

## PHASE I ENVIRONMENTAL SITE ASSESSMENT

**81 COLLEGE AVENUE WEST, GUELPH, ONTARIO**

PROJECT NO. GE-001100

DECEMBER 1, 2025

Submitted to:

**Chabad of Guelph**

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Appendix A - Site Photographs

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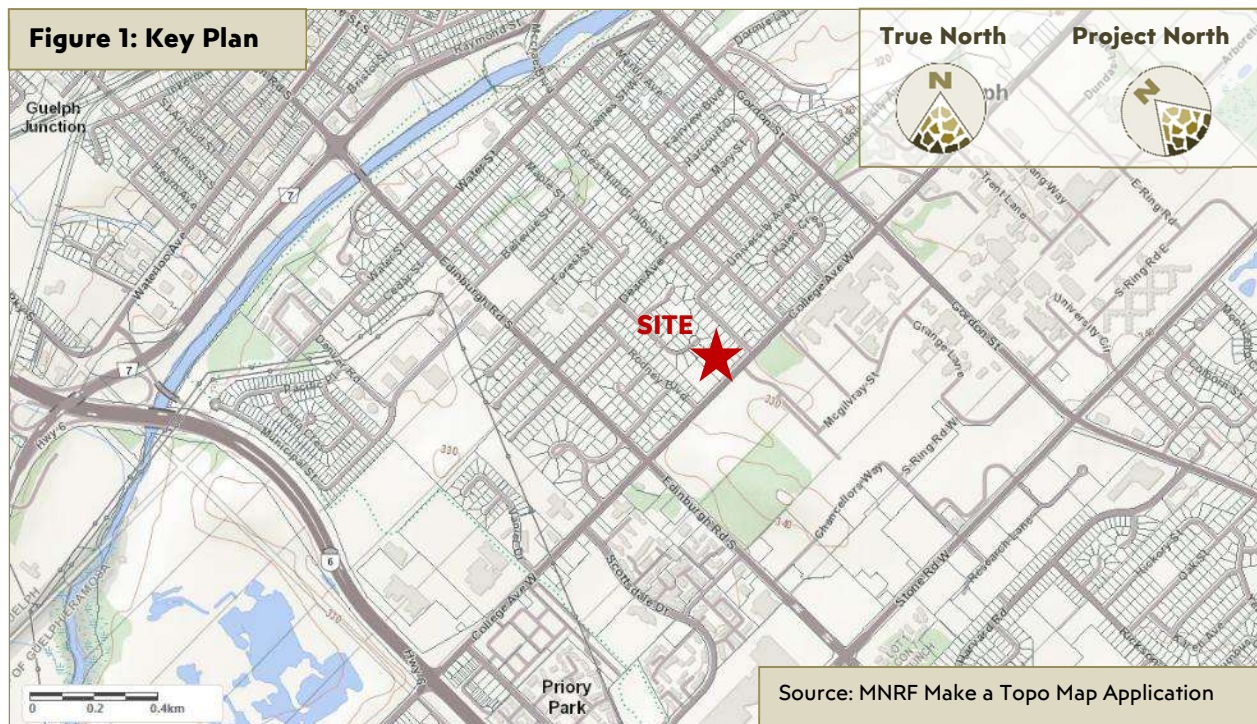
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## 1. INTRODUCTION

This document has been prepared by Stonecain Consulting Inc. [Stonecain] at the request of the Chabad of Guelph (the "Client"), to summarize the results of the Phase I Environmental Site Assessment (ESA) completed for their property located at 81 College Avenue West in Guelph, Ontario (the "Site" or "subject property").

A Key Plan showing the Site location is provided on Figure 1, below.



For the purpose of this report, College Avenue West is considered to run in a project east to west direction, while Edinburgh Road South is considered to run in a north to south direction (project north).

Authorization to carry out this work was received from Mr. Raphael Steiner, on behalf of the Client. This Phase I ESA was completed in general accordance with CSA Standard Z768-01 (reaffirmed 2022), and the site investigation and recommendations provided in this report follow generally accepted practices for environmental consultants in Ontario. It is our understanding that this report is required for due diligence financing purposes in support of proposed redevelopment activities at this property, and that filing an RSC with the MECP for the Site is not required at this time.

The objective of a Phase I ESA is to assess whether evidence of potential and/or actual environmental contamination exists at a Site (soil and/or groundwater), as a result of current and/or past activities at the Site and on neighbouring properties within the determined Phase I Study Area, as indicated on Drawing 1, appended. A Phase I ESA is intended to reduce, but not necessarily eliminate, uncertainty regarding the potential for contamination of a property.



The scope of work for this Phase I ESA consisted of completion of the following tasks:

- Conducting a Site reconnaissance to identify the presence of actual and/or potential environmental contaminants or significant concerns at the Site or on adjacent lands.
- Conducting interviews with a knowledgeable representative as a resource for current and historical Site information.
- Reviewing the historical occupancy of the Site through the use of locally available archived and relevant municipal and business directories and FIPs.
- Reviewing available topographic and geological mapping, aerial photographs and well records for the Phase I Study Area.
- Reviewing any previous reports available for the Site.
- Preparation of this report, which includes a summary of findings and recommendations for further work, if required.

This Phase I ESA did not include any intrusive investigation work (i.e., sampling or chemical testing of air, soil, groundwater, surface water or building materials), and does not constitute a Phase II ESA, an asbestos survey, designated substances survey or hazardous building materials survey, nor a building or property condition assessment.

## 2. SITE DETAILS

The subject Site is situated on the (project) north side of College Avenue Est, approximately 50 m west of its intersection with University Avenue West, within the City of Guelph. Drawing 1 provides a general overview of the Site and surrounding property features, and Site details are shown on Drawing 2 (both attached). The Site, subject to this Phase I ESA, may be further described as follows:

Feature	Site Information
Geographic Coordinates	Universal Transverse Mercator (UTM): Zone 17 561524 m Easting, 4819777 m Northing (approximate centre of Site)
Legal Descriptions	PT LT 3, PL 249, PTS 7,8,9, 61R9059; Guelph; S/T Ease MS29835 ON PT 8 61R9059, City of Guelph, County of Wellington
Property Identification Number	712430169
Surface Area	Approximately 3,180 m <sup>2</sup> (0.318 hectare)
Number of Buildings	1 (residence with attached garage)
Current Site Owner	Chabad of Guelph
Current Use(s)	Residential
Current Zoning	Based on City of Guelph Zoning mapping [Zoning Bylaw (2023) – 20790] the Site is zoned as R.1 - Residential



## 2.1 Site Reconnaissance

A detailed visual survey of the Site was originally completed by the assessor (at the time working for LDS Consultants Inc.) on November 15, 2023. Since then, Stonecairn field staff has visited the Site on multiple occasions, lastly on April 17, 2025 in order to collect manual groundwater elevation readings from monitoring wells installed at the Site as part of a geotechnical investigation. It is noted that Site conditions did not appear to have changed significantly since the initial assessment and as such, this report heavily relies on 2023 observations. Subject site observations are summarized in the following table, and select photographs showing various areas of the Site and surrounding properties, including written descriptions, are provided in Appendix A. Qualifications of the assessors are provided in Appendix E.

<b>Stonecairn Site Assessor(s)</b>	Natascha Ungerer C.E.T. (Nov. 15,2023), Rob Walker (Jan 15, 2024 – Apr 17, 2025)
<b>Site Visit Date</b>	November 15, 2023 with updated observations as current as April 17, 2025
<b>Weather/Ground Surface Conditions</b>	Nov. 15, 2023: Sunny, approximately 5° Celsius / ground conditions clear, except for grass covered/landscaped areas of the Site.
<b>Site Contact/ Interview(s)</b>	Rabi Steiner, client and Site representative, accompanied Stonecairn at the time of the Site visit and was available for an on-Site interview. He informed the assessor that the Chabad of Guelph obtained ownership of the Site in June of 2022. The Chabad had previously leased the property (2012 - 2022) and previous known Site use was student housing.  Additionally, a communications tower was reportedly formerly located within the northwest corner of the Site (backyard). The former presence of this tower was not considered a significant environmental concern and as such is not further discussed in this report.  Other information provided by Rabi Steiner has been incorporated into the following report sections, as appropriate.
<b>Limitations</b>	Full access to the interior and exterior portions o the Site was provided on November 15, 2023, at the time no crawl spaces or attics were entered. Subsequent visits were limited to the exterior of the Site.

<b>Assessor Observation(s) During Site Visit</b>	
<b>Building</b>	
Year of construction	Circa mid-1950 (with 1960s addition)
Number of storeys (above/below ground)	1/1
Construction details	Concrete/concrete block and wood-frame structure with sloped roof
Exterior finishes	Brick and stone veneer, aluminium siding, asphalt shingles
Interior finishes (where observed)	Laminate/hardwood flooring, drywall walls and ceilings, some ceiling tiles, bare concrete flooring and wood deck ceilings in basement mechanical rooms and garage
General condition of building materials	Good condition (significant portions of the building were renovated in recent years)



<b>Assessor Observation(s) During Site Visit</b>	
Lighting (where observed)	Incandescent
Sumps/Pits/Lagoons	1 sump pump observed in basement
Heating system	Natural gas-powered forced air furnace
Cooling system	Pad-mounted air conditioning unit
Amenities	Chabad of Guelph residential as well as religious space (including office and meeting space, community kitchen, etc).
<b>Exterior Site Features</b>	
Access road(s) and rights-of-way	Paved access driveways from College Avenue West to the (project) south of Site building.
Topography	Relatively flat, gentle relieve to the (project) south, towards College Avenue
Fill materials	The Site is generally level with surrounding properties. Limited fill was likely placed at the Site for building construction, site servicing and grading, but is not anticipated to present a significant environmental risk.
Hard-cover exterior surfaces	Paved entrance driveway and parking lot on south side of Site building.
Soft-covered exterior surfaces	Exterior portion of the Site not covered by pavements was observed as grass/tree covered/landscaped areas.
Stressed vegetation	Not observed
Surface staining	Not observed
Non-permanent structures	None observed
Site drainage	No stormwater infrastructure was noted at the time of the Site visit. Surface water appears to be managed by infiltration and/or via overland flow towards College Avenue West.
Watercourse(s)	No surface water features were observed on-Site.
Abandoned and/or existing wells	Two (2) monitoring wells (BH1/MW and BH4/MW) were installed on-Site as part of a geotechnical investigation. No other existing or abandoned wells are identified.
Railway lines/spurs	None observed on-Site.
<b>Site Servicing</b>	
Drinking water supply	The Site is connected to the municipal drinking water system.
Wastewater management	The Site is connected to the municipal waste water sewer system.
Stormwater management	As previously noted, no stormwater infrastructure was observed.
Other underground infrastructure on-Site	Communication, private hydro, and natural gas lines observed or inferred
Back-up generator(s)	Not observed
Hydraulic equipment	None observed
Transformer(s)	None observed on-Site.
Fuel tank(s)	No evidence of current Above Ground Storage Tanks (ASTs) or Underground Storage Tanks (USTs), was observed during Stonecairn's Site visit. It is noted, however, that a suspected fill pipe was noted along the northern building exterior (likely serviced a former furnace oil tank within the basement of the



<b>Assessor Observation(s) During Site Visit</b>	
	Site building). As previously noted, that Site building is currently serviced by natural-gas powered furnace and a close inspection of the basement confirmed that no fuel tank remained.
Other bulk storage tanks and containers	Not observed
<b>Other Observations</b>	
Unidentified or other substances	Not observed
Air emissions/odours	Not observed
Chemical inventory/storage/handling	Based on residential and religious/community property use, limited amounts of general household cleaning/disinfecting supplies and general building/property maintenance products (paints, adhesives, etc.) are presumed to be present (albeit not directly observed by Stonecairn). The presence of these products is not considered to pose a significant environmental risk towards soil and groundwater quality at the Site, given limited quantities and use.
Evidence of water damage/mould	No evidence of significant water damage or suspected mould was noted in accessed areas of the building.  Rabi Steiner reported a former significant leak (originating from the main floor kitchen and affecting drywall and other building materials within basement). Affected drywall and building products within the basement were consequently removed.
<b>Surrounding Property Uses/Occupants</b>	
Project North	Residential properties along Woodside Road and Yeadon Drive
Project South	College Avenue West followed by vacant (naturalised lands that are part of the University of Guelph campus, student residences/apartments beyond
Project East	Residential properties along College Avenue West and Caledonia Street
Project West	Residential properties along College Avenue West and Rodney Boulevard

## 2.2 Site Records

The following Site reports were available for review:

- LDS Consultants Inc. "Phase I Environmental Site Assessment: 81 College Avenue West, Guelph, Ontario". LDS Project No. GE-01100, submitted to Chabad of Guelph, dated November 20, 2023.
- Stonecairn Consulting Inc. "Geotechnical Investigation & Hydrogeological Assessment: Proposed Place of Worship & Accessory Residence – 81 College Avenue West, Guelph, Ontario". Stonecairn Project No. GE-00110, submitted to Chabad of Guelph, dated July 3, 2025.

Stonecairn's review of the aforementioned reports is summarized on the following page.



<b>Report</b>	<b>Summary of Pertinent Information</b>
<p><b>Phase I ESA</b> LDS, 2023</p>	<p>It is noted that this assessment was completed by the same accessors that are penning the current report. As such, the current report relied heavily on information obtained during the 2023 Site visit and research process.</p> <p>Sourcewater protection mapping included in this report, indicates the general Site area to be located within a wellhead protection area as well as part of an extensive issue contributing area (contaminant: Trichloroethylene or other DNAPL). LDS noted that both the wellhead protection Area B and Issues Contributing Area extend over a very large area, encompassing much of the southwestern portion of the City of Guelph, and are not indicative of significant</p> <p>impacts of groundwater on a more local level within the Phase I Study Area. Furthermore, based on the listed contaminant of concern (Trichloroethylene), a chemical related to dry-cleaning operations, it is believed that the Issues Contributing Area designation was assigned due to point-source impacts from a former dry-cleaning operation near one of the municipal wells within the City limits. No evidence of any current or historic dry-cleaning operations within the Phase I Study Area were found during research conducted as part of this investigation.</p> <p>As such, no significant environmental concerns were identified with respect to activities at the Site and immediately abutting properties and further environmental work (i.e., soil and/or groundwater sampling) was not recommended.</p>
<p><b>Geo &amp; HydroG</b> Stonecairn, 2025</p>	<p>A geotechnical investigation was completed at the property in order to support proposed redevelopment plans (i.e., new place of worship and accessory residence) at the Site. It is noted that the current one-storey residence is proposed to be removed as part of planned redevelopment at the Site.</p> <ul style="list-style-type: none"> <li>- Four (4) boreholes were drilled at the Site in January of 2024 to completion depths of 6.55 m below existing ground surface.</li> <li>- Two (2) of the four boreholes were equipped as monitoring wells (BH1/MW and BH4/MW) in order to allow monitoring of stabilized groundwater levels at the Site.</li> <li>- Soils encountered within the boreholes was generally described as topsoil overlying natural sand (fine grained, trace silt), overlying sandy silt/silt, overlying sand and gravel.</li> <li>- Shallow groundwater conditions (within the near surface silt and sand and gravel soils) were monitored between January 2024 and April 2025. Water elevations generally ranged between 4.91 and &lt;6.1 m bgs.</li> <li>- Groundwater flow was inferred to be directed in a southerly direction.</li> </ul>



### 3. DETERMINATION OF STUDY AREA

As soil and groundwater quality at a Site can be negatively impacted by potential contaminants migrating onto the Site from neighbouring properties, potential environmental concerns related to off-Site operations also need to be considered when assessing a property. Soil conditions (low vs. high permeability), stratigraphy, and groundwater flow are major factors in determining risks associated with neighbouring properties. As such, soil and groundwater information reviewed as part of this assessment (as summarized below in Section 3.1) was carefully considered in Stonecainr's determination of the applicable study area for this project. Reviewed mapping is referenced in Appendix F, attached to this report.

#### 3.1 Physical Setting

<b>Topography</b>	
Ground elevation	The ground surface elevation in the area of the Site is consistent with surrounding properties at approximately 325 to 330 m ASL.
Topography	Local topography is relatively flat with a gentle, generally northerly slope towards the Speed River, which is located approximately 1 km (project) north of the Site.
<b>Stratigraphy</b>	
Soil conditions	<p>Physiographic Region of Guelph Drumlin Field, set within a drumlinized till plain, with drumlins shown to the east and west and surrounded by Spillways (located approximately 250 m from the Site boundaries).</p> <p>Surficial soils in the immediate area are described as gravelly glaciofluvial deposits composed of river deposits and delta topset facies. Surficial tills in the drumlin ridges, located further south and east are being described as stone-poor, sandy silt to silty sand textured till on Paleozoic terrain.</p>
Bedrock	Bedrock in the general area consists of sandstone, shale, dolostone or siltstone of the Guelph Formation. Bedrock elevations in the general Site area vary but are generally at an approximately elevation of 288 to 310 m ASL (approximately 15 to 42 m below ground surface).
<b>Hydrogeologic Setting</b>	
Inferred groundwater flow	<p>Based on a review of topographic mapping, groundwater flow is generally expected to follow local topography (towards the Speed River), with an overall north-northwesterly flow.</p> <p>A review of Grand River Conservation Authority Watershed Mapping, however, shows that the Site and general study area are part of a Lower Speed River sub-catchment area with an overall west-southwesterly groundwater flow anticipated. Subwatershed boundaries are indicated on Drawing No. 1, attached.</p> <p>Contrary to both, a recent geotechnical investigation, which included the installation of two monitoring wells on-Site indicated an inferred southerly groundwater flow across the Site.</p> <p>As such, inferred groundwater flow could <u>not</u> be determined with great certainty, however, for the purposes of this report, a southerly groundwater flow was inferred (based on on-Site groundwater elevation measurements).</p>



Surface water features	No surface water features, such as lakes, rivers or creeks were identified on-Site or within the general immediately surrounding area. As previously noted, the Speed River is located to the general north of the Site.
<b>Potential Contaminant Pathways</b>	
Underground infrastructure	Utility trenches, associated with underground infrastructure present within the general area are identified as potential pathways for the migration of contaminants.
Other	None identified.

### 3.2 MECP Well Records Review

Information regarding wells located within the greater Site area was examined on November 28, 2025. Reference numbers and approximate locations of the wells are shown on Drawing 3, appended, and additional details are provided in the table below. No wells were identified for the Site location, however, as previously noted and shown on Drawing No. 2, two (2) monitoring wells were indeed installed at the subject Site in 2023 as part of a geotechnical investigation.

MECP Well ID	Completion Date	Type	Depth (m bgs)	Water Found (m bgs)	Static Level (m bgs)
<i>Water Supply Wells</i>					
6701430	1953-12-11	Domestic	32.92	24.38	8.53
6701432	1954-01-12	Domestic	26.21	16.76	6.40
6701450	1955-10-31	Domestic	25.91	10.67	4.57

NR – Not recorded

Reviewed well records indicate that domestic water supply wells in the area are generally set at an intermediate to deep depth with well depths listed between 26 and 33 m bgs with static water levels recorded between 4.6 and 8.5 m bgs.

### 3.3 Phase I Study Area Limits

Based on the identified topography (relatively flat), soil conditions in the area (predominantly high-permeability sand/sand and gravel soils) and uncertainty about inferred groundwater flow direction, Stonecain has deemed the following study area limits to be suitable for this Phase I ESA in assessing potential environmental risks associated with neighbouring properties:

<b>Limits of Phase I Study Area (from Site boundaries)</b>				
Geographic Direction	Project North	Project South	Project East	Project West
Inferred hydraulic direction	Downgradient	Upgradient	Cross-gradient	Cross-gradient
Distance	250 m	250 m	250 m	250 m

The limits of the determined Phase I Study Area are shown on Drawing 1, appended.



#### 4. ENVIRONMENTAL REGISTRY/DATABASE INFORMATION

Additional environmental information regarding the Site and surrounding properties was obtained through in-house resources and online regulatory databases/registries, and is summarized in the following table:

<b>Environmental Source</b>	<b>Record(s) for the Site and/or Surrounding Properties</b>
MECP Inventory of Coal Gasification Plant Waste Sites in Ontario	No coal gasification plants were identified at the Site or on adjacent surrounding properties.
MECP Inventory of PCB Storage Sites in Ontario	Neither the Site nor surrounding properties with the Phase I Study Area have been registered as PCB storage facilities in the Inventory.
MECP Waste Disposal Site Inventory	No current disposal sites were identified on-Site or within the Phase I Study Area.
RPPRA HWP Registry	An online search completed on December 1, 2025 did not identify any RPPRA hazardous waste generators at the Site address or any addresses within the study area.
Environmental Site Registry for RSCs	A search of the MECP's online RSC database conducted on December 1, 2025 revealed no information relating to environmental investigations or remedial activities for the Site or immediately adjacent properties.



## 5. HISTORICAL RESEARCH

### 5.1 Historical Records

Historical information about land uses at the Site and general study area was obtained by a review of available records, as summarized below.

Historical Record	Coverage Information
Land Title Search / Ownership Information	A formal chain of title was not obtained since it was determined that ownership/occupant/land use information is available through other sources. Historical landowners are not considered to represent a potential environmental concern to the Site.
Aerial Photographs	Aerial photographs for the years 1930, 1955, 1966, 1967, 1975, 2000, 2006, 2013, 2020, 2023, 1954, 1977, 2001, 2006, 2010, 2016, 2023, 2024 and 2025 were obtained from the University of Western Ontario, University of Waterloo, Grand River Conservation Authority, and Google Earth. Copies of select historical aerial photographs are included in Appendix B.
Historical Topographic Maps	Appendix C includes historical topographic maps of the general Phase I Study Area for the years 1935, 1939, 1965, 1975, and 2025.
Fire Insurance Plans (FIPs)	Guelph FIPs dated 1916, 1929, 1946, and 1930 were reviewed as part of this investigation. While the Site itself was not covered in any of the reviewed FIPs, surrounding land uses were documented between 1946 and 1960.
Property Use Directories	Select Guelph Property Use directories, dated between 1908/09 and 2011, were reviewed as part of this assessment. A summary of reviewed directories is included in Appendix D.
Other Records	Google Street View imaging dated between May 2009 and September 2023 were reviewed. No other historical records were reviewed as part of this investigation.

### 5.2 Significant Findings - Historical Record Review

Stonecainr's review of historical records indicated that land use within the general area was predominantly residential and agricultural in the past, with some institutional uses also noted within the study area. More detailed information is provided below:

Address/ Location	Approx. Timeframe	Pertinent Finding(s)	Supporting Records
On-Site			
81 College Ave W	1930 – 1939	The Site appeared to be part of a large farm/farmstead situated outside of former City limits. agricultural field, devoid of structures.	Aerial, topos, directories
	1955	A residential dwelling (inferred to be original portion of the current Site building), based on size, outline and position within the lot was observed on-Site.	Aerial, directories
	1966 - 2025	An addition appeared to have been added to the east side of the original structure. Based on reviewed directories, private residential use continued until circa 2005. The Site building was reportedly used for student housing between circa 2005 and	Aerial, topos, directories, Google



<b>Address/ Location</b>	<b>Approx. Timeframe</b>	<b>Pertinent Finding(s)</b>	<b>Supporting Records</b>
		2012. In 2012, the Chabad of Guelph first started renting the space and later purchased the Site in 2022, after which extensive interior renovations reportedly took place. No significant changes to Site features were observed on reviewed aerial photographs. Land use remained predominantly residential from an environmental sensitivity standpoint.	Street view, site visit, interview
<b>Off-Site within Study Area</b>			
General study area	1930 – 1946	The general surrounding area was observed as predominantly vacant agricultural land in a rural setting. Some farmsteads appeared to be present along College Avenue West while residentially developed lots were noted along to the east of the Site, along the north side of College Avenue West (in closer proximity to the Agricultural College illustrated outside of the study area -southwest corner of College Ave W & Gorden St)	Aerials, topos, directories, FIPs
	1955 - 1975	Significant increase in residential development was noted in the general areas to the north, northwest and northeast of the Site. An increase in institutional development was noted to the general southeast as the college campus expanded. The area to the immediate south of the Site, across College Avenue West remained predominantly in agricultural land use, however.	Aerials, topos, directories, FIPs
	1990s - 2025	Further expansion of the University of Guelph campus included the construction of McGilvray Street to the general south of the Site, along with student apartments/housing along the southern limits of the study area. Residential redevelopment with current homes on neighbouring lands abutting the Site to the north (Woodside Road cul-de-sac) occurred circa 2006.	Aerials, topos, directories, Google street view, site visit

Note: aerials = aerial photographs (see Appendix B), topos = topographic maps (see Appendix C), directories = City Directories (see Appendix D), FIPs = Fire Insurance Plans.



## 6. EVALUATION OF FINDINGS

Based on Stonecairn’s Site reconnaissance and records review, the following potential environmental concerns (PECs) are identified within the study area:

PEC	Description [duration of PEC]	Address	Location relative to Site	PEC deemed to contribute towards a significant environmental risk to soil and/or groundwater quality at the Site?
<b>On-Site</b>				
The current residential/religious use and former residential and agricultural land uses are generally considered low-risk from an environmental risk perspective. Based on Stonecairn’s review of available documentation and Site observations, the following potential environmental concerns are identified in respect to on-Site risks to impacts of soil and/or groundwater quality:				
PEC-1	Suspected former furnace oil AST in basement [circa 1955 - 2012]	81 College Avenue	Basement of on-Site residence	No – While a suspected fill pipe was noted along the northern exterior of the Site building during the initial Site visit, it could be confirmed that no AST remains at the Site. The basement, where any former furnace oil fuel tank would have been located, was observed finished with concrete flooring in good condition. Significant impact to soil and/or groundwater at the Site due to any potential former leaks was considered unlikely, given the conditions of the basement flooring.
<b>Off-Site within Study Area</b>				
Current and historical property uses within the study area were predominantly residential, institutional, and agricultural in nature and, as such, are considered low-risk from an environmental risk perspective. No industrial, or higher risk commercial operation (such as gas stations, dry-cleaning, and/or automotive repair and maintenance, etc.) were identified within the study area. As such, the risk associated with significant impact of soil and or groundwater quality at the Site due to contaminants migrating onto the Site from potential neighbouring source sites was considered low and no off-Site PECs are identified.				

*Note: Stonecairn reiterates that this report was completed in general accordance with CSA Standard Z768-01 (reaffirmed 2022), and in an effort to differentiate reporting requirements, the terms “Potentially Contaminating Activity (PCA)” and “Areas of Potential Environmental Concern (APECs)”, associated with O.Reg. 153/04 reporting were purposely not used to describe environmental risks associated with this project.*



## 7. OTHER CONSIDERATIONS

While not related to soil and groundwater quality at the Site, from a site management standpoint, additional considerations should be given to the following:

- Based on the age of the on-Site structure (circa 1950s), it was deemed possible that asbestos containing materials (ACM) and/or other designated substances are present within building materials at the Site. Stonecairn notes that the entire Site building was extensively renovated in 2022 and included the removal of many of the original finishes; therefore, significant quantities of ACM are not expected to remain at the Site. However, the presence of hidden ACM within the Site building cannot be ruled out altogether. A Designated Substances/ Hazardous Building Materials Survey (DSS/HMS) of the Site building should be completed prior to any further renovation and/or demolition activities, in accordance with the Occupational Health and Safety Act, particularly O.Reg. 490/09 (as amended), in order to identify possible presence of designated substances and/or hazardous building materials.
- Two (2) monitoring wells are identified at the Site. These wells were installed as part of the geotechnical and hydrogeological background study prepared for the site. When the monitoring wells at the Site are no longer required for monitoring purposes, they should properly be decommissioned in accordance with O.Reg. 903.

## 8. RECOMMENDATIONS

Based on the findings of this Phase I ESA, no areas of environmental concern considered to represent a significant risk to soil and/or groundwater quality at the Site were identified. As such, further environmental assessment work at the Site (i.e., a Phase II ESA) is not recommended at this time.



## 9. LIMITATIONS AND CLOSING

This report has been prepared and is intended for the sole use of **Chabad of Guelph**. Reliance is not extended to other parties without receiving written permission from Stonecairn. No portion of this report may be used as a separate entity. It is intended to be read in its entirety.

This Phase I ESA has been conducted in accordance with the Phase I ESA standard as defined by CSA Standard Z768-01 (R2022). Information obtained during the site history research relies on data sourced from third-party entities, which has not been verified, unless specifically noted in the report. Completion of an environmental investigation reduces, but does not eliminate environmental risk.

Stonecairn staff have conducted themselves in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the area, and under similar conditions as this project. Stonecairn has provided its professional judgement of the potential environmental concerns facing the client, based on observations during site reconnaissance work; review of available historical data regarding land-use, occupancy and ownership; and, review of available mapping and publications.

We trust this satisfies your present requirements. If you have any questions or require anything further, please feel free to contact our office.

Respectfully Submitted,

### STONECAIRN CONSULTING INC.



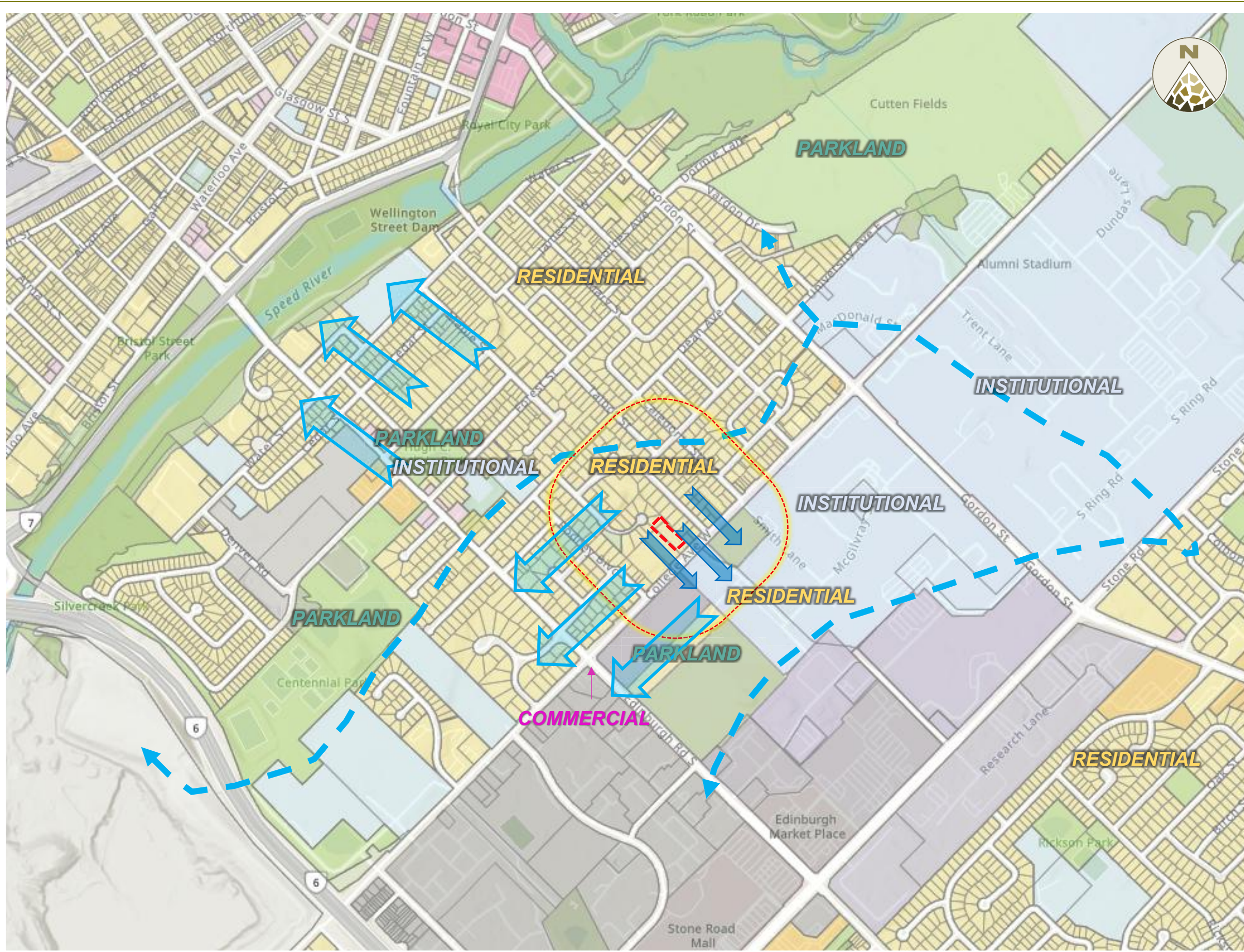
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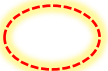





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## **DRAWINGS**



- Legend**
-  Approximate Site boundary
  -  Approximate extent of Phase I Study Area
  -  Approximate limits of watershed sub-catchment areas (as shown on GRCA mapping)
  -  Inferred shallow groundwater flow direction (based on sub-catchment area)
  -  Inferred shallow groundwater flow direction (based on on-Site manual groundwater elevation measurement)

**Source**  
 Base drawing from City of Guelph Interactive Online Mapping Zoning Application

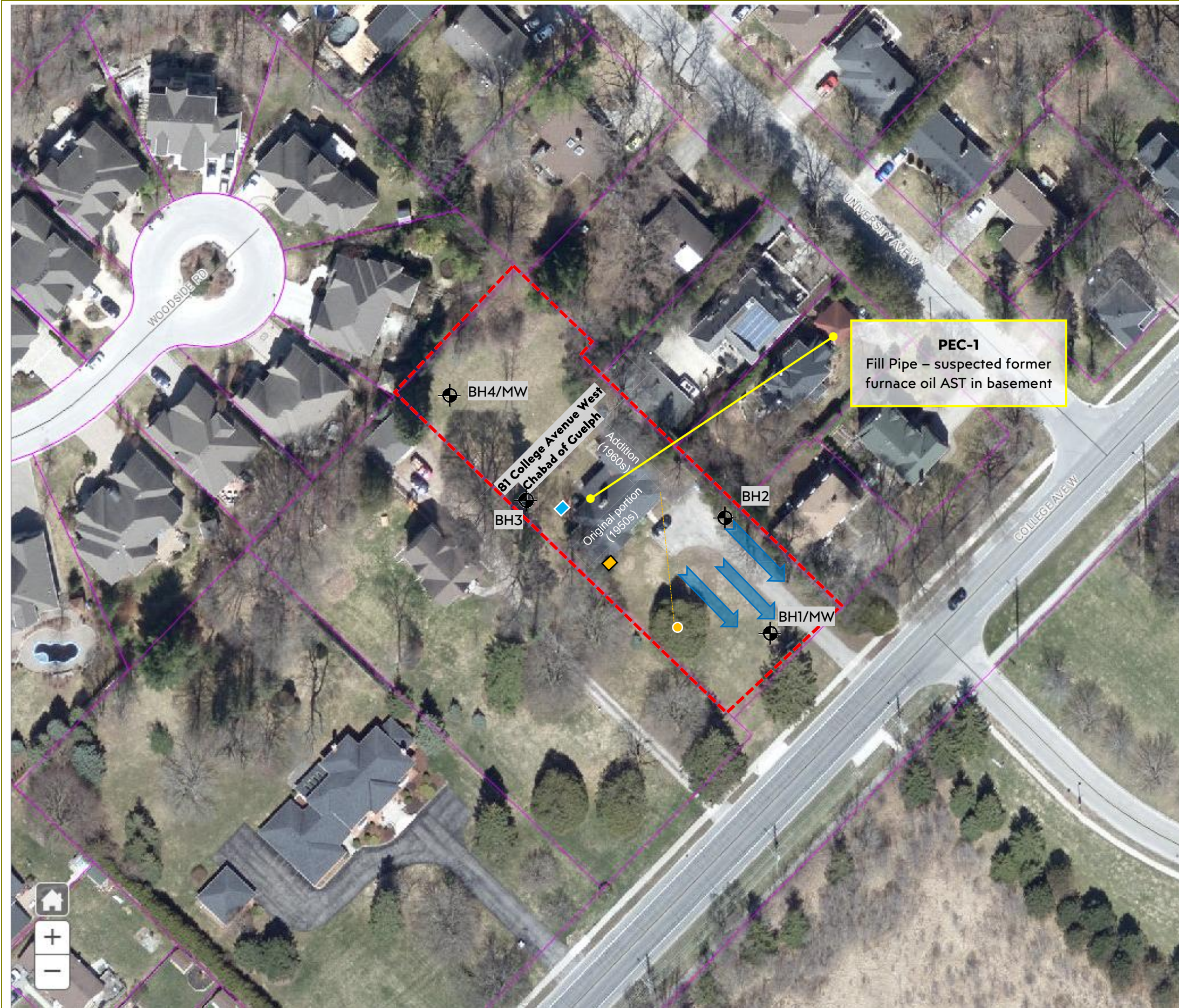


**PROJECT NAME**  
 Phase I Environmental Site Assessment

**PROJECT LOCATION**  
 81 College Avenue West, Guelph, ON

**DRAWING NAME**  
 Site and Surrounding Property Plan

<b>SCALE</b> NTS	<b>PROJECT NO.</b> GE-01100
<b>DATE</b> Dec 2025	<b>DRAWING NO.</b> 1



**Legend**

- Approximate Site boundary
- Approximate location hydro pole
- Approximate location of buried electrical cable
- Approximate location of gas meter
- Approximate location of pad-mounted a/c unit
- ⊕ Approximate borehole/monitoring location (2023)
- PEC Potential environmental concern (as identified during the current investigation)

**Source**

Base drawing from Grand River Conservation Authority, Imagery® 2020.



**PROJECT NAME**

Phase I Environmental Site Assessment

**PROJECT LOCATION**

81 College Avenue West, Guelph, ON

**DRAWING NAME**

Site Detail Plan

<b>SCALE</b>	<b>PROJECT NO.</b>
NTS	GE-01100
<b>DATE</b>	<b>DRAWING NO.</b>
Dec 2025	2



**Source**

Base drawing from Google Earth.  
Well data compiled from MECP Online Well Record Database, November 28, 2025.



**PROJECT NAME**

Phase I Environmental Site Assessment

**PROJECT LOCATION**

81 College Avenue West, Guelph, ON

**DRAWING NAME**

MECP Well Location Plan

**SCALE**

As Shown

**PROJECT NO.**

GE-01100

**DATE**

Dec 2025

**DRAWING NO.**

3

**APPENDIX A**

**SITE PHOTOGRAPHS**



**Photograph 1:**

Paved entrance driveway and current Site building located at 82 College Avenue West as observed from roadway south of the Site.

**Direction:** Project North



**Photograph 2:**

Rear (north side) of Site building and backyard.

**Direction:** Southeast



**Photograph 3:**

Hydro-meter located on south side of Site building near garage. Underground hydro cable connects this meter to a hydro-pole that is located within a cedar tree on the southwestern portion of the property.

**Direction:** Project Northeast



**Photograph 4:**

Gas meter located on southwest corner of Site building.

**Direction:** Project North





**Photograph 5:**

Pad-mounted air conditioning unit on north side of Site building as well as window-mounted air conditioning units currently service the Site building.

**Direction:** Project South-southwest



**Photograph 6:**

Capped pipe noted near pad-mounted air conditioner unit on north side of Site building. It was deemed possible that this was a former fill pipe for a furnace oil tank. No fuel tanks were currently noted at the property. The Site building is currently serviced by a natural gas powered forced-air furnace.

**Direction:** Project South



**Photograph 7:**

Much of the interior of the current Site building has been significantly renovated in recent years, shown here is the front parlour.

**Direction:** Project Southwest



**Photograph 8:**

Back parlour; interior finishes in this room were more dated than much of the rest of the main floor. Older ceiling tiles are observed on the ceiling.

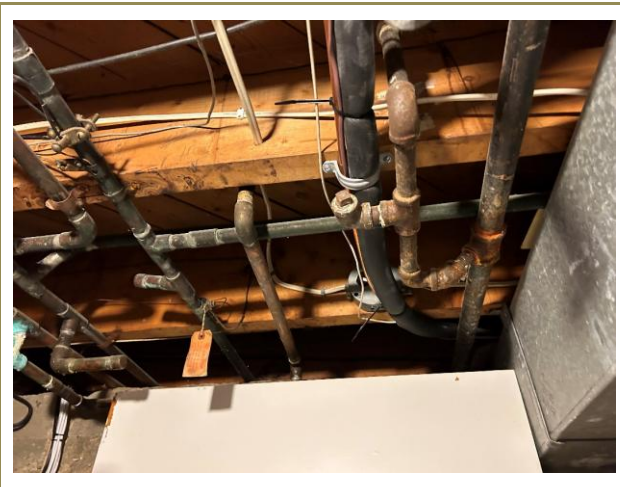
**Direction:** Project Northwest





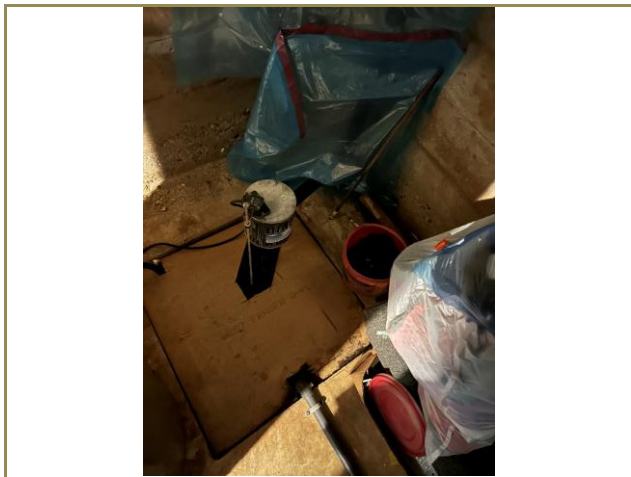
**Photograph 9:**  
Hot water boiler and natural gas forced air furnace in basement of the building.

**Direction:** Project North



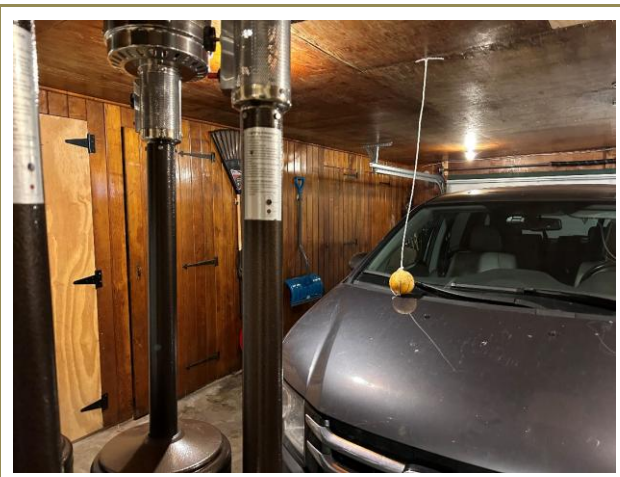
**Photograph 10:**  
Piping within accessible areas of the basement were generally noted as bare (i.e., uninsulated).

**Direction:** N/A



**Photograph 11:**  
A sump pump is located within the basement.

**Direction:** N/A



**Photograph 12:**  
Interior of garage on east side of Site building.

**Direction:** Project South




## **APPENDIX B**

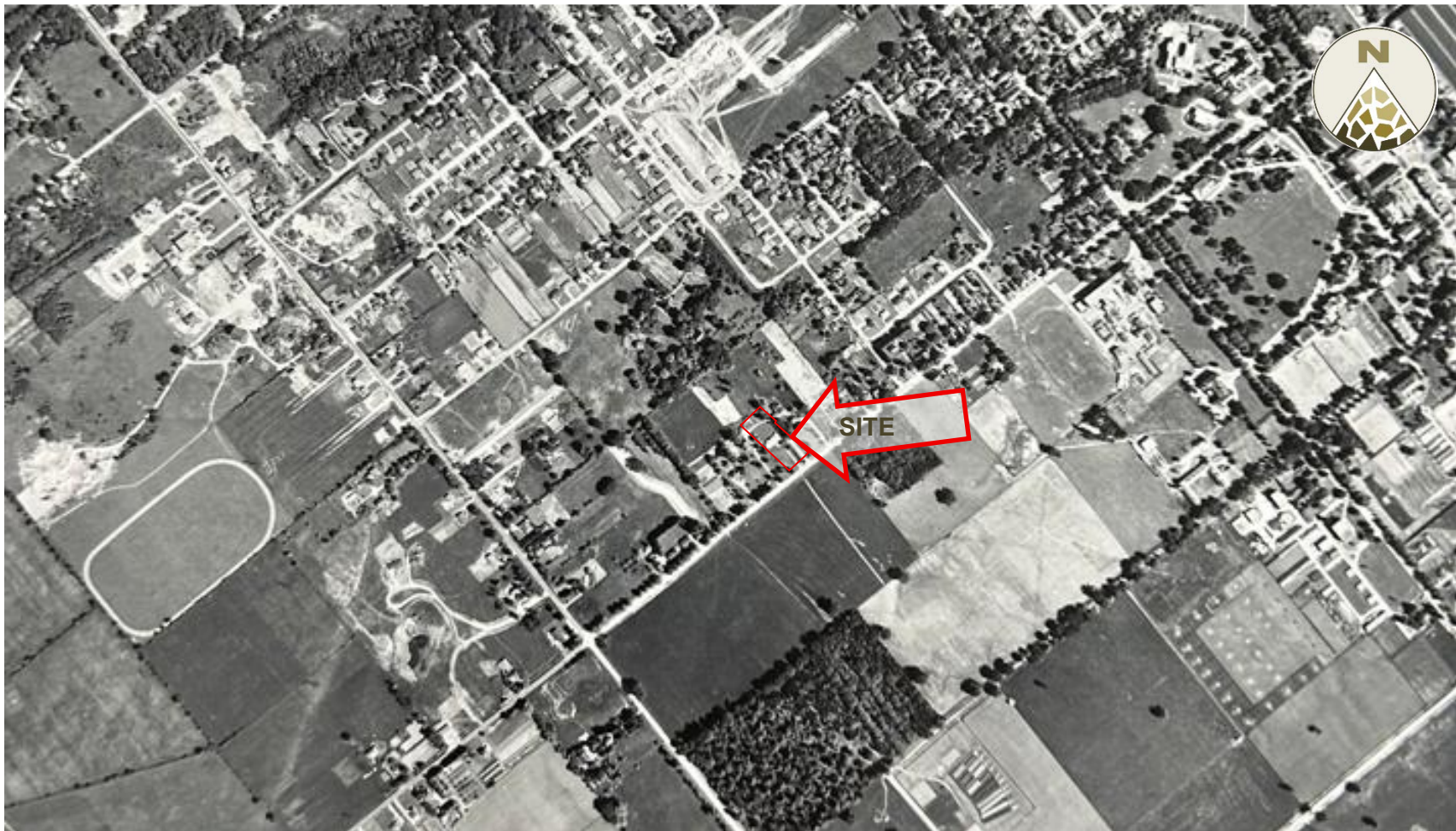
### **AERIAL PHOTOGRAPHS**



**Source**


University of Western Ontario Aerial Photo Collection.

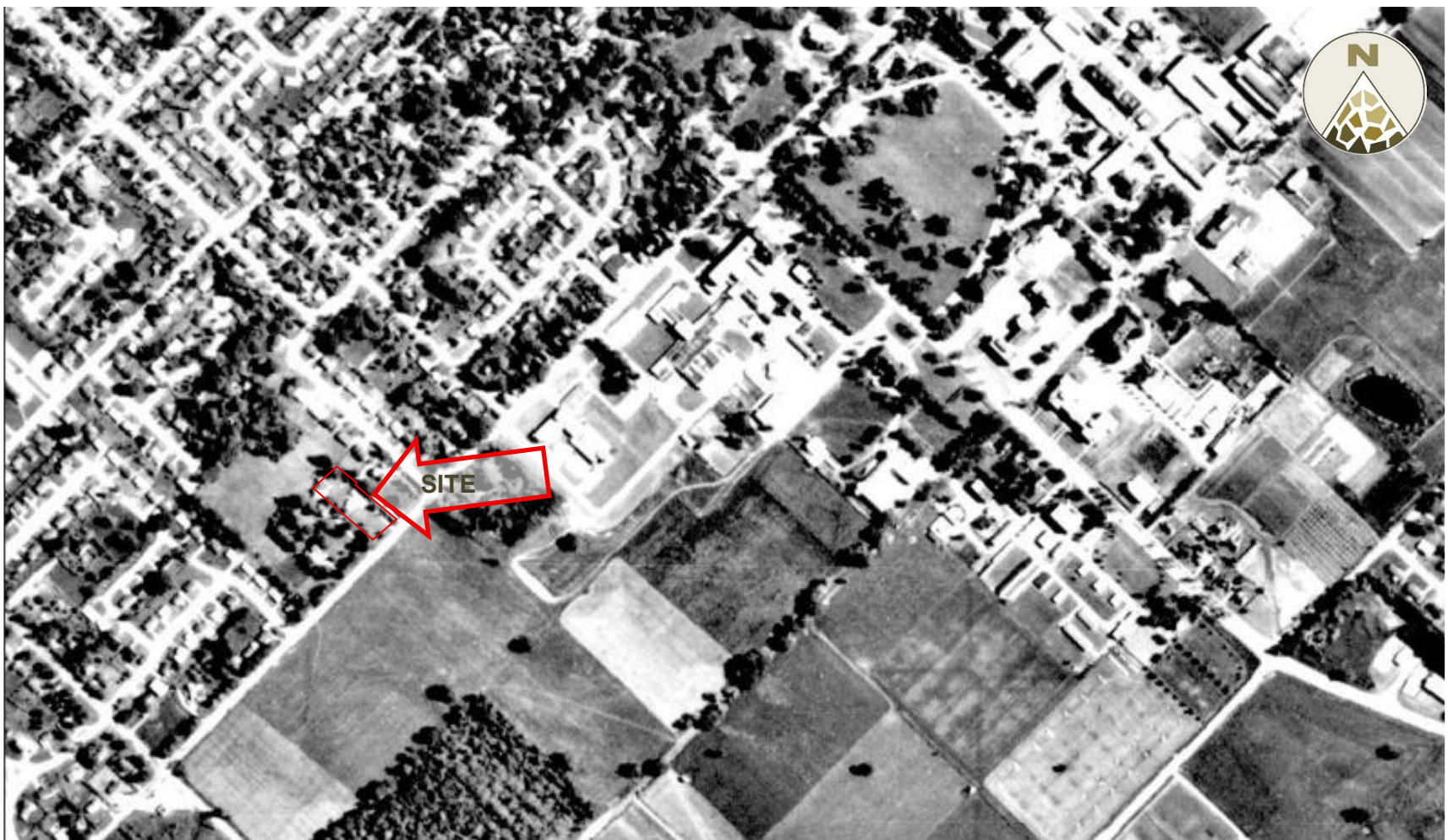
	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 1930 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B1



**Source**


University of Waterloo Aerial Photo Collection.

	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 1955 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B2



**Source**


University of Waterloo Aerial Photo Collection.

	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 1966 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B3



**Source**


University of Western Aerial Photo Collection.

	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 1972 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B4



**Source**


University of Western Ontario, Map and Data Centre

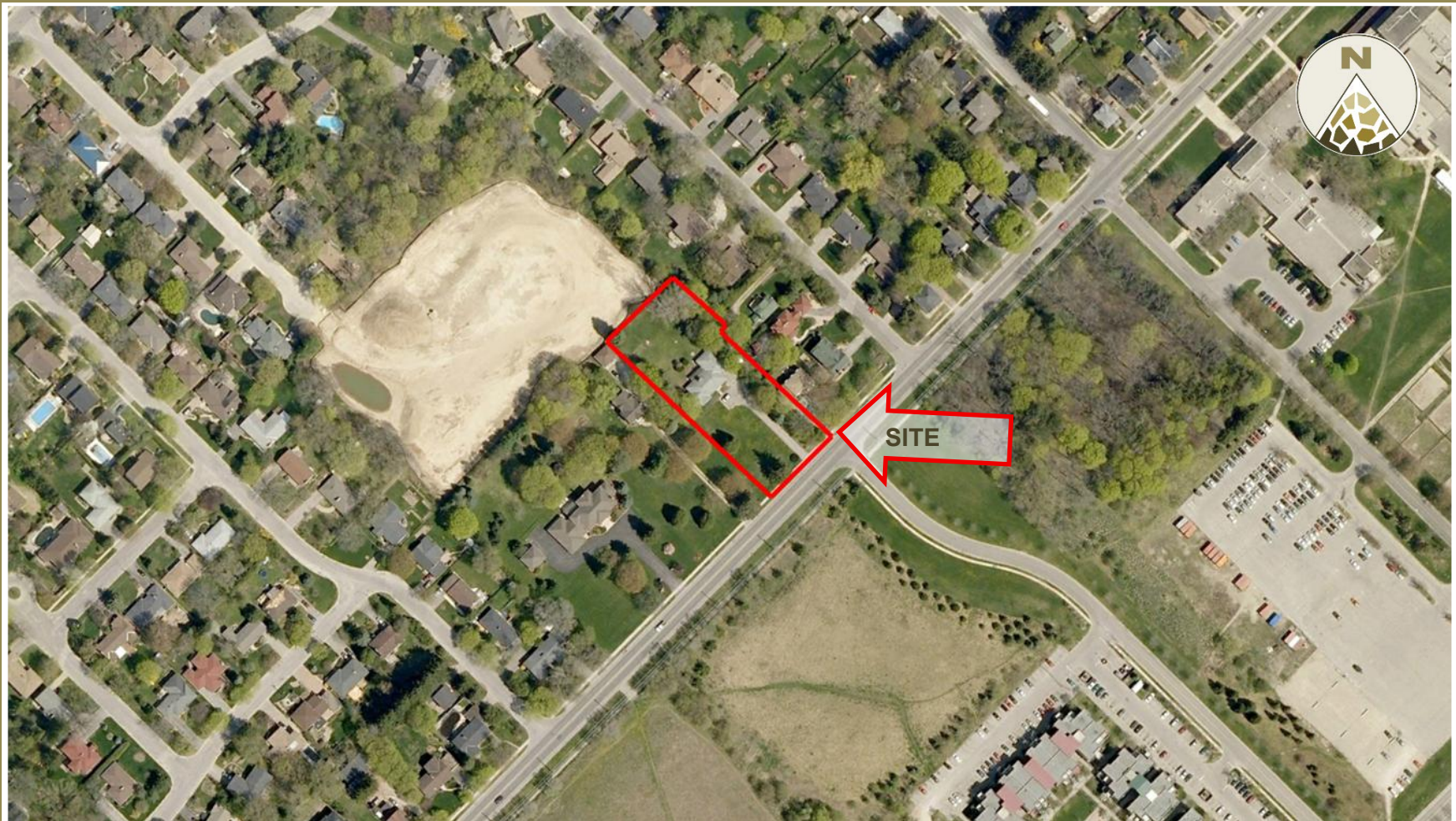
	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 1975 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B5




**Source**

Grand River Conservation Authority.

	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 2000 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B6




**Source**  
Google Earth Pro.

	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 2006 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B7




**Source**  
Google Earth Pro.

	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 2013 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B8

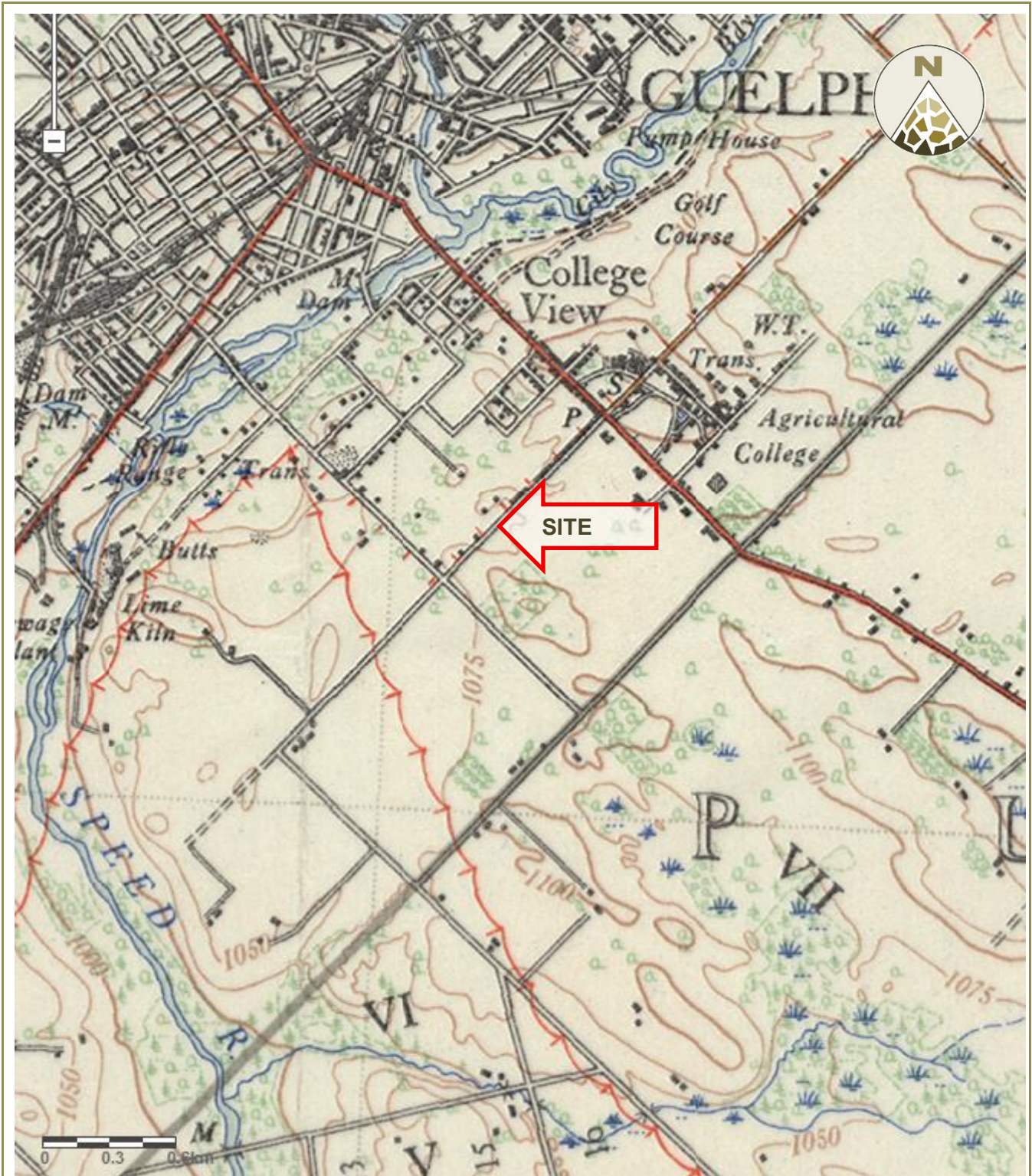


**Source**  
Google Earth Pro.


	<b>LOCATION</b> 81 College Avenue, Guelph, ON	<b>SCALE</b> NTS	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 2025 Aerial Photograph	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> B9

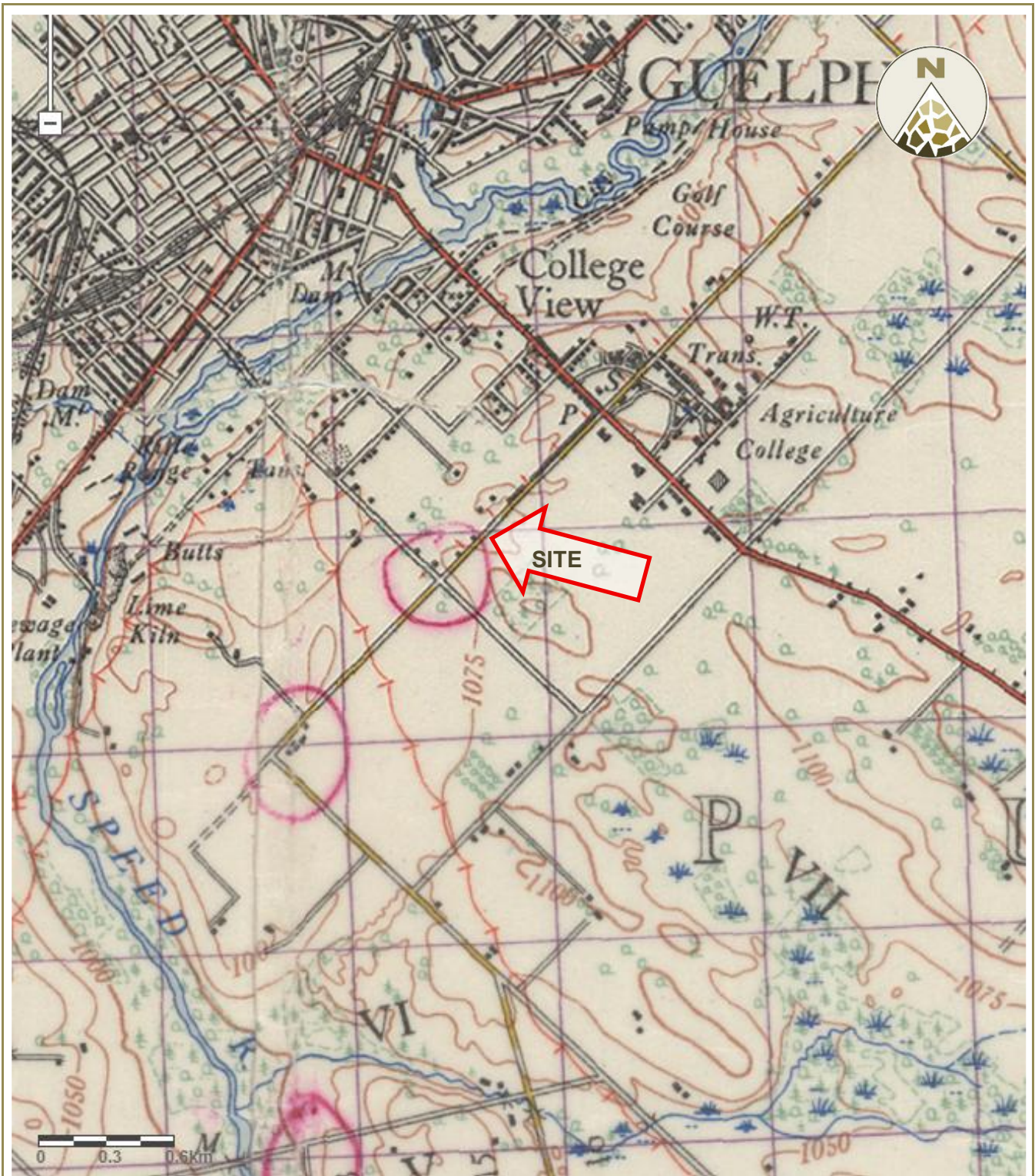
## **APPENDIX C**

### **HISTORICAL TOPOGRAPHIC MAPS**




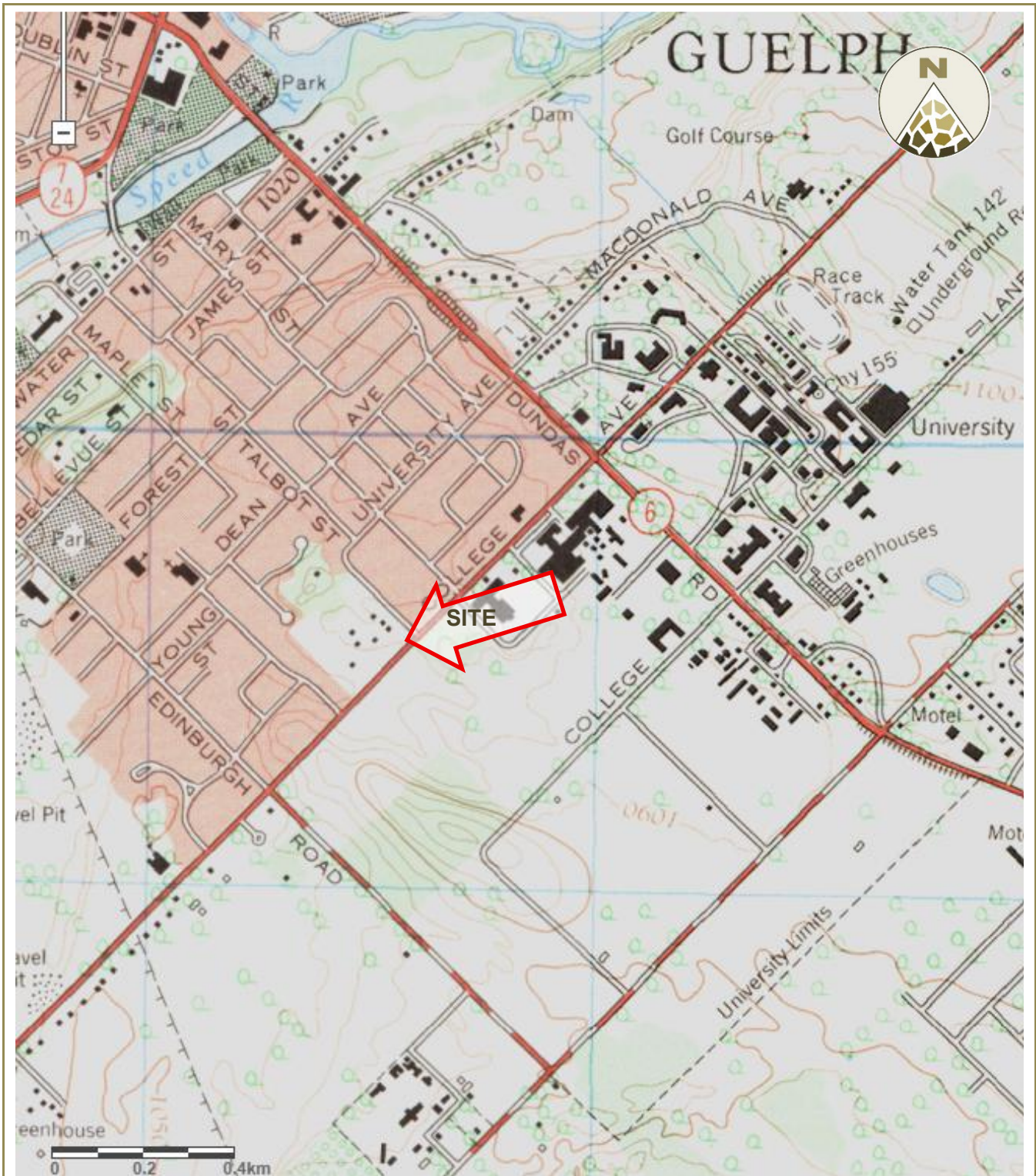
**Source**  
 Department of National Defence, Guelph Sheet (04PI09), ed. 1, 1935.

	<b>LOCATION</b> 81 College Ave W, Guelph, ON	<b>SCALE</b> As shown	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 1935 Topographic Map	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> C1




**Source**  
 Department of National Defence, Guelph Sheet (04PI09), ed. 2, 1939.

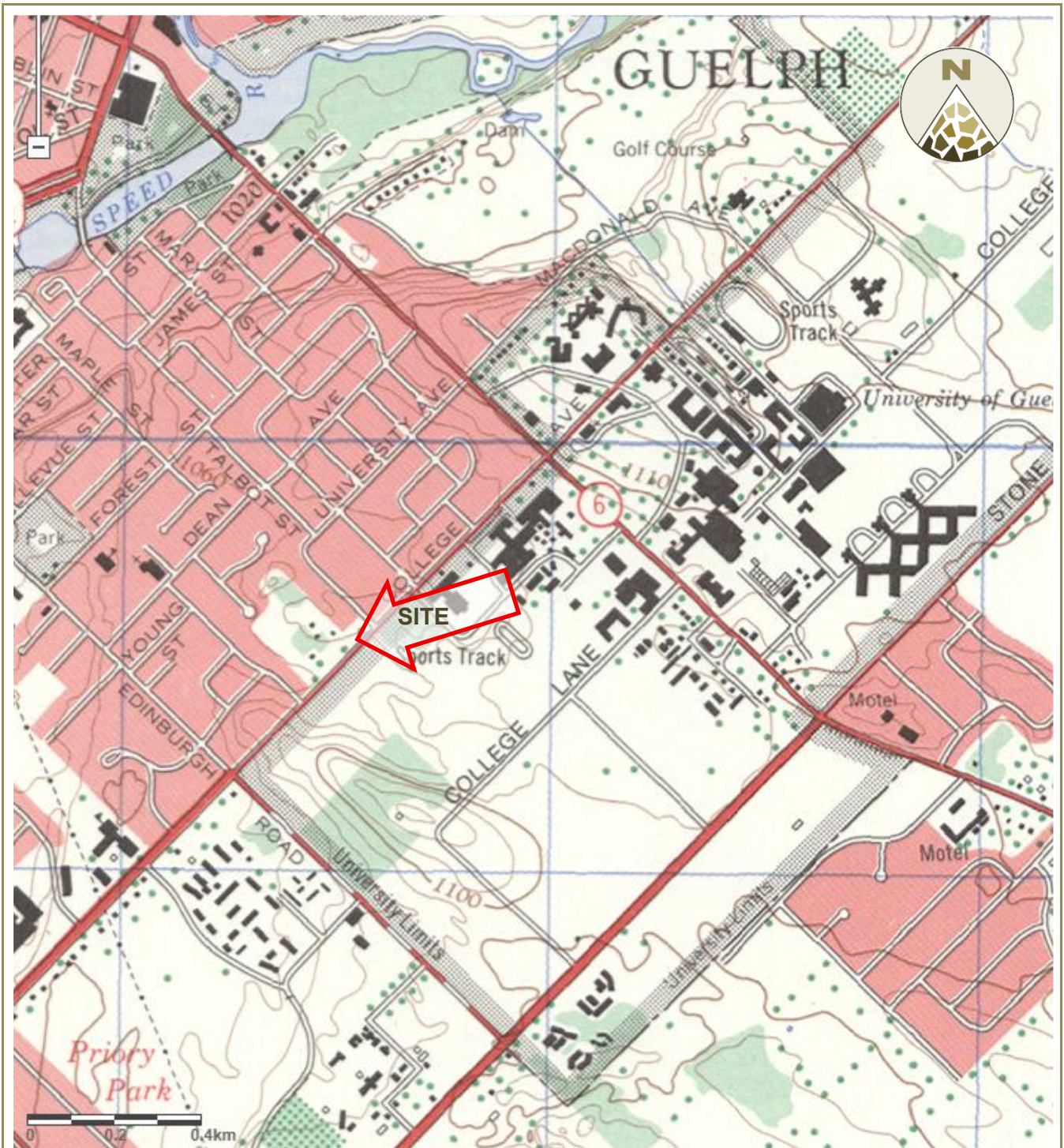
	<b>LOCATION</b> 81 College Ave W, Guelph, ON	<b>SCALE</b> As shown	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 1939 Topographic Map	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> C2



**Source**

Department of Energy, Mines and Resources, Guelph East, Ontario. 1:25,000. Map Sheet O40P09B, ed. 1, 1965.

	<b>LOCATION</b> 81 College Ave W, Guelph, ON	<b>SCALE</b> As shown	<b>PROJ. NO.</b> GE-01100
	<b>DRAWING NAME</b> 1965 Topographic Map	<b>DATE</b> Dec 2025	<b>DWG. NO.</b> C3



**Source**

Department of Energy, Mines and Resources, Guelph East, Ontario. 1:25,000. Map Sheet O40P09B, ed. 2, 1975.



**LOCATION**

81 College Ave W, Guelph, ON

**SCALE**

As shown

**PROJ. NO.**

GE-01100

**DRAWING NAME**

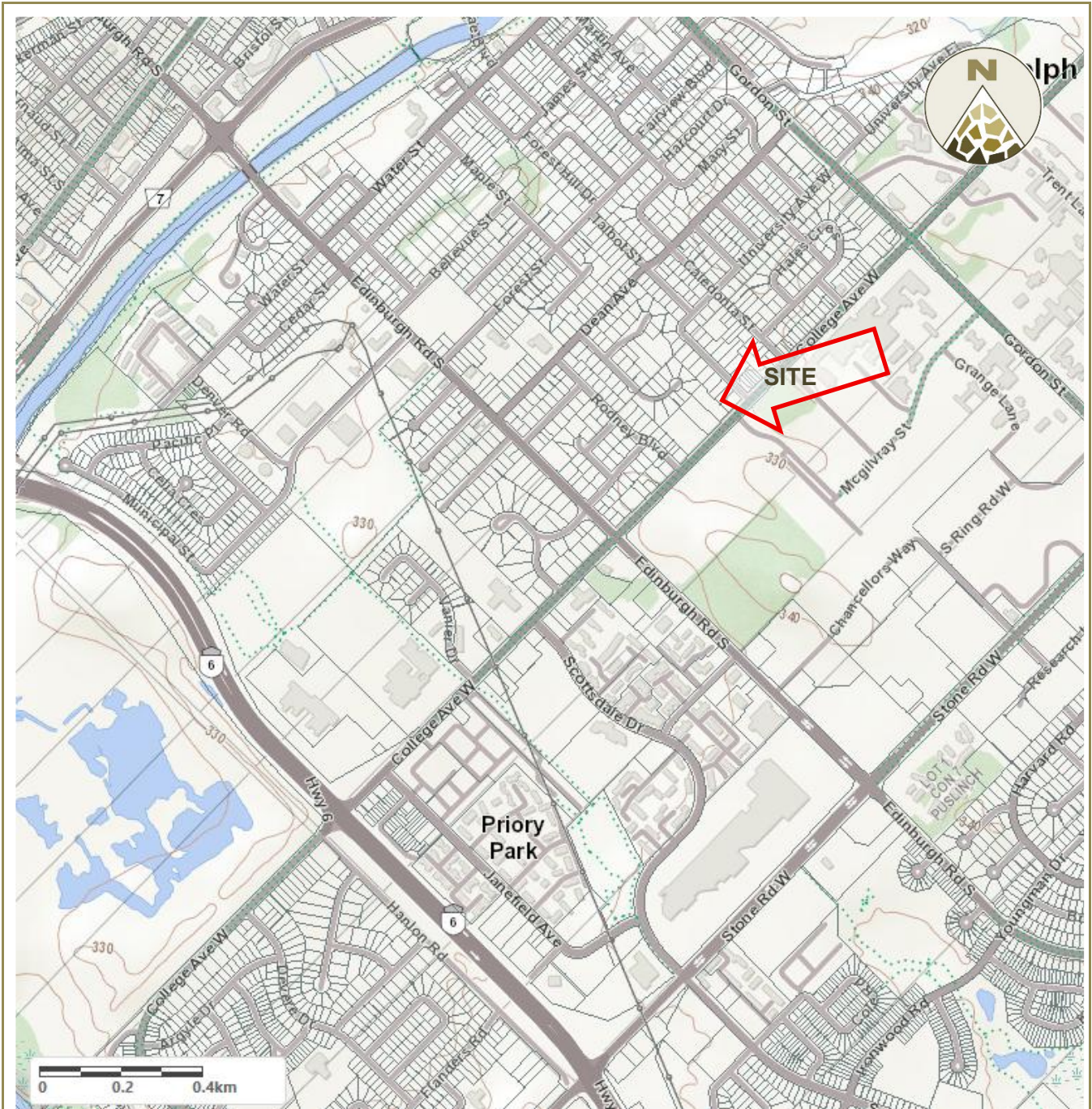
1975 Topographic Maps

**DATE**

Dec 2025

**DWG. NO.**

C4



**Source**

Ontario Ministry of Natural Resources, Make a Topographic Map Application, <https://www.lioapplications.lrc.gov.on.ca/MakeATopographicMap>, King's Printer Ontario, 2025.



**LOCATION**

81 College Ave W, Guelph, ON

**DRAWING NAME**

2025 Topographic Map

**SCALE**

As shown

**DATE**

Dec 2025

**PROJ. NO.**

GE-01100

**DWG. NO.**

C5

**APPENDIX D**

**CITY DIRECTORIES**

Available City of Guelph Property Use Directories were reviewed via available online sources (FamilySearch online library: <https://www.familysearch.org/en>) for various years between 1908/9 and 2011 (latest available edition). It is noted that the general Site area was not listed in the 1908/09 and earlier directories, due to its location outside former City of Guelph limits.

The following occupants were listed for the Site, under various applicable current and former addresses:

Address	Occupant	Years
81 College Avenue West	No return	2011
	Residential entry (Hammond)	1955 - 2005
	Address not listed	1949 and prior

The reviewed directories indicated that neighbouring properties within the Phase One Study Area were predominantly of residential and institutional land uses. Current residential subdivisions to the north, east and west of the Site appeared to have been developed in the late 1950s/early 1960s while University of Guelph campus appeared to have been established to the immediate south of the Site in the 1980s, with associated student housing (78 McGilvray Street) built in the mid 1990s. Prior to these developments, the area appeared to be predominantly of agricultural land use; few residential entries (no MNs listed) were shown along Caledonia Street and College Avenue West in the reviewed 1930 City of Guelph directory. None of the other current roadways were listed at that time.

**Based on listed occupants of the Site or neighbouring properties within the Phase One Study Area no environmental risk towards the Site (based on the nature of the operations listed) were identified.**



## **APPENDIX E**

### **QUALIFICATIONS OF ASSESSORS**

## QUALIFICATIONS OF ASSESSORS

### **Project Assessor / Report Writer**

Natascha Ungerer is a Senior Environmental Technologist with over 15 years of experience in the environmental consulting field. She obtained her Environmental Technology Diploma from Fanshawe College in 2006 and has routinely been involved with numerous environmental assessments (Phase I, II and III) on residential, commercial, institutional, and industrial properties since then. Natascha is fully acquainted with proper sampling protocol and all Environmental Regulations and Guidelines.

### **Project Engineer / Report Reviewer**

Rebecca Walker is the President and Geotechnical Director of Stonecairn Consulting Inc. She is a qualified professional engineer with over 25 years of experience in the geotechnical and environmental consulting field. She obtained a Bachelor of Science in Geological Engineering from Queen's University, and is a Qualified Person (QP) registered with the Ontario Ministry of Environment, Conservation and Parks (MECP), in accordance with Ontario Regulation 153/04. Rebecca has extensive experience in the development and management of Phase I and II environmental site assessments, as well as site remediation and site restoration in support of property transactions, environmental due diligence, and / or regulatory requirements.

## **APPENDIX F**

## **REFERENCES**

## REFERENCES

- Canadian Standards Association (CSA) Standard Z768-01. Phase I Environmental Site Assessment, originally published November 2001, reaffirmed 2022 as updated
- Chapman, L.J., Putman, D.F., 2007. Physiography of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 228
- City of Guelph, online GIS mapping, <https://geodatahub-cityofguelph.opendata.arcgis.com/datasets/city-map-1>
- Google Earth Pro™ Satellite Imagery
- Ministry of Natural Resources, Ontario Geological Survey, Bedrock Topography, Guelph Area, Preliminary Map P.2224, 1979
- Ontario Geological Survey 2000. Quaternary geology, seamless coverage of the Province of Ontario; Ontario Geological Survey, Data Set 14---Revised
- Ontario Geological Survey 2010. Surficial geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 128-REV
- Ontario Geological Survey 2011. 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey, Miscellaneous Release---Data 126-Revision 1
- Ontario Government, RSO 1990, Ontario Environmental Protection Act
- Ontario Ministry of the Environment, Conservation and Parks, June 1991, Waste Disposal Site Inventory
- Ontario Ministry of the Environment, Conservation and Parks, April 1987, Inventory of Coal Gasification Plant Waste Sites in Ontario

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