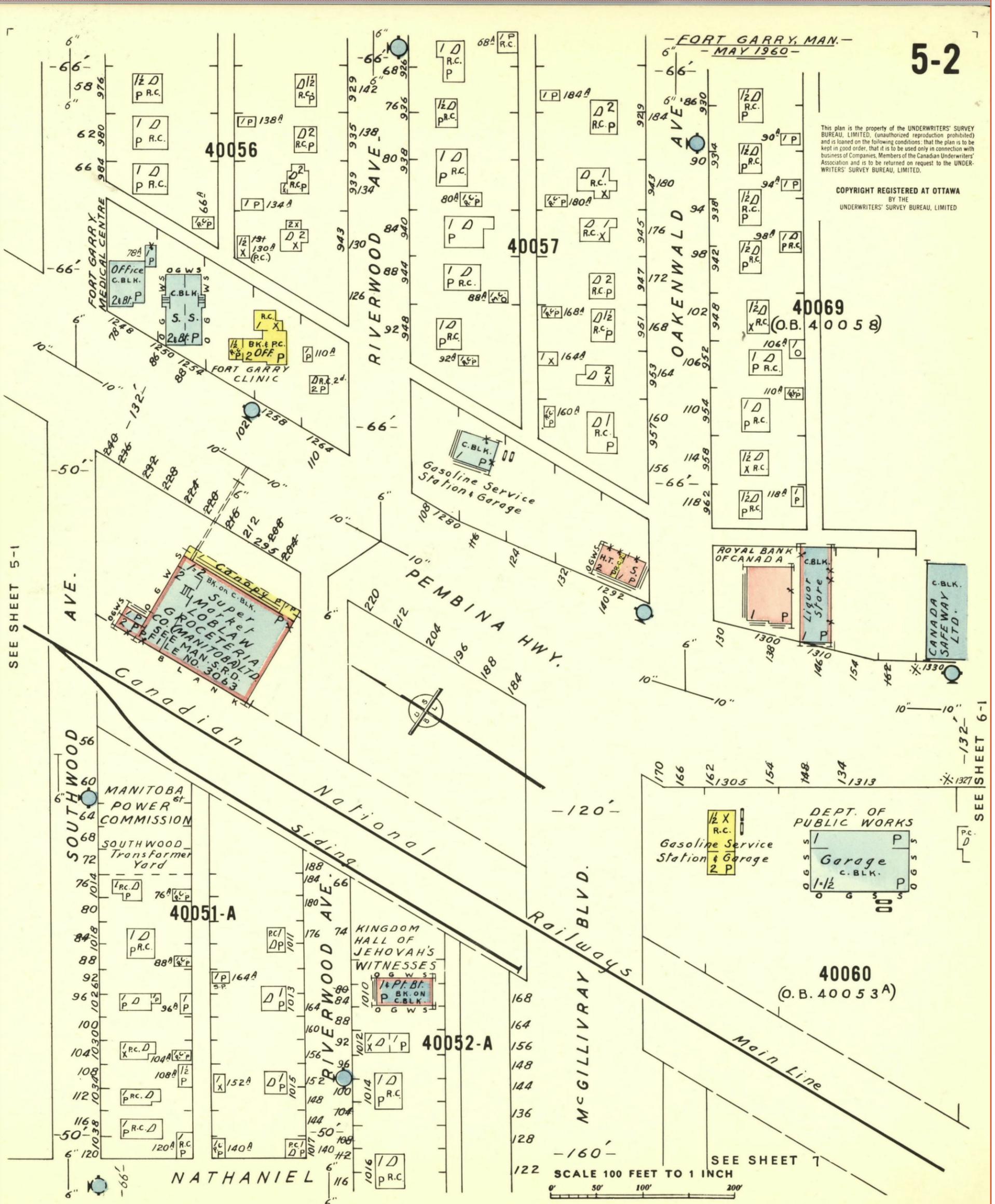
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5-2

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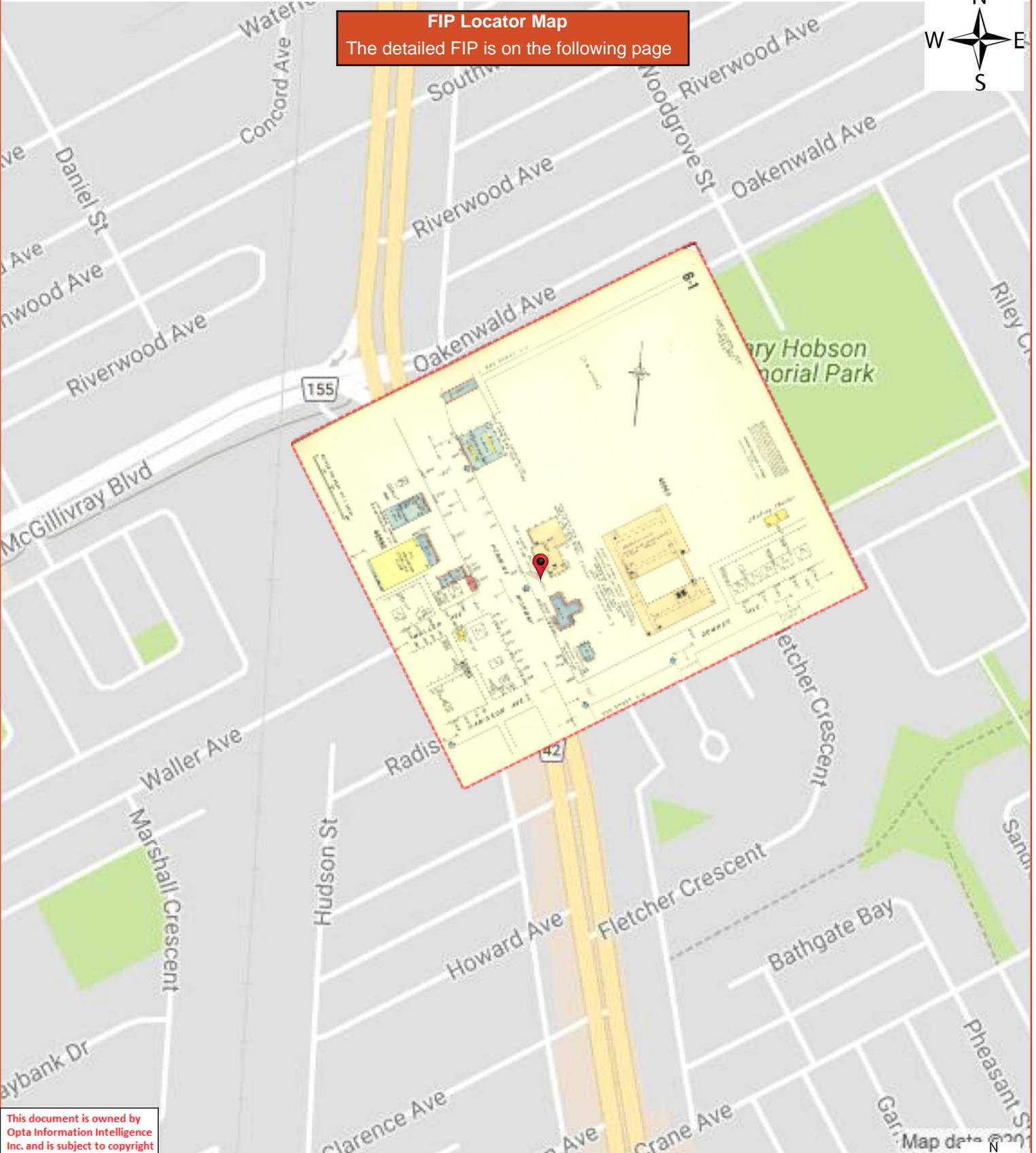
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SEE SHEET 5-1

SEE SHEET 6-1

SEE SHEET 7

SCALE 100 FEET TO 1 INCH



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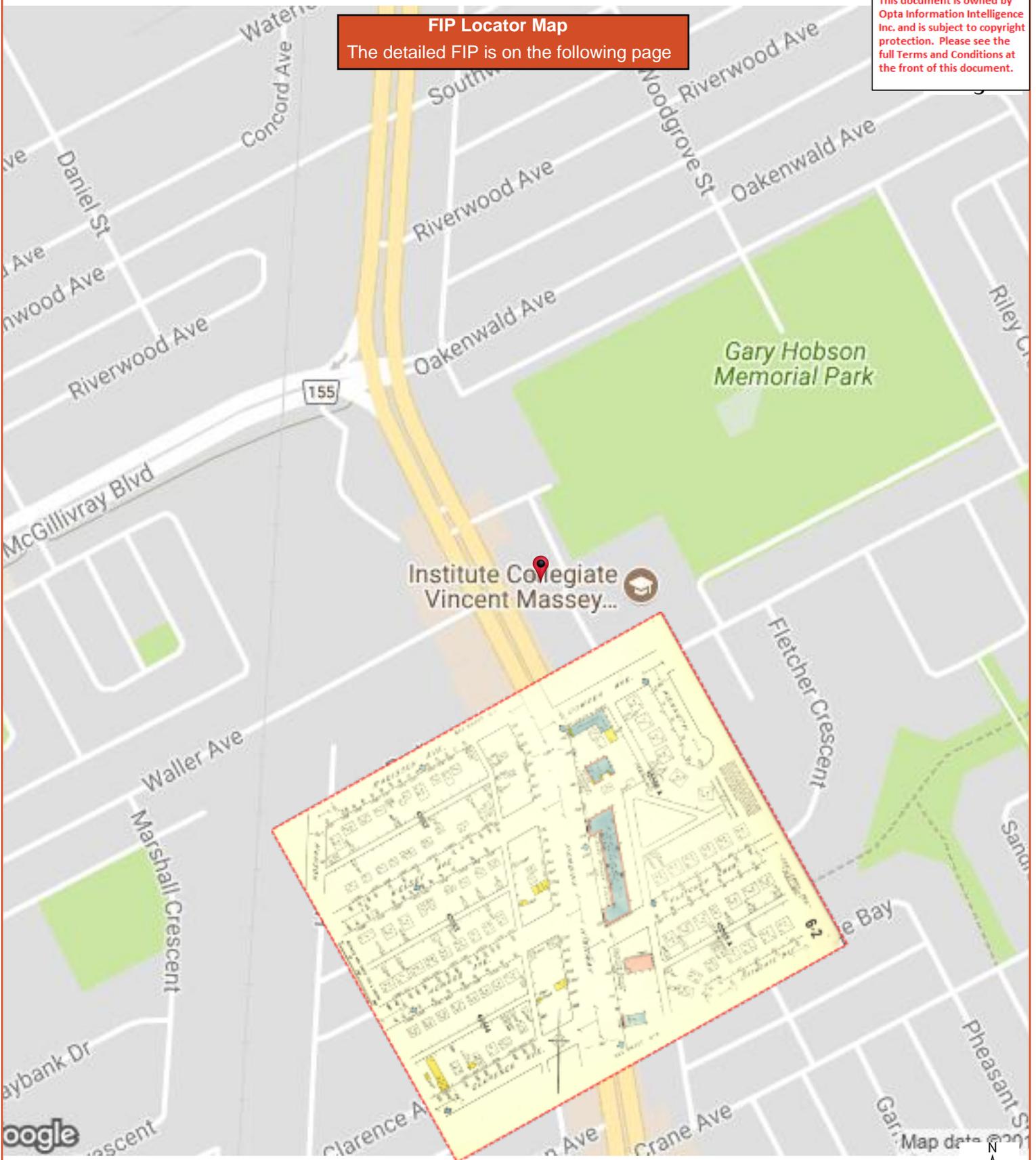
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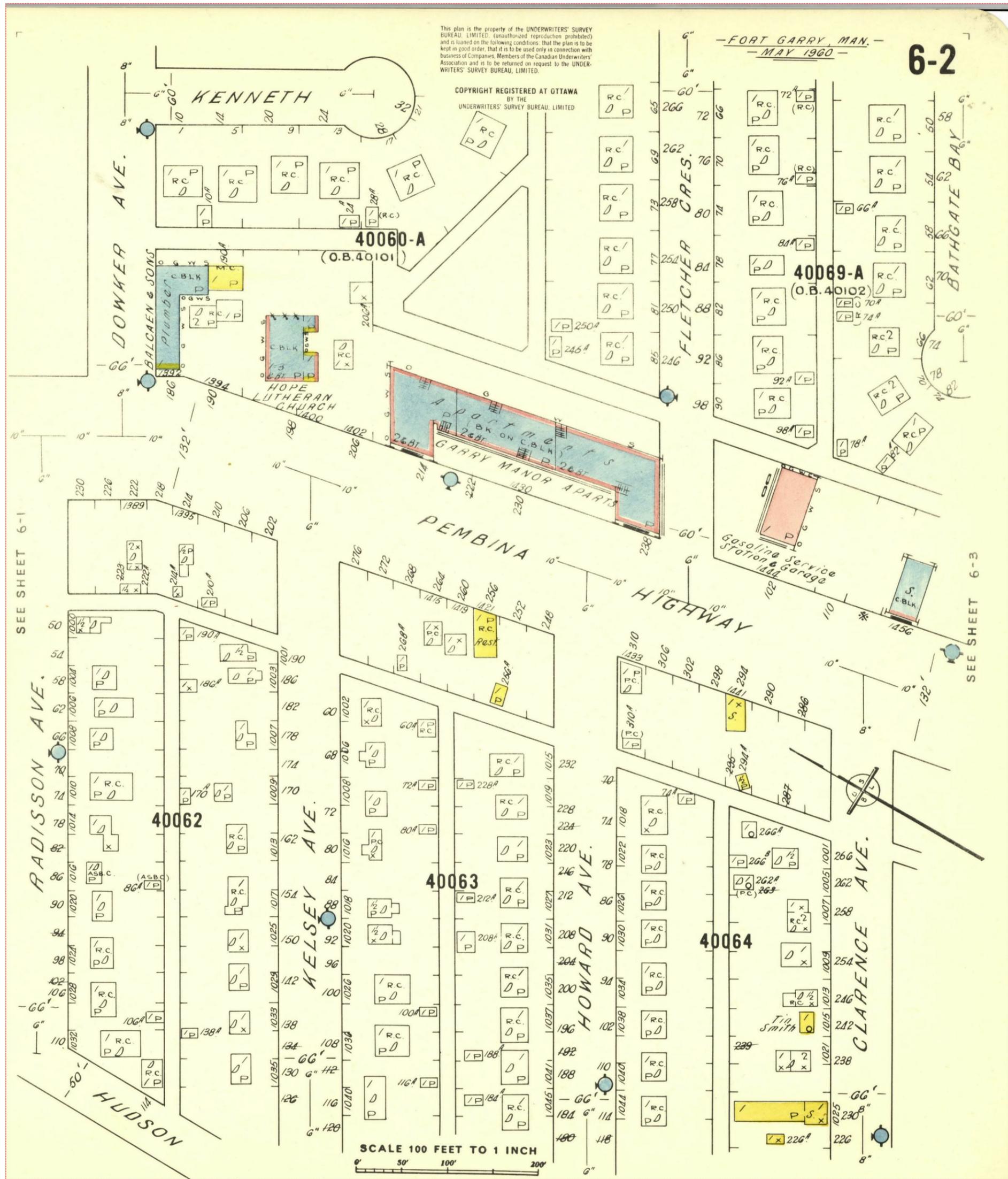




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**APPENDIX III**

**CORRESPONDENCE WITH MANITOBA SUSTAINABLE  
DEVELOPMENT**



## Sustainable Development

Environmental Compliance & Enforcement  
27 2<sup>nd</sup> Avenue SW, Box 10  
Dauphin, Manitoba R7N 3E5  
T 204-622-2030 F 204-638-8626  
www.manitoba.ca

March 27, 2018

File #: 2457

Client File #:

Jonathan Ota  
HLC Consulting Ltd.  
3 Red Lily Road  
Winnipeg, MB R3X 0G3

Dear Jonathan Ota:

**Re: 1350 Pembina Highway, Winnipeg**

Your request to conduct an Environmental File Search of the property listed above has been completed. The attached Environmental Stewardship Response summarizes the information found in the current records maintained by the Department of Sustainable Development.

Should you require additional information **regarding a confirmed contaminated or impacted site** we have on file, please contact Jeremy Mowez, Environment Officer, at 204-945-6478 or [Jeremy.Mowez@gov.mb.ca](mailto:Jeremy.Mowez@gov.mb.ca).

Should you have questions regarding the information presented on the attached file search response, **please contact the Environment Officer listed on the response form.**

Yours truly,

Tammy Wruth  
Administrative Assistant

Attached: Environmental Stewardship File Search Response  
(GST registration # R107863847)

#### Disclaimer

This response summarizes the information found in current records maintained by the Department of Sustainable Development and is for informational purposes only. No representation or responsibility is assumed whatsoever as to the completeness of this information as it relates to the environmental condition or prior incidents associated with the property in question. In order to obtain more complete information on the property, persons may wish to retain the services of a qualified consultant for the purposes of conducting an environmental audit.

# ENVIRONMENTAL STEWARDSHIP DIVISION FILE SEARCH RESPONSE



Date Received	08/Mar/2018	File Search #	2457
Company Name	HLC Consulting Ltd.		
Property	1350 Pembina Highway, Winnipeg		
Search Requested by	Jonathan Ota		
Environment Officer	Julie Froese	EO Phone #	204-945-7104
Date Completed	March 19, 2018		

Program	File	Status	Licence / Permit/File/EMS #
Environment Act Licence or Permit	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Operating <input type="radio"/> Inactive <input type="radio"/> Decommissioned	
DGHT Act Licence or Permit	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Operating <input type="radio"/> Inactive <input type="radio"/> Decommissioned	
Registered Hazardous Waste Generator	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Operating <input type="radio"/> Inactive <input type="radio"/> Decommissioned	
Registered Petroleum Storage Site	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Operating <input type="radio"/> Inactive <input checked="" type="radio"/> Decommissioned	EMS OP ID: 29098, City of Winnipeg, 1350 Pembina Hwy
Permitted/Registered Manure Storage Facility or Confined Livestock Area	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Operating <input type="radio"/> Inactive <input type="radio"/> Decommissioned	
Contaminated/Impacted Site	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Not Designated <input type="radio"/> Designated Contaminated <input type="radio"/> Designated Impacted	
Orders (Environmental Protection Order, Emergency Action Notice, Director's Order, or Environment Officer Order)	<input type="radio"/> Yes <input checked="" type="radio"/> No		
Additional Comments	The Contaminated/Impacted Site Program does not have a file on the site. This site is not a designated contaminated or impacted site pursuant to The Contaminated Sites Remediation Act.		

This report summarizes the information found in current electronic records maintained by the Department and is for informational purposes only. No representation or responsibility is assumed whatsoever as to the completeness of this information as it relates to the environmental condition or prior incidents associated with the property in question. In order to obtain more complete information on the property, persons may wish to retain the services of a qualified consultant for the purposes of conducting an environmental audit.

#12505

12505

STORAGE TANK SYSTEM (S.T.S.) REGISTRATION FORM

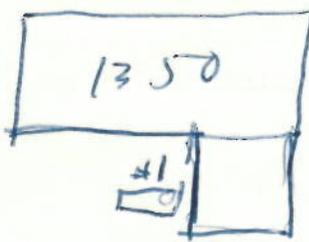
Required by

PROVINCE OF MANITOBA - ENVIRONMENTAL MANAGEMENT DIVISION

Pursuant to the Manitoba Regulation under the Clean Environment Act respecting the Handling and Storage of Gasoline and Associated Products.

EXISTING SYSTEMS

- Business Name: CITY OF WINNIPEG - DISTRICT 6  
 Business Address or Legal Description: CITY POLICE  
1350 PEMBINA, WPL  
 Operator of S.T.S.: DISTRICT 6, WPG POLICE DEPT.  
 Owner of S.T.S.: CITY OF WINNIPEG
- Plan of S.T.S. showing roads, buildings, distances and other distinctive features. (Use separate sheet if required).  
NORTH.   
 Assign a number to each tank. PEMBINA



3. Provide the information indicated below for each tank. (Use separate sheet if required).

Tank No.	Tank Material (Fiberglass or steel)	Tank Type (Above Ground or underground)	Tank Capacity (gallons)	Product Normally in Tank	Estimated Age of Tank
#1	STEEL	U/G	1000	UNK.	15 YRS
Tank removed on November 21, 1988 					

19202

4. If a corrosion protection system is being used, please provide details.

N/A

5. I hereby certify that the information provided by me on this registration form is complete and accurate.

[Signature]  
S.T.S. Operator

APRIL 7, 1987  
Date

This form does not supersede the requirements of any other Governmental Acts, Regulations or Standards.

Forward to: Environmental Control Services  
Bldg. 2 - 139 Tuxedo Avenue  
WINNIPEG, Manitoba  
R3N 0H6



# Inspection Report

BUSINESS NAME: <i>WPG City Police - District 6</i>	INSPECTION DATE: <i>APRIL 7, 1987</i>
ADDRESS: <i>1350 Pembina</i>	RE-INSPECTION DATE(S):
PERSON CONTACTED: <i>WAYNE WEBB</i>	INSPECTOR: <i>M. MAZEROLI</i>

**INSPECTION CATEGORY**

New Installation	<input type="checkbox"/>	General Site	<input checked="" type="checkbox"/>	Cathodic Protection Check	<input type="checkbox"/>
Inventory Record	<input checked="" type="checkbox"/>	Complaint Investigation	<input type="checkbox"/>	Other	<input type="checkbox"/>

Items check ( ) below were inspected and found to be in compliance with The Clean Environment Act. Items marked with an "x" were found to be unsatisfactory.

TANKS/PIPING	SPILL/LEAK CONTAINMENT	INSTALLATION STANDARDS	
Tank Construction Spec. <input type="checkbox"/>	Dike Dimensions <input type="checkbox"/>	Excavation Dimensions <input type="checkbox"/>	
Tank Condition <input type="checkbox"/>	Dike Material <input type="checkbox"/>	Backfill Material <input type="checkbox"/>	
Coating Condition <input type="checkbox"/>	Dike Condition <input type="checkbox"/>	Tank Depth/Slope <input type="checkbox"/>	
Pipe Material <input type="checkbox"/>	Spill Slabs/Sumps <input type="checkbox"/>	Test Procedures <input type="checkbox"/>	
Swing Joints/Flex Connectors <input type="checkbox"/>	Spill Preventers <input type="checkbox"/>	<b>CATHODIC PROTECTION</b>	
Valve Conditions <input type="checkbox"/>	Drainage Control <input type="checkbox"/>		System Type:
Pipe/Valve Labels and Tags <input type="checkbox"/>	<b>INVENTORY RECORDS</b>		Impressed Current <input type="checkbox"/>
Valve Locks <input type="checkbox"/>			Approved Form <input checked="" type="checkbox"/>
Observation Wells <input type="checkbox"/>		Entry Frequency <input type="checkbox"/>	Test Station Accessibility <input type="checkbox"/>
<b>GENERAL CONDITIONS</b>	Dip/Meter Readings <input type="checkbox"/>	Rectifier Operational <input type="checkbox"/>	
Site Cleanliness <input type="checkbox"/>	Daily/Weekly Variation <input type="checkbox"/>	Test Readings:	
Waste Oil Disposal <input type="checkbox"/>	Cumulative Variation <input type="checkbox"/>		
Abandoned Tanks <input type="checkbox"/>	Variations within Allowable Limits <input type="checkbox"/>		

**OTHER ITEMS CHECKED**

\_\_\_\_\_

\_\_\_\_\_

TANK NO.	VOLTAGE

INSPECTOR'S COMMENTS: *Registered as of this date*

\_\_\_\_\_

\_\_\_\_\_

New Installation Conforms to Registration Information: YES  NO

Existing Site Conforms to Current Registration Information: YES  NO

**WARNING** — The items listed below must be corrected within the specified deadlines to comply with Clean Environment Act requirements. Failure to comply could result in legal action.

*Inventory to commence as of April 7, 1987.*

Issued To: *Wpg City Police - District 6* Date: *APRIL 7, 1987*

*1350 Pembina* Received By: *[Signature]*

**DEPARTMENT USE ONLY:**

Compliance Date: *APRIL 7, 1987* Bring Forward On: \_\_\_\_\_

Registration Update Required: YES  NO  Received On: \_\_\_\_\_

Computer Update Required: YES  NO  Processed On: \_\_\_\_\_



**APPENDIX IV**  
**ECOLOG ERIS REPORT**

**ERIS**  
ENVIRONMENTAL RISK INFORMATION SERVICES



# DATABASE REPORT

**Project Property:** 1350  
1350 Pembina Hwy  
Winnipeg MB R3T2B6

**Project No:**

**Report Type:** Standard Report

**Order No:** 20180307176

**Requested by:** HLC Consulting Ltd.

**Date Completed:** March 14, 2018

**Environmental Risk  
Information Services**  
A division of Glacier Media Inc.  
P: 1.866.517.5204  
E: info@erisinfo.com

**[www.erisinfo.com](http://www.erisinfo.com)**

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## **Notice: IMPORTANT LIMITATIONS and YOUR LIABILITY**

**Reliance on information in Report:** This report DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a database review of environmental records.

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# Executive Summary

## Property Information:

**Project Property:** 1350  
1350 Pembina Hwy Winnipeg MB R3T2B6

**Project No:**

**Coordinates:**

**Latitude:** 49.839875  
**Longitude:** -97.151568  
**UTM Northing:** 5,522,466.23  
**UTM Easting:** 632,907.32  
**UTM Zone:** UTM Zone 14U

**Elevation:** 746 FT  
227.36 M

## Order Information:

**Order No:** 20180307176  
**Date Requested:** March 7, 2018  
**Requested by:** HLC Consulting Ltd.  
**Report Type:** Standard Report

## Historical/Products:

**Insurance Products** Fire Insurance Maps/Inspection Reports/Site Specific Plans

## Executive Summary: Report Summary

<b>Database</b>	<b>Name</b>	<b>Searched</b>	<b>Project Property</b>	<b>Within 0.25 km</b>	<b>Total</b>
AUWR	<i>Automobile Wrecking &amp; Supplies</i>	Y	0	0	0
CA	<i>Certificates of Approval</i>	Y	0	0	0
CHEM	<i>Chemical Register</i>	Y	0	0	0
CNG	<i>Compressed Natural Gas Stations</i>	Y	0	0	0
CONV	<i>Enforcement Actions</i>	Y	0	0	0
CS	<i>Contaminated/Impacted Sites</i>	Y	0	5	5
DRL	<i>Drill Holes</i>	Y	0	0	0
EEM	<i>Environmental Effects Monitoring</i>	Y	0	0	0
EHS	<i>ERIS Historical Searches</i>	Y	0	4	4
EIIS	<i>Environmental Issues Inventory System</i>	Y	0	0	0
FCON	<i>Federal Convictions</i>	Y	0	0	0
FCS	<i>Contaminated Sites on Federal Land</i>	Y	0	0	0
FST	<i>Fuel Storage Tanks</i>	Y	1	3	4
FUEL	<i>Bulk Fuel Distributors</i>	Y	0	1	1
GEN	<i>Waste Generators Summary</i>	Y	0	11	11
GHG	<i>Greenhouse Gas Emissions from Large Facilities</i>	Y	0	0	0
IAFT	<i>Indian &amp; Northern Affairs Fuel Tanks</i>	Y	0	0	0
MAST	<i>Manure Storage Facilities</i>	Y	0	0	0
MINE	<i>Canadian Mine Locations</i>	Y	0	0	0
MNR	<i>Mineral Occurrences</i>	Y	0	0	0
MOGW	<i>Manitoba Oil and Gas Wells</i>	Y	0	0	0
NATE	<i>National Analysis of Trends in Emergencies System (NATES)</i>	Y	0	0	0
NDFT	<i>National Defense &amp; Canadian Forces Fuel Tanks</i>	Y	0	0	0
NDSP	<i>National Defense &amp; Canadian Forces Spills</i>	Y	0	0	0
NDWD	<i>National Defence &amp; Canadian Forces Waste Disposal Sites</i>	Y	0	0	0
NEBI	<i>National Energy Board Pipeline Incidents</i>	Y	0	0	0
NEBW	<i>National Energy Board Wells</i>	Y	0	0	0
NEES	<i>National Environmental Emergencies System (NEES)</i>	Y	0	0	0
NPCB	<i>National PCB Inventory</i>	Y	0	0	0
NPRI	<i>National Pollutant Release Inventory</i>	Y	0	0	0
OGW	<i>Oil and Gas Wells</i>	Y	0	0	0
PAP	<i>Canadian Pulp and Paper</i>	Y	0	0	0
PCB	<i>Inventory of PCB Storage Sites</i>	Y	0	0	0
PCFT	<i>Parks Canada Fuel Storage Tanks</i>	Y	0	0	0
PITS	<i>Manitoba Pits and Quarries</i>	Y	0	0	0
REC	<i>Waste Receivers Summary</i>	Y	0	0	0

<i>Database</i>	<i>Name</i>	<i>Searched</i>	<i>Project Property</i>	<i>Within 0.25 km</i>	<i>Total</i>
RST	<i>Retail Fuel Storage Tanks</i>	Y	0	0	0
SCT	<i>Scott's Manufacturing Directory</i>	Y	0	2	2
SPL	<i>Manitoba Spills</i>	Y	0	0	0
TCFT	<i>Transport Canada Fuel Storage Tanks</i>	Y	0	0	0
WDS	<i>Waste Disposal Site Inventory</i>	Y	0	0	0
WWIS	<i>Water Well Inventory</i>	Y	0	2	2
			<hr/>		
<b>Total:</b>			1	28	29

## Executive Summary: Site Report Summary - Project Property

<i>Map Key</i>	<i>DB</i>	<i>Company/Site Name</i>	<i>Address</i>	<i>Dir/Dist (m)</i>	<i>Elev diff (m)</i>	<i>Page Number</i>
<a href="#">1</a>	FST	Winnipeg, City of	1350 Pembina Hwy. Winnipeg MB	-/0.0	0.00	<a href="#">15</a>

## Executive Summary: Site Report Summary - Surrounding Properties

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">2</a>	EHS		1349 Pembina Hwy Winnipeg MB R3T 2B6	WSW/69.7	0.00	<a href="#">15</a>
<a href="#">3</a>	CS	MAC'S CONVENIENCE STORE - 1382 PEMBINA HWY - CS	1382 PEMBINA HWY WINNIPEG MB	SSE/72.8	0.00	<a href="#">15</a>
<a href="#">4</a>	CS	MAC'S CONVENIENCE STORES INC	1382 PEMBINA HWY WINNIPEG MB R3T 2B4	SSE/87.1	0.00	<a href="#">15</a>
<a href="#">4</a>	FST	Mac's Convenience Store	1382 Pembina Hwy. Winnipeg MB R3T 2B4	SSE/87.1	0.00	<a href="#">16</a>
<a href="#">5</a>	GEN	VINCENT MASSEY COLLEGIATE	975 Dowker Ave Winnipeg MB	E/88.1	0.00	<a href="#">16</a>
<a href="#">6</a>	GEN	VINCENT MASSEY COLLEGIATE	975 DOWKER AVE Winnipeg MB R3T 1R7	E/91.3	0.00	<a href="#">16</a>
<a href="#">7</a>	CS	HOLIDAY INN SOUTH - CS	1330 PEMBINA HWY WINNIPEG MB	NNW/116.7	0.00	<a href="#">17</a>
<a href="#">7</a>	GEN	HOLIDAY INN SOUTH	1330 Pembina Hwy Winnipeg MB	NNW/116.7	0.00	<a href="#">17</a>
<a href="#">8</a>	EHS		1330 Pembina Hwy Winnipeg MB R3T 2B4	NNW/118.5	0.00	<a href="#">17</a>
<a href="#">8</a>	GEN	HOLIDAY INN SOUT	1330 PEMBINA HWY Winnipeg MB R3T 2B4	NNW/118.5	0.00	<a href="#">17</a>
<a href="#">9</a>	GEN	BALCAEN AND SONS LTD	1392 Pembina Hwy Winnipeg MB	SSE/135.6	0.00	<a href="#">17</a>
<a href="#">10</a>	SCT	GILBERT INTERNATIONAL INC.	1383 Pembina Hwy Winnipeg MB R3T 2B9	S/137.0	0.00	<a href="#">18</a>
<a href="#">11</a>	CS	DOMO GASOLINE CORPORATION LTD	1319 PEMBINA HWY WINNIPEG MB R3T 2B6	WNW/141.2	0.00	<a href="#">18</a>
<a href="#">11</a>	EHS		1319 Pembina Hwy Winnipeg MB R3T2B6	WNW/141.2	0.00	<a href="#">18</a>
<a href="#">11</a>	FST	Domo Gas Bar	1319 Pembina Hwy. Winnipeg MB R3T 2B6	WNW/141.2	0.00	<a href="#">18</a>
<a href="#">11</a>	FUEL	PEMBINA DOMO - 1319 PEMBINA HWY	1319 PEMBINA HWY Winnipeg MB R3T 2B6	WNW/141.2	0.00	<a href="#">19</a>
<a href="#">11</a>	GEN	DOMO GASOLINE CORP.- PEMBINA HWY., 1319	PEMBINA HWY., 1319 WINNIPEG MB R3T 2B6	WNW/141.2	0.00	<a href="#">19</a>
<a href="#">12</a>	EHS		1392 Pembina Hwy Winnipeg MB R3T2C1	SSE/141.4	0.00	<a href="#">19</a>
<a href="#">12</a>	GEN	BALCAEN AND SONS LTD	1392 PEMBINA HWY Winnipeg MB R3T 2C1	SSE/141.4	0.00	<a href="#">19</a>
<a href="#">13</a>	GEN	MCKNIGHT'S PEMBINA PHARMACY	PEMBINA HWY., 1315 WINNIPEG MB	NW/159.9	0.00	<a href="#">20</a>
<a href="#">13</a>	GEN	MCKNIGHT'S PEMBINA PHARMACY	1315 PEMBINA HWY Winnipeg MB R3T 2B6	NW/159.9	0.00	<a href="#">20</a>
<a href="#">14</a>	CS	DOMO GAS BAR - 1319 PEMBINA - CS	1319 PEMBINA HWY WINNIPEG MB	WNW/170.3	0.00	<a href="#">20</a>
<a href="#">15</a>	SCT	Prairie Oven Inc.	1399 Pembina Hwy Winnipeg MB R3T 2B8	S/173.3	0.00	<a href="#">20</a>

<b>Map Key</b>	<b>DB</b>	<b>Company/Site Name</b>	<b>Address</b>	<b>Dir/Dist (m)</b>	<b>Elev Diff (m)</b>	<b>Page Number</b>
<a href="#">16</a>	FST	Barrack's Machine Shop	1305 Pembina Hwy. Winnipeg MB R3T 2B6	WNW/182.5	0.00	<a href="#">20</a>
<a href="#">17</a>	WWIS	QU9INTON JEDLIC	MB	ENE/200.0	0.00	<a href="#">21</a>
<a href="#">17</a>	WWIS	QUINTON JEDLIC	MB	ENE/200.0	0.00	<a href="#">21</a>
<a href="#">18</a>	GEN	MANITOBA X-RAY CLINIC (1288 PEMBINA)	PEMBINA HWY., 1288 WINNIPEG MB	NNW/244.7	0.00	<a href="#">21</a>
<a href="#">18</a>	GEN	MANITOBA X-RAY CLINIC	1288 PEMBINA HWY Winnipeg MB R3T 2B2	NNW/244.7	0.00	<a href="#">21</a>

# Executive Summary: Summary By Data Source

## **CS - Contaminated/Impacted Sites**

A search of the CS database, dated Up to May 2017 has found that there are 5 CS site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
MAC'S CONVENIENCE STORE - 1382 PEMBINA HWY - CS	1382 PEMBINA HWY WINNIPEG MB	SSE	72.82	<a href="#"><u>3</u></a>
MAC'S CONVENIENCE STORES INC	1382 PEMBINA HWY WINNIPEG MB R3T 2B4	SSE	87.13	<a href="#"><u>4</u></a>
HOLIDAY INN SOUTH - CS	1330 PEMBINA HWY WINNIPEG MB	NNW	116.72	<a href="#"><u>7</u></a>
DOMO GASOLINE CORPORATION LTD	1319 PEMBINA HWY WINNIPEG MB R3T 2B6	WNW	141.17	<a href="#"><u>11</u></a>
DOMO GAS BAR - 1319 PEMBINA - CS	1319 PEMBINA HWY WINNIPEG MB	WNW	170.27	<a href="#"><u>14</u></a>

## **EHS - ERIS Historical Searches**

A search of the EHS database, dated 1999-Feb 28, 2018 has found that there are 4 EHS site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
	1349 Pembina Hwy Winnipeg MB R3T 2B6	WSW	69.66	<a href="#"><u>2</u></a>
	1330 Pembina Hwy Winnipeg MB R3T 2B4	NNW	118.53	<a href="#"><u>8</u></a>
	1319 Pembina Hwy Winnipeg MB R3T2B6	WNW	141.17	<a href="#"><u>11</u></a>
	1392 Pembina Hwy Winnipeg MB R3T2C1	SSE	141.45	<a href="#"><u>12</u></a>

## **FST - Fuel Storage Tanks**

A search of the FST database, dated 1905-Feb 2003\* has found that there are 4 FST site(s) within approximately 0.25 kilometers of the project property.

<b><u>Equal/Higher Elevation</u></b>	<b><u>Address</u></b>	<b><u>Direction</u></b>	<b><u>Distance (m)</u></b>	<b><u>Map Key</u></b>
Winnipeg, City of	1350 Pembina Hwy. Winnipeg MB	-	0.00	<a href="#"><u>1</u></a>
Mac's Convenience Store	1382 Pembina Hwy. Winnipeg MB R3T 2B4	SSE	87.13	<a href="#"><u>4</u></a>
Domo Gas Bar	1319 Pembina Hwy. Winnipeg MB R3T 2B6	WNW	141.17	<a href="#"><u>11</u></a>

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
Barrack's Machine Shop	1305 Pembina Hwy. Winnipeg MB R3T 2B6	WNW	182.49	<a href="#">16</a>

### **FUEL - Bulk Fuel Distributors**

A search of the FUEL database, dated 2006-Dec 31, 2017 has found that there are 1 FUEL site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
PEMBINA DOMO - 1319 PEMBINA HWY	1319 PEMBINA HWY Winnipeg MB R3T 2B6	WNW	141.17	<a href="#">11</a>

### **GEN - Waste Generators Summary**

A search of the GEN database, dated 1998-Jun 2017 has found that there are 11 GEN site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
VINCENT MASSEY COLLEGIATE	975 Dowker Ave Winnipeg MB	E	88.12	<a href="#">5</a>
VINCENT MASSEY COLLEGIATE	975 DOWKER AVE Winnipeg MB R3T 1R7	E	91.35	<a href="#">6</a>
HOLIDAY INN SOUTH	1330 Pembina Hwy Winnipeg MB	NNW	116.72	<a href="#">7</a>
HOLIDAY INN SOUT	1330 PEMBINA HWY Winnipeg MB R3T 2B4	NNW	118.53	<a href="#">8</a>
BALCAEN AND SONS LTD	1392 Pembina Hwy Winnipeg MB	SSE	135.62	<a href="#">9</a>
DOMO GASOLINE CORP.- PEMBINA HWY., 1319	PEMBINA HWY., 1319 WINNIPEG MB R3T 2B6	WNW	141.17	<a href="#">11</a>
BALCAEN AND SONS LTD	1392 PEMBINA HWY Winnipeg MB R3T 2C1	SSE	141.45	<a href="#">12</a>
MCKNIGHT'S PEMBINA PHARMACY	PEMBINA HWY., 1315 WINNIPEG MB	NW	159.94	<a href="#">13</a>
MCKNIGHT'S PEMBINA PHARMACY	1315 PEMBINA HWY Winnipeg MB R3T 2B6	NW	159.94	<a href="#">13</a>
MANITOBA X-RAY CLINIC (1288 PEMBINA)	PEMBINA HWY., 1288 WINNIPEG MB	NNW	244.70	<a href="#">18</a>
MANITOBA X-RAY CLINIC	1288 PEMBINA HWY Winnipeg MB R3T 2B2	NNW	244.70	<a href="#">18</a>

### **SCT - Scott's Manufacturing Directory**

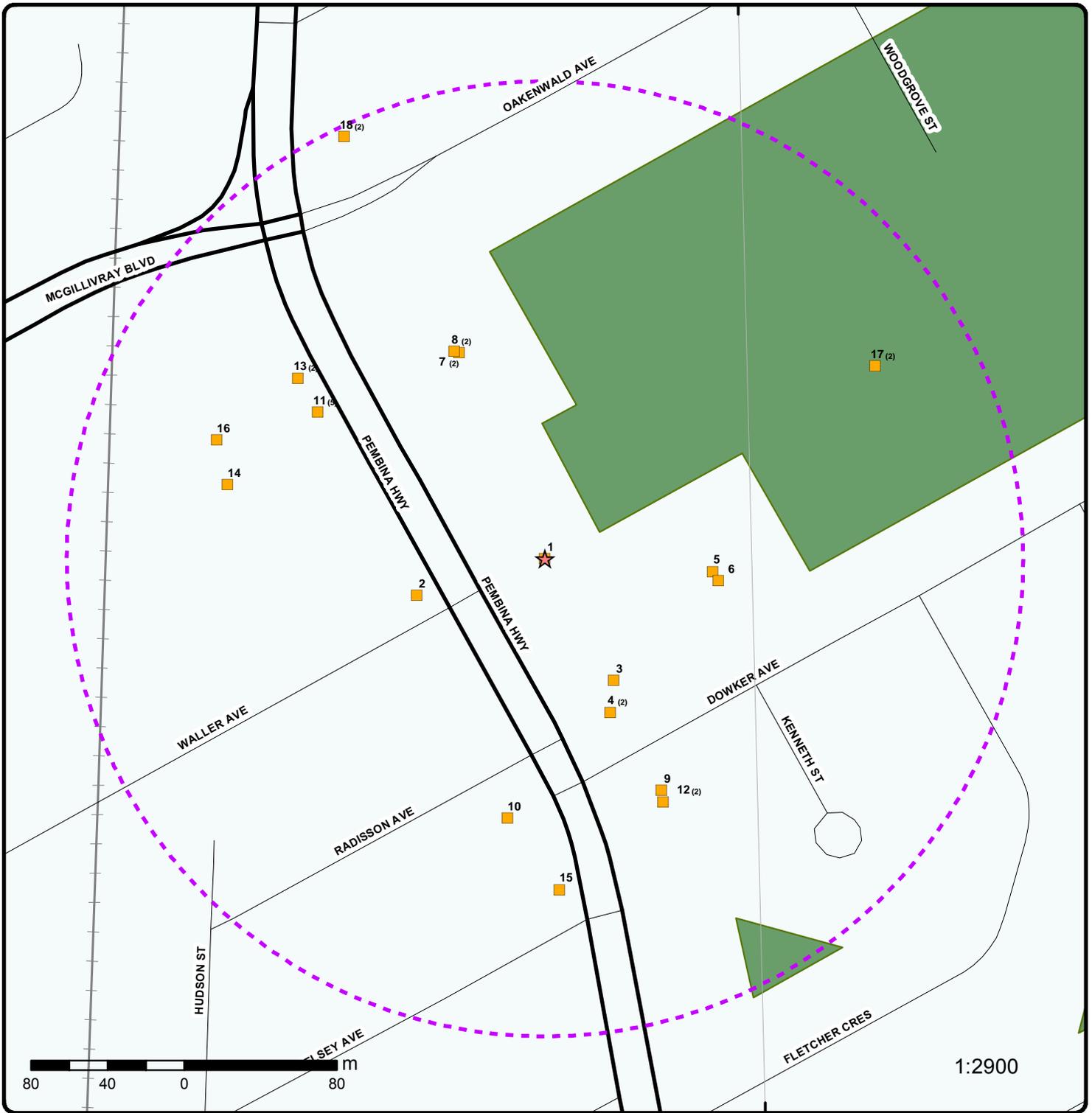
A search of the SCT database, dated 1992-Mar 2011\* has found that there are 2 SCT site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
GILBERT INTERNATIONAL INC.	1383 Pembina Hwy Winnipeg MB R3T 2B9	S	137.02	<a href="#">10</a>
Prairie Oven Inc.	1399 Pembina Hwy Winnipeg MB R3T 2B8	S	173.29	<a href="#">15</a>

### **WWIS - Water Well Inventory**

A search of the WWIS database, dated 1880-May 2015 has found that there are 2 WWIS site(s) within approximately 0.25 kilometers of the project property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction</u>	<u>Distance (m)</u>	<u>Map Key</u>
QU9INTON JEDLIC	MB	ENE	199.97	<a href="#">17</a>
QUINTON JEDLIC	MB	ENE	199.97	<a href="#">17</a>



### Map : 0.25 Kilometer Radius

Order No: 20180307176

Address: 1350 Pembina Hwy, Winnipeg, MB, R3T2B6

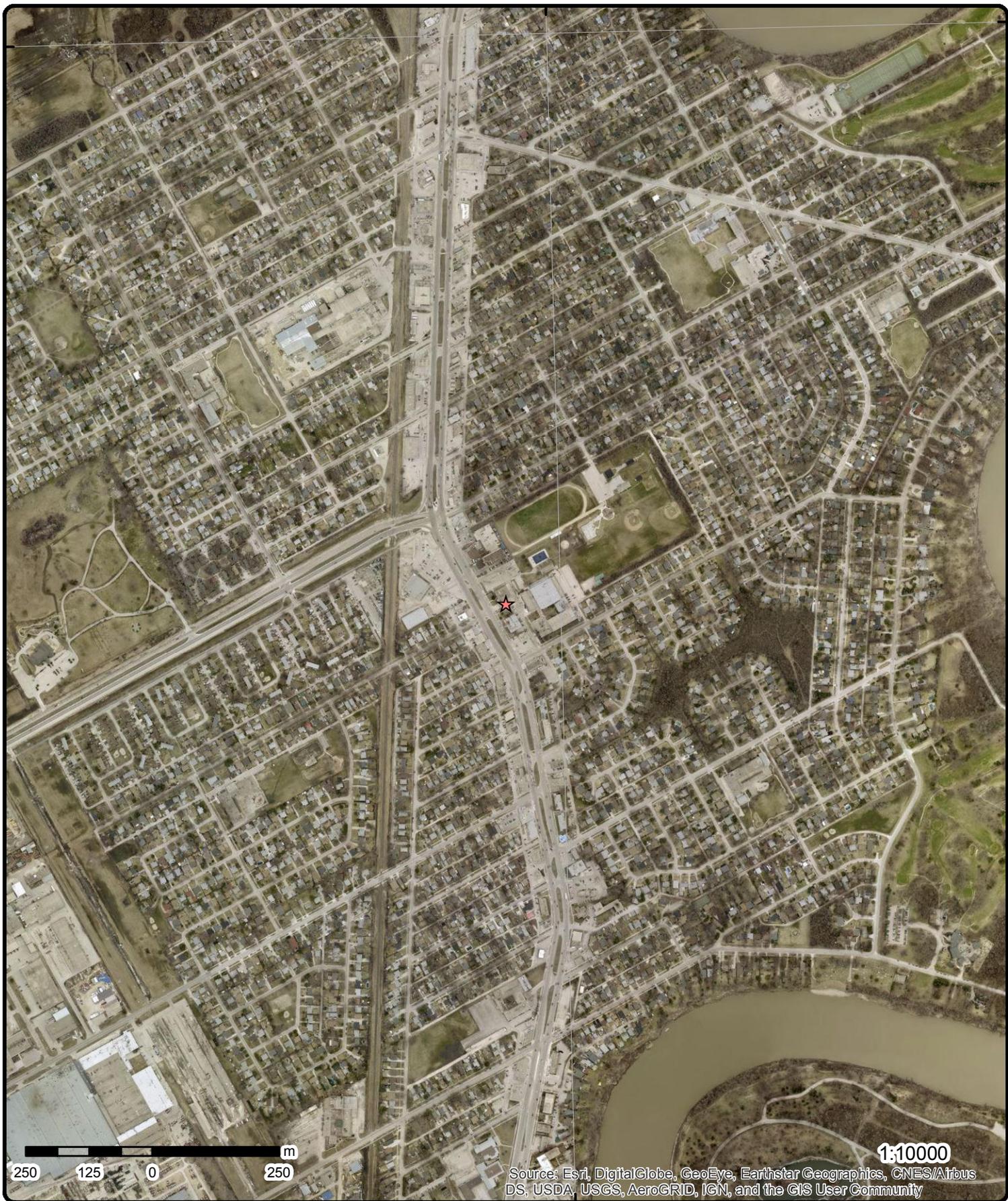


Project Property	Expressway	Industrial and Resource - Regions	National Park
Buffer Outline	Principal Highway	Main Line	Provincial or Territorial Park
Eris Sites with Higher Elevation	Secondary Highway	Sidetrack	Other Park
Eris Sites with Same Elevation	Major Road	Transit Line	Golf Course or Driving Range
Eris Sites with Lower Elevation	Local road	Abandoned Line	Park or Sports Field
Eris Sites with Unknown Elevation	Trail		Other Recreation Area
	Proposed Road		
	Ferry Route/Ice Road		

49°51'N

97°9'W

49°51'N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# Aerial (2016)

Address: 1350 Pembina Hwy, Winnipeg, MB, R3T2B6

Source: ESRI World Imagery

Order No: 20180307176



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# Topographic Map

**Address: 1350 Pembina Hwy, Winnipeg, MB, R3T2B6**

Source: ESRI World Topographic Map

Order No: 20180307176



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# Detail Report

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">1</a>	1 of 1	-/0.0	227.4 / 0.00	<b>Winnipeg, City of 1350 Pembina Hwy. Winnipeg MB</b>	<b>FST</b>
<b>Site ID:</b> 12505 <b>Owner::</b> Winnipeg, City of <b>Operator::</b> <b>Mailing City::</b> Winnipeg MB <b>Mailing Address::</b> 1350 Pembina Highway		<b>Owner Category:</b> Municipal <b>Site Status:</b> Dismantled <b>Outlet Type:</b> Fleet <b>Inventory:</b> NA			
<b>--Details--</b>					
<b>Status:</b> Installed		<b>NO Of Tanks:</b> 1			
<b>Position:</b> Underground		<b>Status Date:</b> 01-Jan-72			
<b>Spill Protect:</b> Unprotected		<b>Capacity(L):</b> 4545.00			
<b>Status:</b> Removed		<b>NO Of Tanks:</b> 1			
<b>Position:</b> Underground		<b>Status Date:</b> 21-Nov-88			
<b>Spill Protect:</b> Unprotected		<b>Capacity(L):</b> 4545.00			
<a href="#">2</a>	1 of 1	WSW/69.7	227.4 / 0.00	<b>1349 Pembina Hwy Winnipeg MB R3T 2B6</b>	<b>EHS</b>
<b>Order ID:</b> 207112 <b>Order No:</b> 20120509012 <b>Customer ID:</b> 86229 <b>Company ID:</b> 77 <b>Status:</b> C <b>Report Code:</b> 4CAN <b>Report Type:</b> Custom Report <b>Report Date:</b> 5/15/2012 9:53:02 AM <b>Report Requested by:</b> Pinchin Environmental <b>Nearest Intersection:</b> <b>Previous Site Name:</b> <b>Additional Info Ordered:</b>		<b>Date Received:</b> 5/9/2012 9:52:42 AM <b>Lot/Building Size:</b> <b>Municipality:</b> <b>Client Prov/State:</b> MB <b>Search Radius (km):</b> 0.25 <b>Large Radius:</b> 2 <b>X:</b> -97.152506 <b>Y:</b> 49.839719			
<a href="#">3</a>	1 of 1	SSE/72.8	227.4 / 0.00	<b>MAC'S CONVENIENCE STORE - 1382 PEMBINA HWY - CS 1382 PEMBINA HWY WINNIPEG MB</b>	<b>CS</b>
<b>File No:</b> 20331 <b>Site Desig. under the CSRA:</b> Registered site under the Manitoba Contaminated/Impacted Sites Program <b>File Name:</b>					
<a href="#">4</a>	1 of 2	SSE/87.1	227.4 / 0.00	<b>MAC'S CONVENIENCE STORES INC 1382 PEMBINA HWY WINNIPEG MB R3T 2B4</b>	<b>CS</b>
<b>File No:</b> 0840 <b>Site Desig. under the CSRA:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>File Name:</b>		MAC'S CONVENIENCE STORE - 1382 PEMBINA HWY			
<a href="#">4</a>	2 of 2	SSE/87.1	227.4 / 0.00	Mac's Convenience Store 1382 Pembina Hwy. Winnipeg MB R3T 2B4	FST
<b>Site ID:</b>	11942			<b>Owner Category:</b>	Oil Company
<b>Owner::</b>	Imperial Oil			<b>Site Status:</b>	Dismantled
<b>Operator::</b>	Acheson, R.			<b>Outlet Type:</b>	Retail / Used Oil
<b>Mailing City::</b>	Winnipeg MB			<b>Inventory:</b>	NA
<b>Mailing Address::</b>	124 Bannister Rd.				
<b>--Details--</b>					
<b>Status:</b>	Installed			<b>NO Of Tanks:</b>	2
<b>Position:</b>	Underground			<b>Status Date:</b>	01-Jul-76
<b>Spill Protect:</b>	Unprotected			<b>Capacity(L):</b>	22730.00
<b>Status:</b>	Installed			<b>NO Of Tanks:</b>	1
<b>Position:</b>	Underground			<b>Status Date:</b>	01-Jul-76
<b>Spill Protect:</b>	Unprotected			<b>Capacity(L):</b>	13635.00
<b>Status:</b>	Removed			<b>NO Of Tanks:</b>	2
<b>Position:</b>	Underground			<b>Status Date:</b>	29-Sep-83
<b>Spill Protect:</b>	Unprotected			<b>Capacity(L):</b>	22730.00
<b>Status:</b>	Removed			<b>NO Of Tanks:</b>	1
<b>Position:</b>	Underground			<b>Status Date:</b>	29-Sep-83
<b>Spill Protect:</b>	Unprotected			<b>Capacity(L):</b>	13635.00
<b>Status:</b>	Installed			<b>NO Of Tanks:</b>	4
<b>Position:</b>	Underground			<b>Status Date:</b>	07-Oct-83
<b>Spill Protect:</b>	Sacrificial Anode			<b>Capacity(L):</b>	25000.00
<b>Status:</b>	Tested			<b>NO Of Tanks:</b>	4
<b>Position:</b>	Underground			<b>Status Date:</b>	23-Apr-92
<b>Spill Protect:</b>	Sacrificial Anode			<b>Capacity(L):</b>	25000.00
<b>Status:</b>	Removed			<b>NO Of Tanks:</b>	4
<b>Position:</b>	Underground			<b>Status Date:</b>	11-Sep-95
<b>Spill Protect:</b>	Sacrificial Anode			<b>Capacity(L):</b>	25000.00
<b>Status:</b>	Installed			<b>NO Of Tanks:</b>	3
<b>Position:</b>	Underground			<b>Status Date:</b>	01-Jul-76
<b>Spill Protect:</b>	Unprotected			<b>Capacity(L):</b>	2270.00
<b>Status:</b>	Removed			<b>NO Of Tanks:</b>	3
<b>Position:</b>	Underground			<b>Status Date:</b>	13-Sep-95
<b>Spill Protect:</b>	Unprotected			<b>Capacity(L):</b>	2270.00
<a href="#">5</a>	1 of 1	E/88.1	227.4 / 0.00	VINCENT MASSEY COLLEGIATE 975 Dowker Ave Winnipeg MB	GEN
<b>Registration No:</b>	MBG11707				
<b>SIC:</b>					
<b>DLS:</b>					
<a href="#">6</a>	1 of 1	E/91.3	227.4 / 0.00	VINCENT MASSEY COLLEGIATE 975 DOWKER AVE	GEN

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<i>Winnipeg MB R3T 1R7</i>					
				<b>Registration No:</b> MBG11707 <b>SIC:</b> <b>DLS:</b>	
<u>7</u>	1 of 2	NNW/116.7	227.4 / 0.00	<b>HOLIDAY INN SOUTH - CS</b> 1330 PEMBINA HWY WINNIPEG MB	CS
				<b>File No:</b> 20328 <b>Site Desig. under the CSRA:</b> Registered site under the Manitoba Contaminated/Impacted Sites Program <b>File Name:</b>	
<u>7</u>	2 of 2	NNW/116.7	227.4 / 0.00	<b>HOLIDAY INN SOUTH</b> 1330 Pembina Hwy Winnipeg MB	GEN
				<b>Registration No:</b> MBG12894 <b>SIC:</b> <b>DLS:</b>	
<u>8</u>	1 of 2	NNW/118.5	227.4 / 0.00	1330 Pembina Hwy Winnipeg MB R3T 2B4	EHS
				<b>Order ID:</b> 236704 <b>Order No:</b> 20130204086 <b>Customer ID:</b> 92907 <b>Company ID:</b> 77 <b>Status:</b> C <b>Report Code:</b> 4CAN <b>Report Type:</b> Custom Report <b>Report Date:</b> 11-FEB-13 <b>Report Requested by:</b> Pinchin Environmental <b>Nearest Intersection:</b> <b>Previous Site Name:</b> <b>Additional Info Ordered:</b>	
				<b>Date Received:</b> 04-FEB-13 <b>Lot/Building Size:</b> <b>Municipality:</b> <b>Client Prov/State:</b> MB <b>Search Radius (km):</b> .25 <b>Large Radius:</b> 2 <b>X:</b> -97.15219 <b>Y:</b> 49.840862	
<u>8</u>	2 of 2	NNW/118.5	227.4 / 0.00	<b>HOLIDAY INN SOUT</b> 1330 PEMBINA HWY Winnipeg MB R3T 2B4	GEN
				<b>Registration No:</b> MBG12894 <b>SIC:</b> <b>DLS:</b>	
<u>9</u>	1 of 1	SSE/135.6	227.4 / 0.00	<b>BALCAEN AND SONS LTD</b> 1392 Pembina Hwy Winnipeg MB	GEN
				<b>Registration No:</b> MBG12992 <b>SIC:</b> <b>DLS:</b>	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB	
<a href="#">10</a>	1 of 1	S/137.0	227.4 / 0.00	GILBERT INTERNATIONAL INC. 1383 Pembina Hwy Winnipeg MB R3T 2B9	SCT	
<b>Established:</b>		1988				
<b>Plant Size (ft²):</b>		0				
<b>Employment:</b>		35				
<b>--Details--</b>						
<b>Description:</b>		Frozen Food Manufacturing				
<b>SIC/NAICS Code:</b>		311410				
<a href="#">11</a>	1 of 5	WNW/141.2	227.4 / 0.00	DOMO GASOLINE CORPORATION LTD 1319 PEMBINA HWY WINNIPEG MB R3T 2B6	CS	
<b>File No:</b>		1147				
<b>Site Desig. under the CSRA:</b>						
<b>File Name:</b>		DOMO GAS BAR - 1319 PEMBINA				
<a href="#">11</a>	2 of 5	WNW/141.2	227.4 / 0.00	1319 Pembina Hwy Winnipeg MB R3T2B6	EHS	
<b>Order ID:</b>		247219		<b>Date Received:</b>	14-JUN-13	
<b>Order No:</b>		20130614067		<b>Lot/Building Size:</b>		
<b>Customer ID:</b>		80347		<b>Municipality:</b>		
<b>Company ID:</b>		56		<b>Client Prov/State:</b>	MB	
<b>Status:</b>		C		<b>Search Radius (km):</b>	.25	
<b>Report Code:</b>		3CAN		<b>Large Radius:</b>	2	
<b>Report Type:</b>		Standard Report		<b>X:</b>	-97.15319	
<b>Report Date:</b>		25-JUN-13		<b>Y:</b>	49.84059	
<b>Report Requested by:</b>		Stantec Consulting Ltd.				
<b>Nearest Intersection:</b>						
<b>Previous Site Name:</b>						
<b>Additional Info Ordered:</b>		Fire Insur. Maps and/or Site Plans; City Directory				
<a href="#">11</a>	3 of 5	WNW/141.2	227.4 / 0.00	Domo Gas Bar 1319 Pembina Hwy. Winnipeg MB R3T 2B6	FST	
<b>Site ID:</b>		11931		<b>Owner Category:</b>	Oil Company	
<b>Owner::</b>		Domo Gasoline Corp. Ltd.			<b>Site Status:</b>	Active
<b>Operator::</b>		Popko, Bruce			<b>Outlet Type:</b>	Retail
<b>Mailing City::</b>		Winnipeg MB			<b>Inventory:</b>	Daily
<b>Mailing Address::</b>		200-270 Fort St.				
<b>--Details--</b>						
<b>Status:</b>		Installed		<b>NO Of Tanks:</b>	2	
<b>Position:</b>		Underground		<b>Status Date:</b>	01-Jan-71	
<b>Spill Protect:</b>		Unprotected		<b>Capacity(L):</b>	22730.00	
<b>Status:</b>		Installed		<b>NO Of Tanks:</b>	1	
<b>Position:</b>		Underground		<b>Status Date:</b>	28-Jul-82	
<b>Spill Protect:</b>		Sacrificial Anode		<b>Capacity(L):</b>	9090.00	
<b>Status:</b>		Removed		<b>NO Of Tanks:</b>	2	
<b>Position:</b>		Underground		<b>Status Date:</b>	19-Jun-84	
<b>Spill Protect:</b>		Unprotected		<b>Capacity(L):</b>	22730.00	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Status:</b>	Installed			<b>NO Of Tanks:</b>	2
<b>Position:</b>	Underground			<b>Status Date:</b>	20-Jun-84
<b>Spill Protect:</b>	Sacrificial Anode			<b>Capacity(L):</b>	22730.00
<b>Status:</b>	Removed			<b>NO Of Tanks:</b>	1
<b>Position:</b>	Underground			<b>Status Date:</b>	01-Jun-89
<b>Spill Protect:</b>	Sacrificial Anode			<b>Capacity(L):</b>	9090.00
<b>Status:</b>	Tested			<b>NO Of Tanks:</b>	2
<b>Position:</b>	Underground			<b>Status Date:</b>	06-Apr-92
<b>Spill Protect:</b>	Sacrificial Anode			<b>Capacity(L):</b>	22730.00
<b>Status:</b>	Tested			<b>NO Of Tanks:</b>	2
<b>Position:</b>	Underground			<b>Status Date:</b>	30-Sep-96
<b>Spill Protect:</b>	Sacrificial Anode			<b>Capacity(L):</b>	22730.00
<a href="#">11</a>	4 of 5	WNW/141.2	227.4 / 0.00	PEMBINA DOMO - 1319 PEMBINA HWY 1319 PEMBINA HWY Winnipeg MB R3T 2B6	FUEL
<b>Permit No:</b>	21648				
<b>Expiry Date:</b>					
<b>Facility Type:</b>	U/G				
<b>Comment:</b>	Not storing used oil				
<a href="#">11</a>	5 of 5	WNW/141.2	227.4 / 0.00	DOMO GASOLINE CORP.-PEMBINA HWY., 1319 PEMBINA HWY., 1319 WINNIPEG MB R3T 2B6	GEN
<b>Registration No:</b>	MBG007110				
<b>SIC:</b>					
<b>DLS:</b>					
<a href="#">12</a>	1 of 2	SSE/141.4	227.4 / 0.00	1392 Pembina Hwy Winnipeg MB R3T2C1	EHS
<b>Order ID:</b>	493458			<b>Date Received:</b>	28-DEC-16
<b>Order No:</b>	20161228065			<b>Lot/Building Size:</b>	
<b>Customer ID:</b>	97828			<b>Municipality:</b>	
<b>Company ID:</b>	77			<b>Client Prov/State:</b>	MB
<b>Status:</b>	C			<b>Search Radius (km):</b>	.25
<b>Report Code:</b>	3CAN			<b>Large Radius:</b>	.3
<b>Report Type:</b>	Standard Report			<b>X:</b>	-97.150751
<b>Report Date:</b>	04-JAN-17			<b>Y:</b>	49.838718
<b>Report Requested by:</b>	Pinchin Ltd.				
<b>Nearest Intersection:</b>					
<b>Previous Site Name:</b>					
<b>Additional Info Ordered:</b>					
<a href="#">12</a>	2 of 2	SSE/141.4	227.4 / 0.00	BALCAEN AND SONS LTD 1392 PEMBINA HWY Winnipeg MB R3T 2C1	GEN
<b>Registration No:</b>	MBG12992				
<b>SIC:</b>					
<b>DLS:</b>					

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<a href="#">13</a>	1 of 2	NW/159.9	227.4 / 0.00	MCKNIGHT'S PEMBINA PHARMACY PEMBINA HWY., 1315 WINNIPEG MB	GEN
<b>Registration No:</b>		MBG003389			
<b>SIC:</b>					
<b>DLS:</b>					
<a href="#">13</a>	2 of 2	NW/159.9	227.4 / 0.00	MCKNIGHT'S PEMBINA PHARMACY 1315 PEMBINA HWY Winnipeg MB R3T 2B6	GEN
<b>Registration No:</b>		MBG03389			
<b>SIC:</b>					
<b>DLS:</b>					
<a href="#">14</a>	1 of 1	WNW/170.3	227.4 / 0.00	DOMO GAS BAR - 1319 PEMBINA - CS 1319 PEMBINA HWY WINNIPEG MB	CS
<b>File No:</b>		20325			
<b>Site Desig. under the CSRA:</b>		Registered site under the Manitoba Contaminated/Impacted Sites Program			
<b>File Name:</b>					
<a href="#">15</a>	1 of 1	S/173.3	227.4 / 0.00	Prairie Oven Inc. 1399 Pembina Hwy Winnipeg MB R3T 2B8	SCOT
<b>Established:</b>					
<b>Plant Size (ft²):</b>					
<b>Employment:</b>					
<b>--Details--</b>					
<b>Description:</b>		Commercial Bakeries and Frozen Bakery Product Manufacturing			
<b>SIC/NAICS Code:</b>		311814			
<b>Description:</b>		Commercial Bakeries and Frozen Bakery Product Manufacturing			
<b>SIC/NAICS Code:</b>		311814			
<b>Description:</b>		Cookie and Cracker Manufacturing			
<b>SIC/NAICS Code:</b>		311821			
<a href="#">16</a>	1 of 1	WNW/182.5	227.4 / 0.00	Barrack's Machine Shop 1305 Pembina Hwy. Winnipeg MB R3T 2B6	FST
<b>Site ID:</b>		14536		<b>Owner Category:</b> Independent	
<b>Owner::</b>		Barrack, Alex		<b>Site Status:</b> Dismantled	
<b>Operator::</b>				<b>Outlet Type:</b> Retail	
<b>Mailing City::</b>		Winnipeg MB		<b>Inventory:</b> NA	
<b>Mailing Address::</b>		1305 Pembina Hwy.			
<b>--Details--</b>					
<b>Status:</b>		Installed		<b>NO Of Tanks:</b> 2	
<b>Position:</b>		Underground		<b>Status Date:</b> 01-Jan-60	
<b>Spill Protect:</b>		Unprotected		<b>Capacity(L):</b> 4545.00	

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
<b>Status:</b> Removed <b>Position:</b> Underground <b>Spill Protect:</b> Unprotected				<b>NO Of Tanks:</b> 2 <b>Status Date:</b> 01-Jan-62 <b>Capacity(L):</b> 4545.00	
<a href="#">17</a>	1 of 2	ENE/200.0	227.4 / 0.00	<b>QU9INTON JEDLIC</b>  <b>MB</b>	WWIS
<b>Well PID:</b> 171671 <b>Water Use:</b> Domestic,Air conditioning <b>Well Use:</b> PRODUCTION <b>Date Completed:</b> 2011 Dec 06 <b>Location:</b> RIVER LOT 0003 IN PARISH OF St. Boniface <b>Remarks:</b> 43 HENNESSEY DRIVE, WINNIPT				<b>Well Name:</b> <b>Driller:</b> Stonewall Drilling <b>Owner:</b> <b>Utm X:</b> 633080 <b>Utm Y:</b> 5522567	
<a href="#">17</a>	2 of 2	ENE/200.0	227.4 / 0.00	<b>QUINTON JEDLIC</b>  <b>MB</b>	WWIS
<b>Well PID:</b> 171672 <b>Water Use:</b> <b>Well Use:</b> RECHARGE <b>Date Completed:</b> 2011 Dec 14 <b>Location:</b> RIVER LOT 0003 IN PARISH OF St. Boniface <b>Remarks:</b> 43 HENNESSEY DRIVE, WINNIPEG				<b>Well Name:</b> <b>Driller:</b> Stonewall Drilling <b>Owner:</b> <b>Utm X:</b> 633080 <b>Utm Y:</b> 5522567	
<a href="#">18</a>	1 of 2	NNW/244.7	227.4 / 0.00	<b>MANITOBA X-RAY CLINIC (1288 PEMBINA)</b> <b>PEMBINA HWY., 1288</b> <b>WINNIPEG MB</b>	GEN
<b>Registration No:</b> MBG002492 <b>SIC:</b> <b>DLS:</b>					
<a href="#">18</a>	2 of 2	NNW/244.7	227.4 / 0.00	<b>MANITOBA X-RAY CLINIC</b> <b>1288 PEMBINA HWY</b> <b>Winnipeg MB R3T 2B2</b>	GEN
<b>Registration No:</b> MBG02492 <b>SIC:</b> <b>DLS:</b>					

# Unplottable Summary

Total: 2 Unplottable sites

DB	Company Name/Site Name	Address	City	Postal
GEN	UNITED GRAIN GROWERS - MCGILLIVRAY	MCGILLIVRAY BLVD.	WINNIPEG MB	
SCT	Sweet Truth Canadian Gourmet	RTO McGillivray Blvd	Winnipeg MB	R3T 5S3

# Unplottable Report

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**Site:** UNITED GRAIN GROWERS - MCGILLIVRAY  
MCGILLIVRAY BLVD. WINNIPEG MB

**Database:**  
GEN

**Registration No:** MBG003832

**SIC:**

**DLS:**

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**Site:** Sweet Truth Canadian Gourmet  
RTO McGillivray Blvd Winnipeg MB R3T 5S3

**Database:**  
SCT

**Established:** 01-NOV-01

**Plant Size (ft²):**

**Employment:**

**--Details--**

**Description:** Non-Chocolate Confectionery Manufacturing

**SIC/NAICS Code:** 311340

# Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) 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 ERIS at the time of update. **Note:** Databases denoted with " \* " indicates that the database will no longer be updated. See the individual database description for more information.

## **Automobile Wrecking & Supplies:**

Private

[AUWR](#)

This database provides an inventory of 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.

**Government Publication Date: 1999-Jan 31, 2018**

## **Certificates of Approval:**

Provincial

[CA](#)

This database contains approvals issued since July 1988 within the following categories: Approvals for Air or Effluent and Orders, Permits and/or Regulated Sites designations for Air, Effluent, Refuse or Storage. The information available within this database pertains to client information, general location, class type, operation type, license # and the issue date of the CA. Please note that no specific site address information is available.

**Government Publication Date: 1988-Jun 2013\***

## **Chemical Register:**

Private

[CHEM](#)

The Manitoba Industry, Trade and Tourism department maintains a chemical register of all known 'active' manufacturers of chemicals, fertilizers and pesticides within the province. Inactive chemical manufacturers are not required to remain in the database. Information available within this register pertains to company name, location and the 'product line'. Information from a private source regarding the locations of chemical manufacturers and distributors is also included in this database.

**Government Publication Date: 1999-Jan 31, 2018**

## **Compressed Natural Gas Stations:**

Private

[CNG](#)

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance.

**Government Publication Date: Dec 31, 2012**

## **Enforcement Actions:**

Provincial

[CONV](#)

This database summarizes enforcement activities (Convictions, Warnings, Director's Order's, EO Order's, MOH Order's, Offence Notice's, and Permit Suspensions) where companies/individual have been found guilty of environmental offenses under Manitoba's Environmental Protection Legislation. Please note that enforcement actions resulting from activities regulated under the Livestock Manure & Mortalities Mgmt Regulation MR 42/98 are also included.

**Government Publication Date: Apr 1994-Mar 2008**

## **Contaminated/Impacted Sites:**

Provincial

[CS](#)

List of sites registered under the Contaminated/Impacted Sites Program, made available by Manitoba Sustainable Development, Environmental Programs and Strategies branch. Includes sites that are on the Designated Impacted and Designated Contaminated Sites lists, as well as sites where impacts do not pose a concern, remediation has been completed, or further action is necessary.

**Government Publication Date: Up to May 2017**

## **Drill Holes:**

Provincial

[DRL](#)

The "Open File Drill Holes" database contains information on more than 10,000 drill holes in the province of Manitoba. The database provides information in regard to drill hole location (place, latitude and longitude), depth and overburden of hole, exploration company and assessment report year.

**Government Publication Date: Oct 31, 2016**

## **Environmental Effects Monitoring:**

Federal

[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.

**Government Publication Date: 1992-2007\***

**ERIS Historical Searches:**

Private

EHS

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.

**Government Publication Date: 1999-Feb 28, 2018**

**Environmental Issues Inventory System:**

Federal

EIIS

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

**Government Publication Date: 1992-2001\***

**Federal Convictions:**

Federal

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.

**Government Publication Date: 1988-Jun 2007\***

**Contaminated Sites on Federal Land:**

Federal

FCS

The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government.

**Government Publication Date: Jun 2000-Dec 2017**

**Fuel Storage Tanks:**

Provincial

FST

The Petroleum Storage Tank database, which is maintained by Manitoba's Petroleum Storage Program, contains information in regard to company name, location, status, outlet type (retail, used oil, bulk/used'), number of tanks, tank capacity and tank status. This database will not be updated as this information is no longer collected in this format. For current information regarding bulk fuel distributors, please see the FUEL database.

**Government Publication Date: 1905-Feb 2003\***

**Bulk Fuel Distributors:**

Provincial

FUEL

The Manitoba Petroleum Storage Program maintains an inventory of Bulk Fuel Distributors. This inventory contains valid operating permit numbers within the Province of Manitoba. Fields such as name, location, expiry date, type of facility and permit Number are included.

**Government Publication Date: 2006-Dec 31, 2017**

**Waste Generators Summary:**

Provincial

GEN

Within Manitoba, a waste generator is defined 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 licensing/registration number (MB1 #), company name and address of registered generators. At present, access to the type of hazardous waste generated and the form of treatment used in the handling of the waste is only available by directly calling Manitoba's Hazardous Waste Program.

**Government Publication Date: 1998-Jun 2017**

**Greenhouse Gas Emissions from Large Facilities:**

Federal

GHG

List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).

**Government Publication Date: 2013-Dec 2015**

**Indian & Northern Affairs Fuel Tanks:**

Federal

IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of 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.

**Government Publication Date: 1950-Aug 2003\***

**Manure Storage Facilities:**

Provincial **MAST**

Under the Livestock Manure and Mortalities Management Regulation (MR 42/98), permits are issued for the construction, modification or expansion of manure storage facilities. Once issued, the Environmental Livestock Program is responsible for the enforcement of regulations on the management of manure and mortalities. Please note that the MAST database only provides information on permit number, operation name, RM and permit issue date. All other information must be obtained from MB Conservation.

**Government Publication Date: Jul 1994-May 2012**

**Canadian Mine Locations:**

Private **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.

**Government Publication Date: 1998-2009\***

**Mineral Occurrences:**

Provincial **MNR**

For over 25 years, Manitoba has been compiling Mineral Inventory Cards on mineral deposits in the province. This database was obtained from Manitoba Industry, Trade and Mines, and contains information on over 650 mineral occurrences in the province. Data is provided on the Mineral Inventory File No., Mineral Deposit Name, Product, Associated Minerals or Products of Value, NTS area, Name of Property Owner or Operator and Address, location, and geographical coordinates.

**Government Publication Date: 1961-Oct 2016**

**Manitoba Oil and Gas Wells:**

Provincial **MOGW**

The Manitoba Oil and Gas Wells database was collected through the assistance of The Land Systems Company. Information is provided regarding license number and location for over 4,800 wells. Please note that this database will not be updated, information on wells drilled after May 2002 can be found in the Oil and Gas Wells (OGW) database under the 'Private Source Database' section.

**Government Publication Date: 1951-May 2002\***

**National Analysis of Trends in Emergencies System (NATES):**

Federal **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.

**Government Publication Date: 1974-1994\***

**National Defense & Canadian Forces Fuel Tanks:**

Federal **NDFT**

The Department of National Defense 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.

**Government Publication Date: Up to May 2001\***

**National Defense & Canadian Forces Spills:**

Federal **NDSP**

The Department of National Defense 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.

**Government Publication Date: Mar 1999-Aug 2010**

**National Defence & Canadian Forces Waste Disposal Sites:**

Federal **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.

**Government Publication Date: 2001-Apr 2007\***

**National Energy Board Pipeline Incidents:**

Federal **NEBI**

Locations of pipeline incidents from 2008 to present, made available by the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

**Government Publication Date: 2008-Dec 31, 2017**

**National Energy Board Wells:**

Federal

[NEBW](#)

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

**Government Publication Date: 1920-Feb 2003\***

**National Environmental Emergencies System (NEES):**

Federal

[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 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.

**Government Publication Date: 1974-2003\***

**National PCB Inventory:**

Federal

[NPCB](#)

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and 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. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored.

**Government Publication Date: 1988-2008\***

**National Pollutant Release Inventory:**

Federal

[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 for recycling for more than 300 listed substances.

**Government Publication Date: 1993-May 2017**

**Oil and Gas Wells:**

Private

[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 Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at [www.nickles.com](http://www.nickles.com).

**Government Publication Date: 1988-December 31, 2017**

**Canadian Pulp and Paper:**

Private

[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.

**Government Publication Date: 1999, 2002, 2004, 2005, 2009**

**Inventory of PCB Storage Sites:**

Provincial

[PCB](#)

Manitoba's Hazardous Waste Program maintains a listing of all "active" PCB storage facilities. Inactive PCB storage equipment and/or disposal sites are not required to remain as part of the PCB inventory database for the province. Please note that some of the sites have no wastes in storage at present, but are retained should they be required for future acceptance of PCB equipment as it comes out of service. The records within this database only provide information on facility name and location. Information pertaining to the inventory of stored wastes and waste quantities at a designated site is only available by directly contacting the Hazardous Waste Program. Please note that this database will not be updated, information after 1999 can be found in the National PCB Inventory (NPCB) database.

**Government Publication Date: 1998-1999\***

**Parks Canada Fuel Storage Tanks:**

Federal

[PCFT](#)

Canadian Heritage maintains an inventory of 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.

**Government Publication Date: 1920-Jan 2005\***

**Manitoba Pits and Quarries:**

Provincial PITS

The Manitoba Pits and Quarries database is comprised of 3 different types of permits. 1. Quarry Lease and Exploration Permits, which have a ten year term with exclusive rights for crown minerals. Quarry Exploration permits have a three year term with exclusive rights. 2. Private Pits and Quarry Permits require annual registration of private aggregate operations in the province and 3. Casual Permits which are for annual permits of Crown materials.

**Government Publication Date: 1994-Oct 2016**

**Waste Receivers Summary:**

Provincial REC

Disposal of regulated waste is maintained 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. A waste receiving location is any site or facility to which waste is transferred through 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 company name and address.

**Government Publication Date: 1998-Jul 2017**

**Retail Fuel Storage Tanks:**

Private 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.

**Government Publication Date: 1999-Jan 31, 2018**

**Scott's Manufacturing Directory:**

Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

**Government Publication Date: 1992-Mar 2011\***

**Manitoba Spills:**

Provincial SPL

The Manitoba Conservation Environmental Management System (EMS) records spills from across the province. Information from this database includes incident type, substance type, reason, location of spill, contaminate info and responsible party.

**Government Publication Date: Apr 2009-Aug 2017**

**Transport Canada Fuel Storage Tanks:**

Federal TCFT

List of fuel storage tanks currently or previously owned or operated by Transport Canada. This inventory also includes tanks on The Pickering Lands, which refers to 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, and falls under the Site Management Policy of Transport Canada, but is administered by Public Works and Government Services Canada. This inventory provides information on the site name, location, tank age, capacity and fuel type.

**Government Publication Date: 1970-Aug 2017**

**Waste Disposal Site Inventory:**

Provincial WDS

Manitoba Conservation retains a separate inventory of all known active and inactive regulated waste disposal grounds and waste transfer facilities for each of the five regions in the province. Registered companies may hold a permit or certificate for release of the following waste types: Effluent, Refuse, Air and Special Waste Storage.

**Government Publication Date: 1998\***

**Water Well Inventory:**

Provincial WWIS

The GW Drill database compiled by the Manitoba Water Stewardship and Groundwater Management Section provides information on water wells across the province. Information such as location, owner, driller, well name, well use, water use and date completed are reported on. Most wells within the inventory are georeferenced by DLS coordinates.

**Government Publication Date: 1880-May 2015**

# Definitions

**Database Descriptions:** This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

**Detail Report:** This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

**Distance:** The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

**Direction:** The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

**Elevation:** The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

**Executive Summary:** This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

**Map Key:** The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

**Unplottables:** These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

**APPENDIX V**  
**SITE PHOTOGRAPHS**



Figure 1: West View of Site



Figure 2: North View of Site



Figure 3: East View of Site



Figure 4: Open Office Space



Figure 5: Communication Room



Figure 6: Office Space



Figure 7: Male Wash Room



Figure 8: Female Wash Room



Figure 9: Plastered Ceiling (Potential Asbestos Concern)



Figure 10: Asbestos Warning



Figure 11: Switch containing Mercury



Figure 12: Reception Area



Figure 13: Lunch Room



Figure 14: Hot Water Tank in the garage



Figure 15: Garage with three overhead doors



Figure 16: Water stained/ damaged ceiling



Figure 17: Hole in a wall (Janitor's Room)



Figure 18: Staff Wash Room



Figure 19: Office Space (Upstairs)



Figure 20: Water stain/damage on a wall near window (upstairs)



Figure 21: Pool of water from leaking pipe in basement area



Figure 22: Partial crawlspace access in basement



Figure 23: Water stained ceiling (basement)

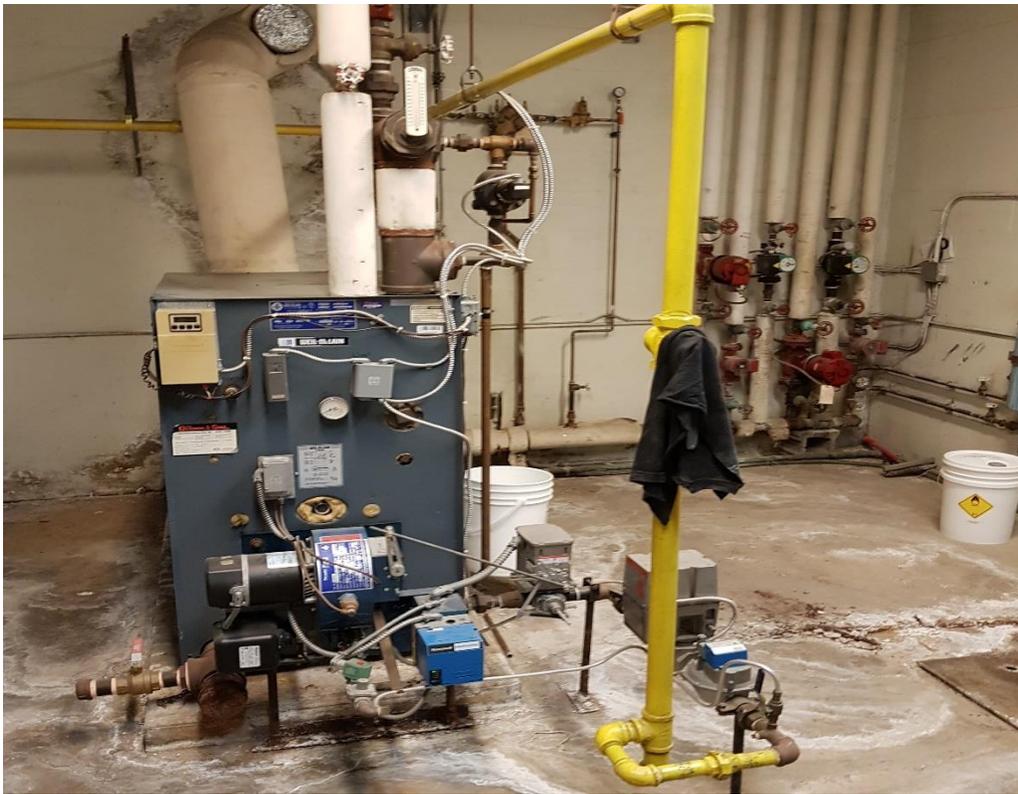


Figure 24: Boiler (basement)



Figure 25: Sump (basement)



Figure 26: Hot water tank (basement)



Figure 27: Drain (basement)



Figure 28: North adjacent property



Figure 29: East adjacent property



Figure 30: South adjacent property



Figure 31: West adjacent property

**APPENDIX V**  
**PERSONNEL RESUMES**



Jonathan Ota, PhD, P.Geo., NCSO

Geo-environmental Consultant/ Hydrogeologist

Jonathan Ota is a Geo-environmental Consultant and a Hydrogeologist with over ten years of experience in environmental site investigation and assessment (involving soil and water/ groundwater sample collection, testing and analysis of contaminated samples), groundwater monitoring and contaminant hydrogeology, remediation and reclamation of contaminated land, waste recycling management, monitoring and supervising landfill cell construction, geotechnical site assessment, geotechnical soil test and analysis, construction quality assurance monitoring and technical report writing with research skills. Jonathan is a Professional Geoscientist and a Designated National Construction Safety Officer (NCSO). He has completed work in Alberta, British Columbia and Saskatchewan and has also worked in United Kingdom and in Nigeria.

### **Site Assessment Experience**

#### **Husky Energy – (2013 - 2017)\***

Completed Phase 1 and 2 Site Assessments and prepared reports of various well sites within southern Alberta and southwest Saskatchewan. Prepared Phase 1 Limited Liability Reports (LLR) of various Oil and Gas facilities within Alberta, BC and Saskatchewan.

#### **Canadian Natural Resources Limited (CNRL) – (2013 – 2018)\***

Completed Phase 2 Site Assessment and prepared reports of Upstream Oil and Gas Site within Northeast BC, Alberta and Saskatchewan.

#### **Walsall City Council, UK – (2008 – 2009)\***

Completed Phase 1 Site Assessment of commercial, industrial and brown fields within the Metropolitan Borough of Walsall.

#### **Shell Gas Station, Dudley UK – (2010)\***

Conducted Phase 2 ESA as a requirement by the UK Environmental Agency.

### **Hydrogeology Experience**

#### **Long Run Exploration – (2017 – 2018)\***

Installed monitoring wells, conducted groundwater sampling and monitoring including slug test on oil and gas facilities with Northeast BC and Northwest Alberta.

\* Denotes work was completed at a different firm

#### **Canadian Natural Resources Ltd (CNRL) – (2017 – 2018)\***

Installed monitoring wells, conducted groundwater sampling and monitoring including slug test on oil and gas facilities with Northeast BC and Northwest Alberta. Prepared annual groundwater monitoring reports.

#### **Texaco Gas Station, Wolverhampton UK – (2010)\***

Conducted groundwater monitoring on Texaco Petrol stations around Wolverhampton Area.

#### **Vigo Landfill, Walsall, UK – (2008)\***

Installed Monitoring wells and conducted groundwater monitoring within the landfill site.

### **Geotechnical Experience**

#### **Biffa Waste Services Dosthill Tamworth UK – (2011)\***

Worked as the Construction Quality Assurance Engineer during the landfill cell construction and conducted geotechnical test on construction materials.

#### **Vigo Landfill Walsall UK – (2007)\***

Worked as the Construction Quality Assurance Engineer during the landfill cell construction and capping which involved conducted geotechnical test on the construction materials.

### **Education**

Bachelor of Science in Geology, University of Calabar, Nigeria, 1998

Master of Science in Hydrogeology, Federal University of Technology, Owerri Nigerian, 2002

Master of Science in Geoenvironmental Engineering (Land Remediation), University of Wolverhampton, UK, 2006.

Doctor of Philosophy in Geoenvironmental Engineering, Anglia Ruskin University, Chelmsford, UK 2013.

### **Associations**

Professional Geoscientist registered with APEGA (Alberta) and Engineers Geoscientists Manitoba (in Progress).

Designated National Construction Safety Officer (NCSO)



Léo Jr. Nicolas, M.Sc., P.Ag., CIH

Occupational Hygienist/Partner

Léo Jr. Nicolas is an occupational hygienist and founding partner of HLC Consulting Ltd. Léo is a registered Certified Industrial Hygienist (CIH) and registered Professional Agrologist (P.Ag.). He has over 15 years of consulting experience that includes asbestos, hazardous materials, and mould building surveys, development of asbestos and mould abatement specifications, performing asbestos and mould air clearance testing, indoor air quality investigation for residential, commercial, industrial, LEED projects, manufacturing, health care and educational facilities, noise surveys, phase I and II environmental site assessments, project management and project development. He has completed work in Alberta, Saskatchewan, Manitoba and Ontario and has also been involved in managing client projects related to obtaining either LEED and BOMA BEST credits. Léo takes pride in providing detailed, timely and accurate reporting to his client

### **Project Management Experience**

#### *Manitoba Branches – (2007 - 2010) TD Canada Trust\**

A project involving over 30 TD Canada Trust branches located throughout Manitoba that includes preparation of budgetary project estimates, completion of hazardous materials building surveys, preparation of asbestos and/or mould abatement specifications, completion of asbestos and/or mould post abatement air clearance testing, report preparation and completion of annual survey updates.

#### *Asbestos Buildings Survey – (2016) Frontier School Division*

Completed an asbestos survey of a school located at northern site for Frontier School Division. This project also included development of abatement specifications, completion of abatement site inspections and collection of post abatement air clearance testing.

### **Phase I Environmental Site Assessment Project Experience**

#### *(2015) Brydges Property Management*

Phase I ESA was required for the re-financing of a residential building located in the downtown area.

#### *(2016) Mayberry Holdings Ltd.*

Phase I ESA was required for the purchase of a commercial building located in the downtown area.

#### *(2016) Capital Commercial Real Estate Services Inc.*

Phase I ESA was required for the purchase of a commercial building located in the downtown area.

\* Denotes work was completed at a different firm

## Occupational Hygiene Project Experience

### *Asbestos Buildings Survey – (2016) Frontier School Division*

Completed an asbestos survey of multiple buildings located at northern school site for Frontier School Division. The site was a former Canadian Forces base that was developed in the 1950s.

### *Asbestos Buildings Survey – (2015 - Ongoing) Astroid Management*

Astroid Management was required to complete an asbestos survey of several of their buildings located throughout Winnipeg. The work began in 2015 and will likely be completed by 2017. The project also included the preparation of an asbestos management plan for Astroid Management.

### *Mould Building Survey – (2008) A.S.H. Management Group Inc. \**

Completed a mould survey of a large apartment complex that was being renovated by A.S.H Management Group. The project includes an assessment of each individual unit, development of abatement scope of work, abatement inspections to ensure that the work was being completed in accordance to the scope, and collection of mould post-abatement air clearance samples.

### *Mould Building Survey – (2016) Winmar Restoration*

Completed a mould survey of a multi-unit nursing residence at a First Nation community located in Northern Manitoba. The project includes an assessment of each individual unit, development of abatement scope of work, abatement inspections to ensure that the work was being completed in accordance to the scope, and collection of mould post-abatement air clearance samples.

### *LEED Indoor Air Quality Pre-Occupancy Testing – (2009) Manitoba Hydro Downtown Office\**

Completed pre-occupancy indoor air quality testing in accordance to requirements outlined in Leadership in Energy and Environmental Design (LEED) Reference Guide for New Construction.

### *Worker Exposure Testing – (2008 - Ongoing) Manufacturing companies located throughout Manitoba*

Mr. Nicolas has completed several welding fume and paint solvent worker exposure testing at many manufacturing companies located throughout Manitoba. The testing is performed to ensure that workers are not being overexposed to various chemicals that are used daily by these workers.

## Education

Bachelor of Science (Honours) in Microbiology, University of Manitoba, 1998

Masters of Science, Soil Science, University of Manitoba, 2001

## Associations

Certified Industrial Hygienist registered with the American Board of Industrial Hygienists (ABIH)

Professional Agrologist registered with Manitoba Institute of Agrologists (MIA)

LEED Green Associate registered with the Canadian Green Building Council

\* Denotes work was completed at a different firm