

16 October 2019

Project No. 19131354

#### Michael Boucher, Manager of Planning DCR/Phoenix Group of Companies 18 Bentley Ave Nepean, ON K2E 6T8

# PHASE ONE ESA UPDATE, BLOCK 232, 1055 CEDAR CREEK DRIVE OTTAWA, ONTARIO

Dear Mr. Boucher,

Golder Associates Ltd. (Golder) was retained by DCR/Phoenix Group of Companies (Phoenix) to complete a Phase One Environmental Site Assessment (ESA) Update for Block 232, 1055 Cedar Creek Dive in Ottawa, Ontario (the "Site"). Golder previously completed a Phase One ESA for the larger subdivision development property in 2013 "*Phase I ESA – 4800 Bank Street, Remer Lands, Ottawa, Ontario, 13-1121-0083 (1011)*" prepared by Golder for Leitrim South Holdings Inc. in November 2013 ("2013 Phase I ESA"). The purpose of this Phase One ESA Update is to provide an update on the 2013 Phase I ESA in relation to the Site and outline any changes to the findings from the 2013 Phase One ESA.

To update the 2013 Phase I ESA, Golder completed a site visit, interviewed a person familiar with the Site for the past 5 years and reviewed publicly available aerial photographs for the intervening years since the 2013 Phase I ESA.

### Background

Municipal Address	1055 Cedar Creek Drive, Ottawa Ontario
Property Identification Number	043284456
Legal Description	Concession 4, Rideau Front, Part of Lot 21

A plan of survey for the Site is provided in Attachment A. The Phase One Study Area is provided in Figure 1.

Authorization to proceed with this investigation was received from Phoenix on September 26, 2019. The contact information for the Site owner is:

Site Owner	Address	Contact Information	
	18 Bentley Ave		
DCR/Phoenix Group of Companies	Nepean, Ontario	Mr. Michael Boucher	
	K2E 6T8		

The Site is rectangular in shape with an area of approximately 1 hectare (approximately 2.5 acres). The Site is located within an area undergoing redevelopment from vacant land to a residential subdivision. The future planned use of the Site is residential.

### Aerial Photography Review

The 2013 Phase I ESA reviewed aerial photography up to 2011. To update the previous findings, aerial photographs from 2014, 2017 and 2018 were reviewed.

Year	Site	Surrounding Property Direction			
Scale		North	East	South	West
2011 (geo-Ottawa)	Forested Land	Forested land with a tower site approximately 200 m north of the Site.	Vacant partially cleared land followed by Bank Street and commercial land.	Vacant land and a commercial property fronting Bank Street	Forested land.
2013 (geo-Ottawa)	Same as 2011	Scarified land is observed north of the Site, and appears to be construction access roads	Same as 2011	Scarified land is observed south of the Site, and appears to be construction access roads	Scarified land is observed west of the Site, and appears to be construction access roads
2017 (geo-Ottawa)	The Site has been partially cleared of vegetation	Further development of construction access roads is observed	The property to the east appears to be used for construction staging, soil stockpiles are observed.	Further development of construction access roads is observed. The property immediately to the south has been cleared of vegetation	Further development of construction access roads is observed
2018 (Google Earth)	The Site is cleared and appears to have the topsoil stripped	roads are clearly visible. The tower stockpiles of pipe 150 metres south of		Topsoil is stripped and the subdivision roads are clearly visible.	

#### Site Reconnaissance

Ms. Laura Jones of Golder visited the Site for 30 minutes on October 4, 2019 at 9:30 am. The site visit consisted of a walk around the Site along with a cursory inspection of neighbouring properties from the Site and publicly accessible areas. The weather conditions were partially cloudy and the temperature was approximately 5°C. Photographs of relevant features noted during the site visit are attached in Attachment B.

The specific observations made during the Site visit are presented herein.

Торіс	Observations	Comment / Source
Total Area of the Site	1 hectare (2.5 acres)	Site Representative
Number and Age of Building on the Site	No buildings	Site observations
Building Area	Not applicable	No building
Number of Floors (include all levels, whether above or below ground)	Not applicable	No building
Number, Age, and Depth of Levels Below Ground Level	Not applicable	No building
Number and Details of all Aboveground Storage Tanks ("ASTs")	No evidence of ASTs was observed on the Phase One Property	Site observations
Number and Details of all Underground Storage Tanks ("USTs")	No evidence of USTs was observed on the Phase One Property	Site observations
Potable and Non-Potable Water Sources	Not serviced - Water line is stubbed 1 metre into the property line.	Site observations
Utility Lines Present (i.e. Electrical, Natural Gas, other)	Not serviced	Site observations
Entry and Exit Points for Site Building	Not applicable	No building
Existing and Former Heating System(s) (include fuel type / source)	Not applicable	No building
Existing and Former Cooling System(s) (include fuel type / source)	Not applicable	No building
Drains, Pits, and Sumps (include current use, if any, and former use)	Not applicable	No building
Unidentified Substances	Not applicable	No building
Stains or Corrosion Located near a Potential Discharge Location	None identified	Site observations
Location of any Current and Former Wells	No current or former wells observed on the Site	Site observations

Торіс	Observations	Comment / Source
Sanitary/Process Wastewater Receptor	Not applicable	No building
Sanitary Sewer Connection	Not applicable – sanitary sewer is stubbed 1 metre into the property line	No building
Septic Systems	None observed	Site observations
Storm Water Flow	Infiltration into surface soil or runoff to catch basins along Salamander Way to the north	Site observations
Storm Sewer Connection	Not applicable – Storm sewer is stubbed 1 metre into the property line	No building
Ground Cover (i.e. grass, gravel, soil, or pavement, etc.)	Eastern portion of the Site was bare topsoil, western portion of the Site was vegetated	Site observations
Current or Former Railway Lines or Spurs	None observed	Site observations and aerial photographs
Presence of Stained Soil, Vegetation, or Pavement	None observed	Site observations
Presence of Stressed Vegetation	None observed	Site observations
Presence of Fill and/or Debris Materials	Some construction related debris and gravel observed on Site.	Site observations
Potentially Contaminating Activity	No potentially contaminating activities were observed during the Site visit	Site observations

#### Surrounding Land Use

Based on visual observations during the Site visit, adjacent property use is primarily composed of a residential subdivision under development. A summary of adjacent land use is as follows:

#### North

The Site is bounded to the north by Salamander Way followed by residential development. The eastern portion of the Site is bounded to the north by residential development. Further to the north, the tower site remains vegetated with light forest cover. No tower was observed on this property.

#### East

The Site is bounded to the east by Cedar Creek Drive followed by residential developments, construction staging (construction trailers, storage, sales centres) followed by Bank Street. East of Bank Street there is a temple, a communication tower and a recreational vehicle retailer.

#### South

The Site is bounded to the south by Pingwi Place followed by residential developments. South of Dun Skipper Drive, further residential development was observed including vegetation clearing, topsoil stripping and lot servicing. Home Hardware is located approximately 150 metres southeast of the Site.

#### West

The Site is bounded to the west by residential properties. Further to the west, additional residential development was observed.



#### Interview with Site Representative

On October 2, 2019, Golder conducted a telephone interview with Erin O'Connor, Manager of Land Development for Regional Group. Regional Group is the land developer responsible for development of the overall subdivision. Ms. O'Connor has been with Regional Group for 5 years and has been familiar with the development of the Remer Lands since that time.

According to the Site Representative the Site remained vacant until 2017. In 2017, the Remer lands, within which the Phase One Property is located, was cleared, the main services installed and roads constructed. Since then, no additional work has been done on the Site as construction of the residential subdivision surrounding the Site was initiated. In 2017, the Site was purchased by Phoenix for medium to high density residential development. To the knowledge of the Site Representative, the Site has remained vacant since development; however, there may be boulders from nearby developments stored on the property.

#### **Updated Phase One Conceptual Site Model**

The following key Site features (as required by O.Reg. 153/04) are presented in Figures 1 through 8:

- Existing buildings and structures;
- Water bodies and areas of natural significance located in the Phase One Study Area;
- Drinking water wells on the Phase One Property;
- Roads (including names) within the Phase One Study Area;
- Uses of properties adjacent to the Phase One Property; and
- Location of identified Potentially Contaminating Activities (PCAs) in the Phase One Study Area (including any storage tanks).

The following describes the Phase One ESA Conceptual Site Model (CSM) for the Site based on the information obtained and reviewed as part of this Phase One ESA:

- The Site consisted of one parcel of land that is 1 hectare (2.5 acres) in area. No buildings were present;
- No water bodies or areas of natural significance were identified on or within 30 m of the Phase One Property;
- Potable water in the vicinity of the Site is provided by the City of Ottawa. No potable water wells were identified on the Phase One Property. Four potable water wells (3 domestic and 1 commercial) were reported to be located within the Phase One Study Area; if present, these wells are not in use.
- At the time of the Phase One ESA, the Site was vacant and unserviced (utilities stubbed 1 metre into property) and stripped of topsoil prior to planned residential development. Historically, the Site has been used solely for agricultural purposes or vacant forested land since at least 1945. There is no indication that the Phase One Property was used for an industrial use or any of the following commercial uses: vehicle garage, bulk liquid dispensing facility, or dry cleaning facility;
- At the time of the Phase One ESA, the neighbouring properties within the Phase One Study Area consisted primary of residential or planned residential land uses. To the southeast and to the east, two parcels are used for commercial purposes, to the east one parcel is used for institutional purposes and to the east one

parcel is used for light industrial purposes (communication tower). The commercial property to the south ast was formerly operated as a retail fuel station. This location is shown on Figure 2 and is approximately 215 metres from the Site;

- No underground utilities are known to be present at the Phase One Property, with the exception of the services stubbed 1 metre into the property line;
- Soil at the Site consists primarily of glacial till consisting of sandy silt to silty sand. Refusal on bedrock was reported at varying depths ranging from about 1 metre below ground surface (mbgs) to 6 mbgs;
- Local groundwater flow is in a northeasterly direction towards Findlay Creek, located approximately 600 metres north of the Site;
- The following relevant PCAs and contaminants of concern were identified on the Phase One Property or in the Phase One Study Area:

Location	Potentially Contaminating	Information	Rationale for Potential
	Activity	Source	Contribution of the PCA to an APEC
Phase One Study Area (excluding the Phase One Property)	<i>#28 Gasoline and Associated</i> <i>Products Storage in Fixed</i> <i>Tanks</i> – A former gasoline service station was located 215 metres southeast of the Phase One Property (4836 Bank Street)	EcoLog ERIS report, previous environmental reports	Based on the distance from the Site, the expected fine textured soil conditions, and the nature of hydrocarbon impacts, this PCA is not expected to impact the Phase One Property, therefore no APECs were identified.

No areas of potential environmental concern (APECs) were identified on Site and no Phase Two ESA is recommended.

#### Closure

Golder trusts that this letter meets your current needs, if you have any questions or comments, please contact the undersigned.

Sincerely,

Golder Associates Ltd.

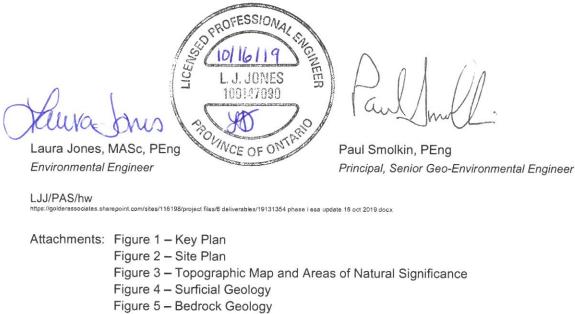


Figure 6 – Drift Thickness

Figure 7 – Soil Survey Complex (Ontario Soils)

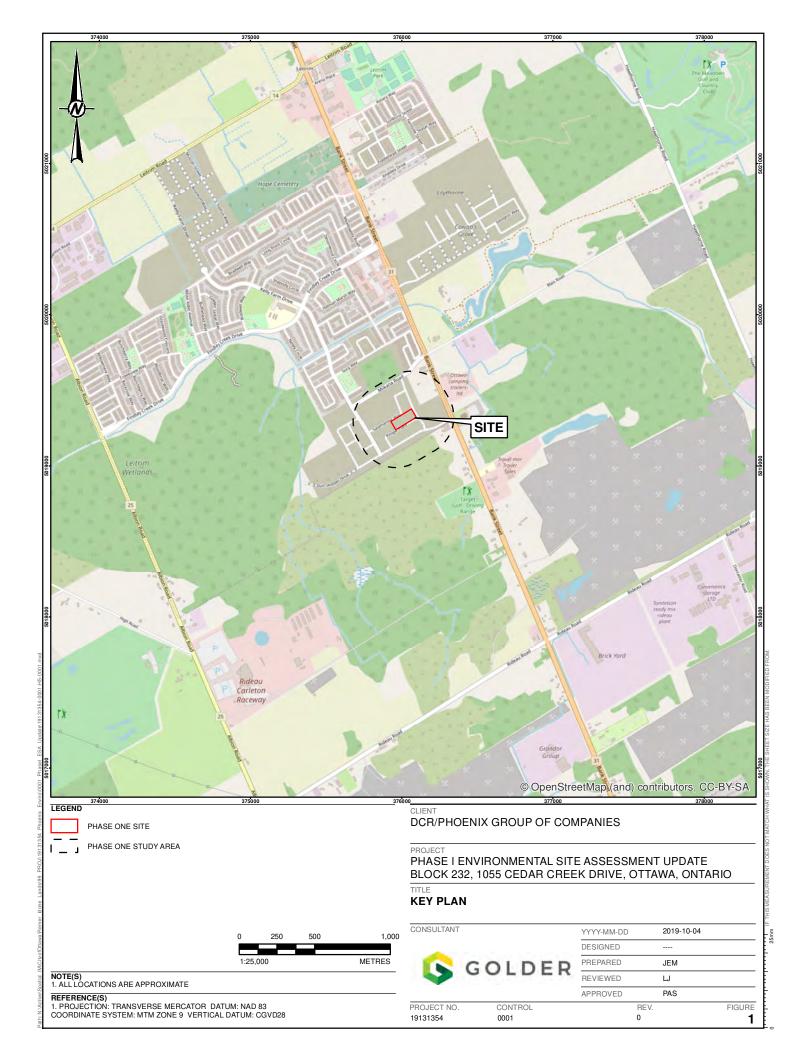
Figure 8 - Physiography Map

Attachment A - Plan of Survey

Attachment B - Site Photographs



## Figures





#### LEGEND

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APPROXIMATE LOCATION OF FORMER UST

PHASE ONE SITE

PHASE ONE STUDY AREA

## NOTE(S) 1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S) 1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014 2. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: MTM ZONE 9, VERTICAL DATUM: CGVD28







CLIENT DCR/PHOENIX GROUP OF COMPANIES

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PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE BLOCK 232, 1055 CEDAR CREEK DRIVE, OTTAWA, ONTARIO

METRES

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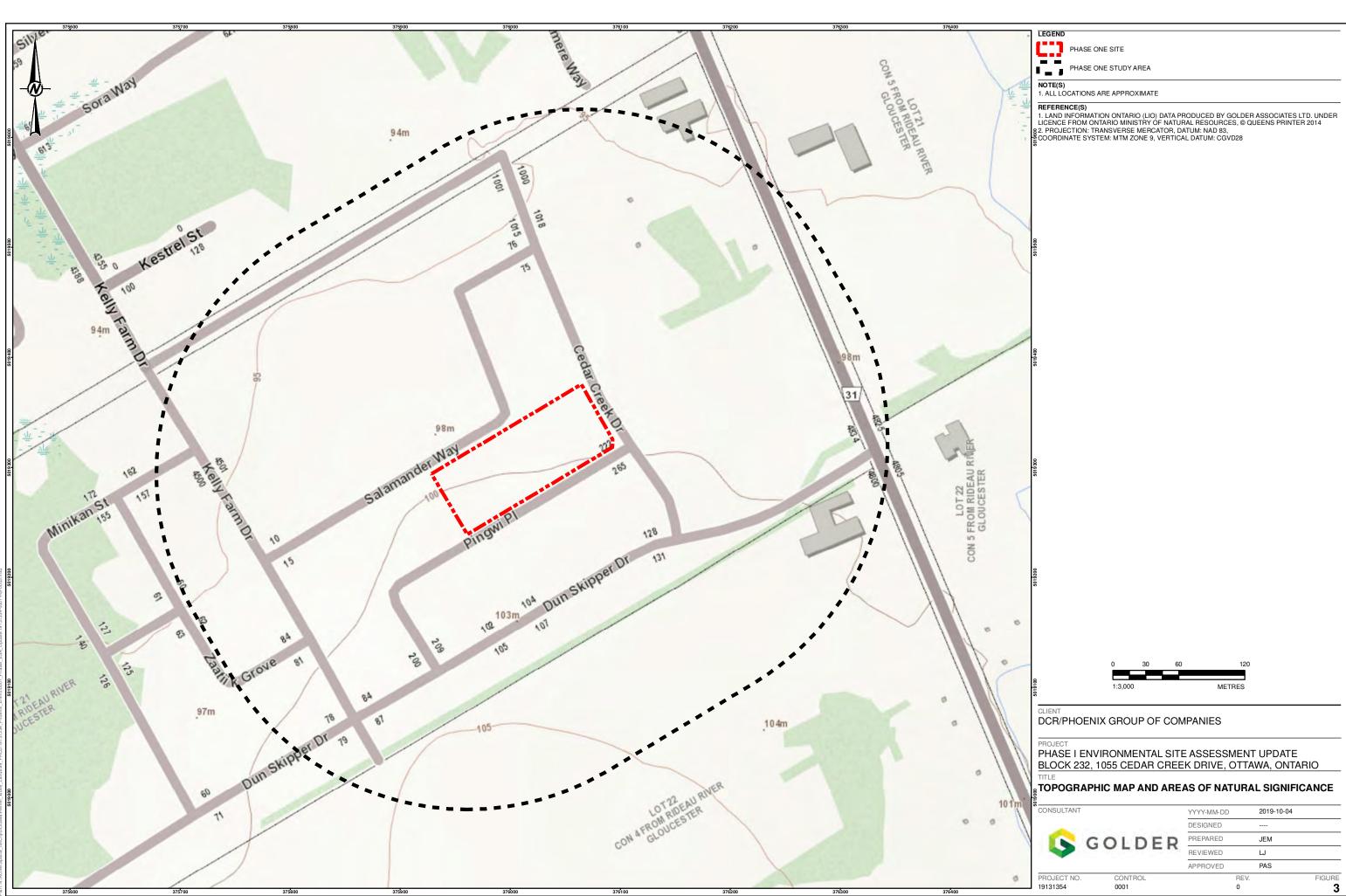
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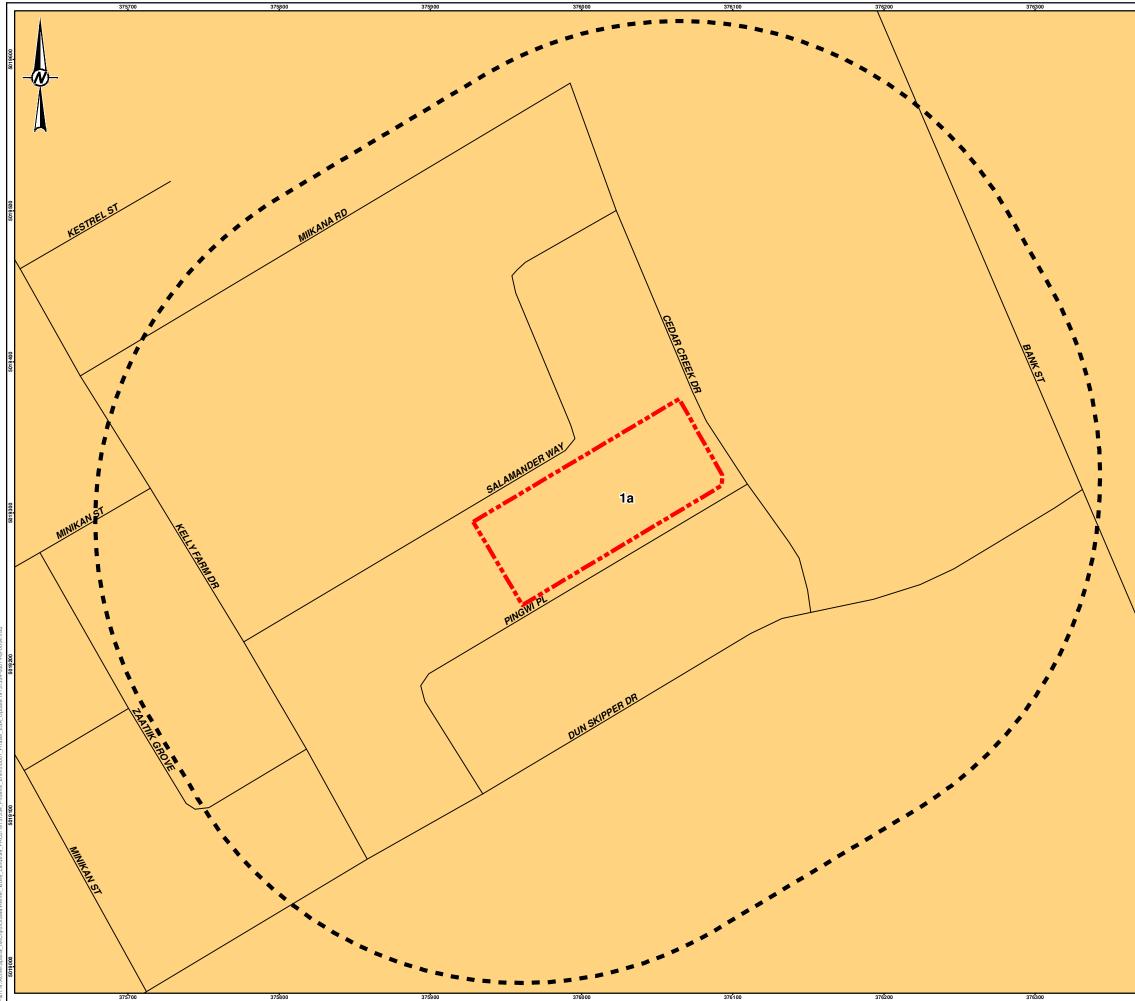
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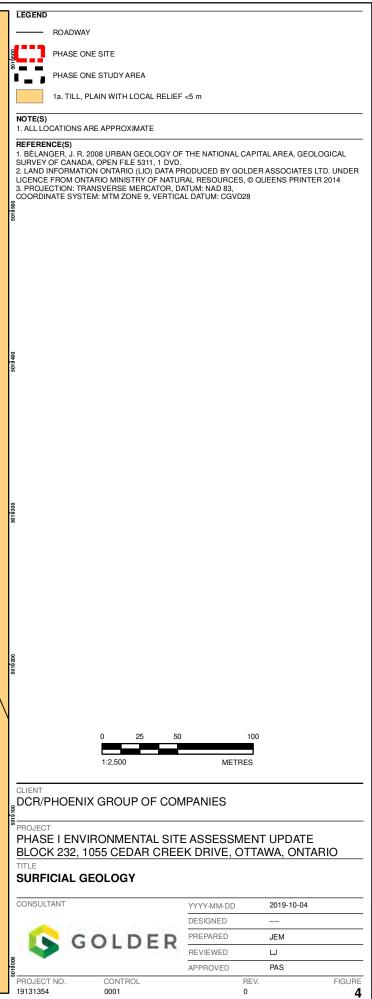
#### TITLE SITE PLAN

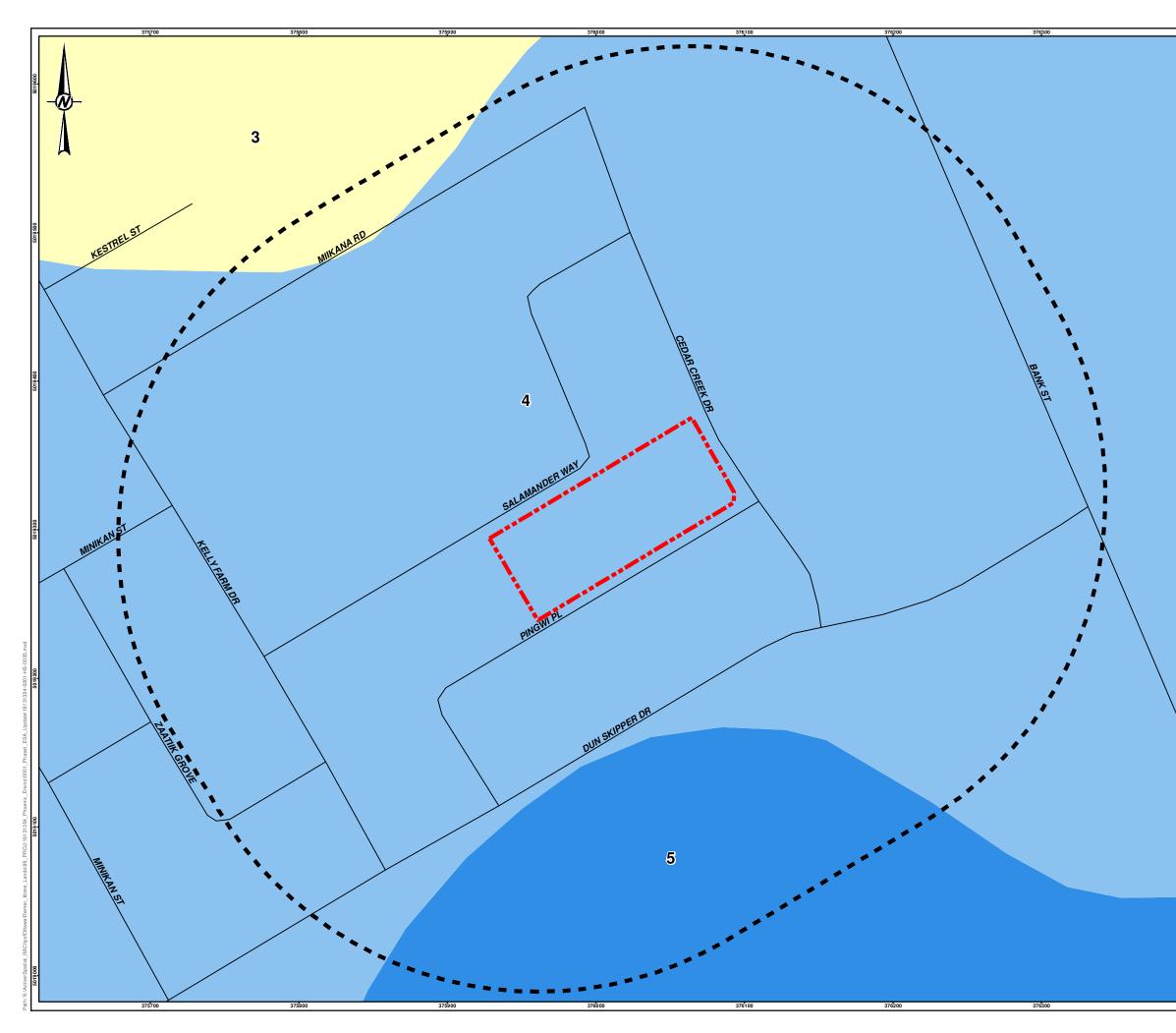
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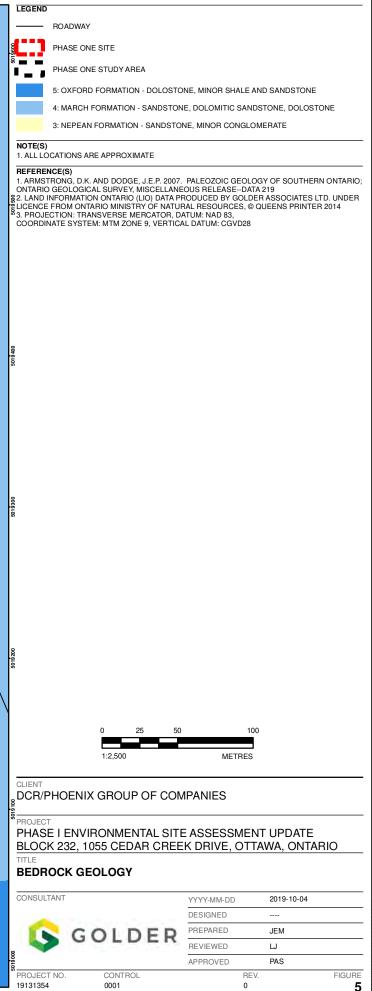
FIGURE 2

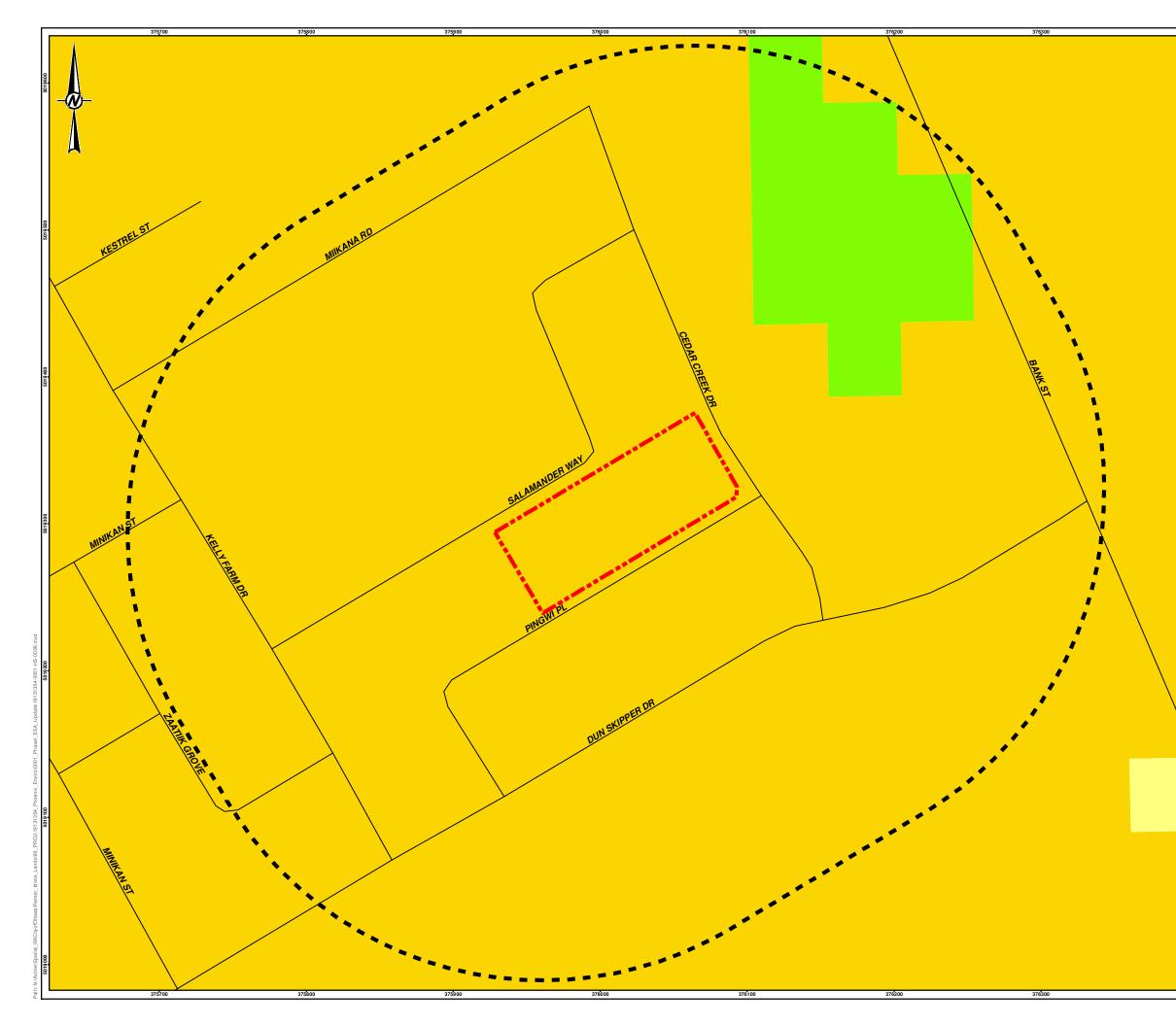


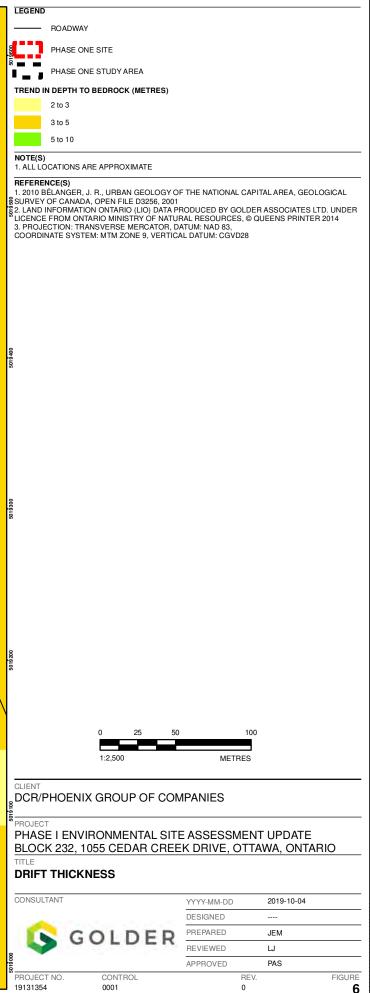


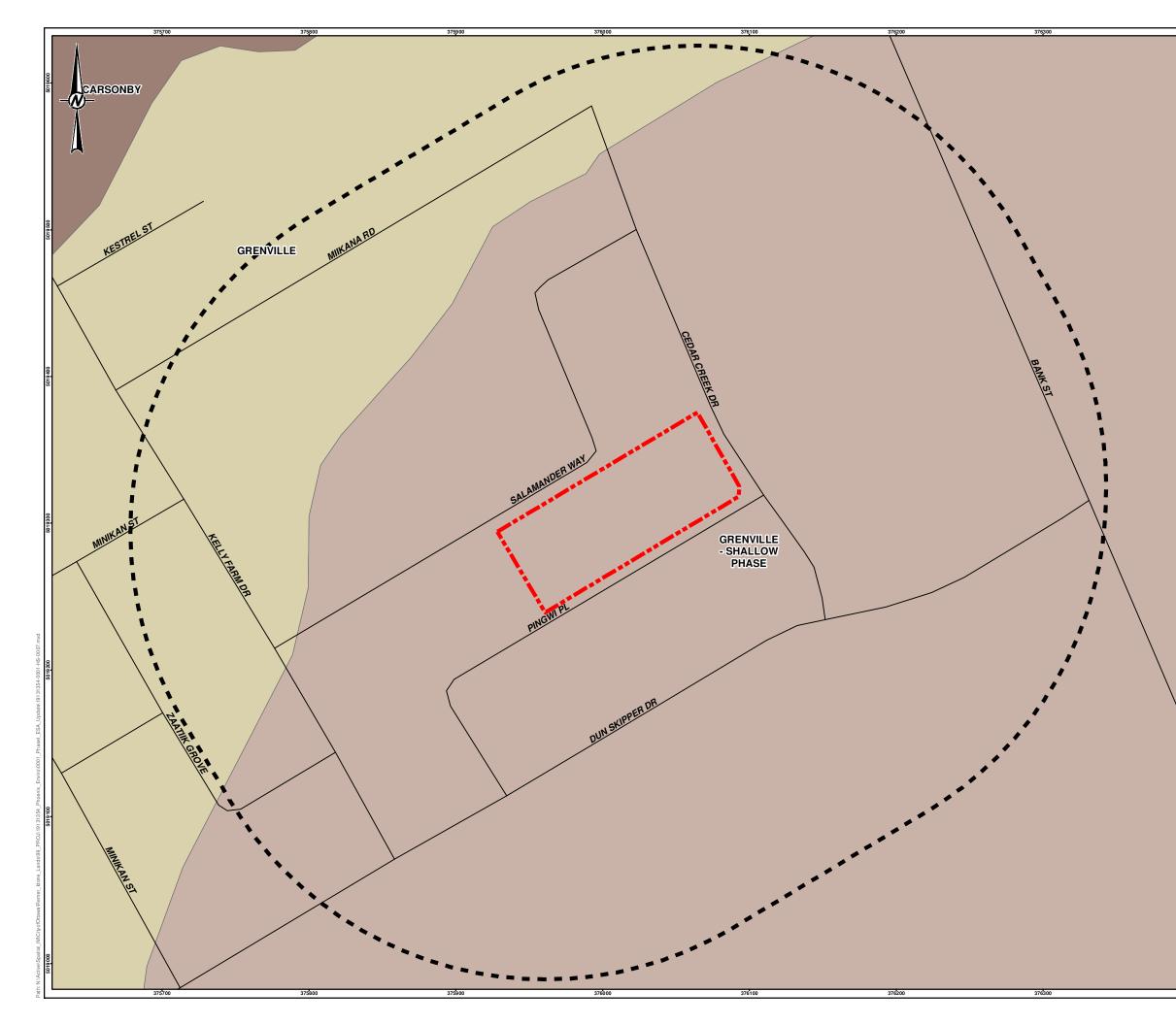






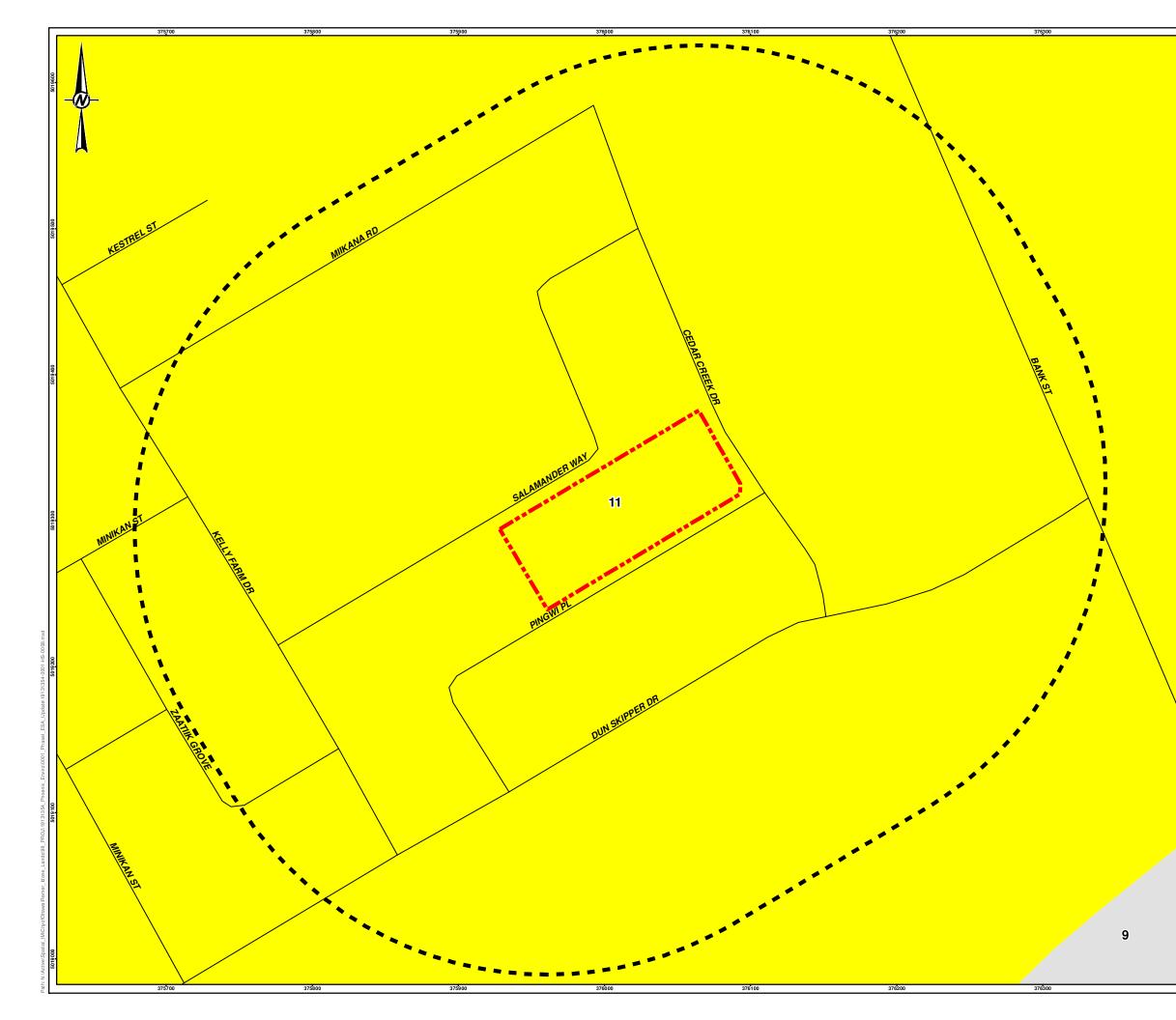


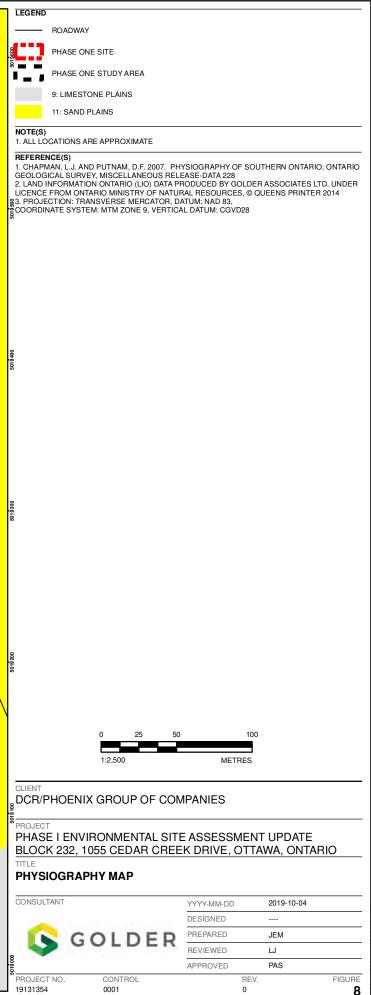




	LEGEND				
		ROADWAY			
	<u>•</u> • •	PHASE ONE STUDY AREA			
		CARSONBY			
		GRENVILLE			
		GRENVILLE - SHALLOW PHASE			
	NOTE(S)				
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		FROM ONTARIO MINISTRY OF NATU		UEENS PRINTER 2014	
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	DCR/PHOENIX GROUP OF COMPANIES				
	PHASE I ENVIRONMENTAL SITE ASSESSMENT UPDATE				
	BLOCK 232, 1055 CEDAR CREEK DRIVE, OTTAWA, ONTARIO				
	SOIL SURVEY COMPLEX (ONTARIO SOILS)				
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36...... IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BE

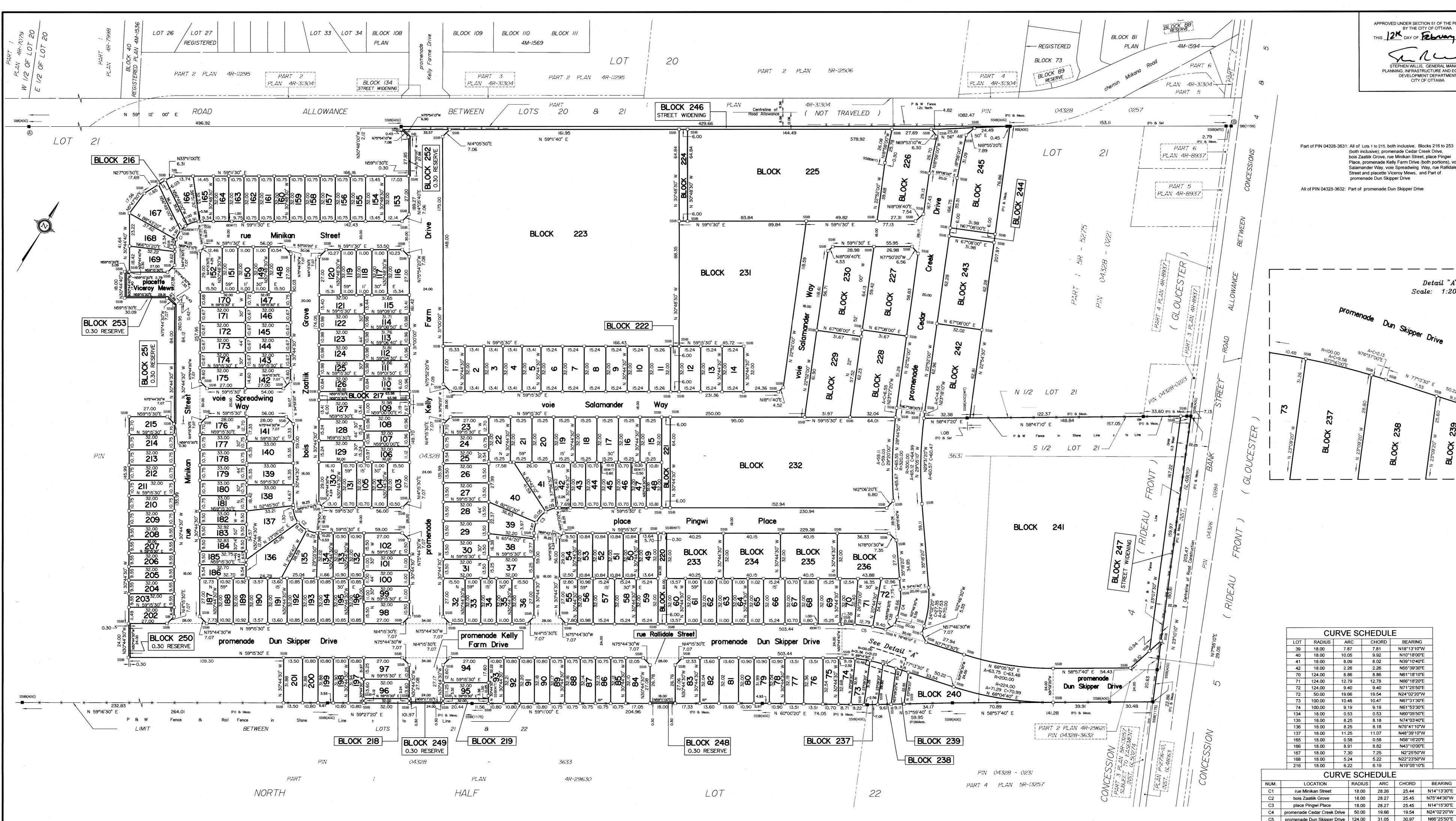




#### ATTACHMENT A

## Plan of Survey





PLAN 4M- 1617 APPROVED UNDER SECTION 51 OF THE PLANNING ACT BY THE CITY OF OTTAWA. THIS 12K DAY OF Ebran 2019 CERTIFY THAT THIS PLAN IS REGISTERED IN THE LAND REGISTRY OFFICE FOR THE LAND TITLES DIVISION OF OTTAWA-CARLETON NO. 4 AT 11:00 O'CLOCK ON THE 22 DAY OF February 2019 un AND ENTERED IN THE PARCEL REGISTER FOR STEPHEN WILLIS, GENERAL MANAGER PROPERTY IDENTIFIERS 04328-3631 and 04328-3632 AND THE PLANNING, INFRASTRUCTURE AND ECONOMIC DEVELOPMENT DEPARTMENT REQUIRED CONSENTS ARE REGISTERED AS CITY OF OTTAWA PLAN DOCUMENT NO. 0C. 2079604 R. MATTA\_ REPRESENTATIVE FOR LAND REGISTRAR This plan comprises part of PIN 04328-3631 and all of PIN 04328-3632. Part of PIN 04328-3631: All of Lots 1 to 215, both inclusive, Blocks 216 to 253 PLAN OF SUBDIVISION OF (both inclusive); promenade Cedar Creek Drive, bois Zaatiik Grove, rue Minikan Street, place Pingwi PART OF LOT 21 Place, promenade Kelly Farm Drive (both portions), voie Salamander Way, voie Spreadwing Way, rue Rallidale **CONCESSION 4 ( RIDEAU FRONT )** Street and placette Viceroy Mews, and Part of promenade Dun Skipper Drive Geographic Township of Gloucester All of PIN 04328-3632: Part of promenade Dun Skipper Drive **CITY OF OTTAWA** Surveyed by Annis, O'Sullivan, Vollebekk Ltd. DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048. Detail "A" Scale: 1:200 SURVEYOR'S CERTIFICATE I CERTIFY THAT romenade Dun Skipper r 1. This survey and plan are correct and in accordance with the Surveys Act, the Surveyors Act and the Land Titles Act and the regulations made under them. 2. The Survey was completed on the 9th day of August ,2018. Jan 3/2019 Judi Koz Andre Rov Ontario Land Surveyor OWNER'S CERTIFICATE THIS IS TO CERTIFY THAT : . Lots 1 to 215, both inclusive, Blocks 216 to 245, both inclusive, the Streets, namely, promenade Cedar Creek Drive, promenade Dun Skipper Drive, bois Zaatiik Grove, rue Minikan Street, place Pingwi Place, promenade Kelly Farm Drive (both portions), voie Salamander Way, voie Spready Way, rue Rallidale Street and placette Viceroy Mews, the Street Widenings namely, Blocks 246 and 247 and the Reserves, namely, Blocks 248 to 253 both inclusive, have been laid out in accordance with our instructions. 2. The Streets and Street Widenings are dedicated as public highways to City of Ottawa . Dated the 🥕 day of TAU 2019 David Kardish Leitrim South Holdings Inc. I have the authority to bind the corporation. NOTES AND LEGEND Survey Monument Planted Survey Monument Found Standard Iron Bar Short Standard Iron Bar. Rock Bar Iron Bar Round Iron Bar 0.3 long Iron Bar AOG) Annis, O'Sullivan, Vollebekk Ltd. (P1) Plan 4R-29621 .... P&W Post & Wire .. ----- 0HW ---- " **Overhead Wires** CURVE SCHEDULE All planted survey monuments are IB's unless otherwise noted. Distances shown on curved limits are Arc distances unless otherwise noted. ARC CHORD BEARING 7.87 7.81 N18°13'10"W 10.05 9.92 N10°18'00"E 8.09 8.02 N39°10'40"E 2.26 N55°39'30"E Distances shown on this plan are ground distances and can be converted 2.26 to grid distances by multiplying by the combined scale factor of 0.99996. 8.86 8.86 N61°18'10"E 12.79 N66°18'20"E 12.78 Bearings are grid, derived from Can-Net 2016 Real Time Network GPS 9.40 9.40 N71°25'50"E observations on reference points A and B, shown hereon, having a 19.66 19.54 N24°02'20"W bearing of N59°12'00"W and are referenced to Specified Control Points 10.48 10.47 N67°31'30"E 01919760735 and 01919871649, MTM Zone 9 (76°30' West Longitude ) NAD-83 (original). 9.19 N61°53'30"E 9.19 0.53 0.53 N60°05'50"E Coordinates are derived from Can-Net 2016 Real Time Network GPS 8.25 N74°03'40"E 8.18 observations referenced to Specified Control Points 01919760735 and 8.25 8.18 N79°41'10"W 01919871649, MTM Zone 9 (76°30' West Longitude) NAD-83 (original). 11.25 11.07 N48°39'10"W Coordinate values are to urban accuracy in accordance with O. Reg. 216/10. N58°16'20"E 0.58 0.58 N43°10'00"E 8.91 8.82 Northing 5026903.34 Easting 376968.72 01919760735 7.30 N2°25'50"W Northing 5007189.87 Easting 372435.05 7.25 01919871649 5.24 5.22 N22°23'50"W Point A Northing 5019119.54 Easting 375233.67 Northing 5019673.83 Easting 376163.46 216 18.00 6.22 6.19 N19°05'10"E . Point B CURVE SCHEDULE Caution: Coordinates cannot, in themselves, be used to re-establish corners or boundaries shown on this plan. RADIUS ARC CHORD BEARING 18.00 28.26 25.44 N14°13'30"E ANNIS, O'SULLIVAN, VOLLEBEKK LTD 18.00 28.27 25.45 N75°44'30"W Ć 14 Concourse Gate, Suite 500 Nepean, Ont. K2E 7S6 18.00 28.27 25.45 N14°15'30"E Phone: (613) 727-0850 / Fax: (613) 727-1079 19.54 N24°02'20"W promenade Cedar Creek Drive 50.00 19.66 Email: Nepean@aovltd.com

and Surveyors Job No. 19429-17 Regional Pt Lts 21 22 C4 RFGL SUB PHI F N

ATTACHMENT B

## Site Photographs



Photo 1 – Photo from the Site looking north towards residential development



Photo 2 – Construction Staging east of the Site, east of Cedar Creek Drive

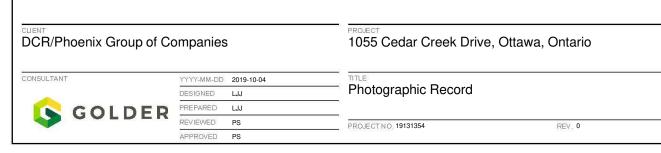




Photo 3 – Photo from the Site looking south towards residential development



Photo 4 – Eastern portion of Site looking west across the Site and to residential development west of the Site

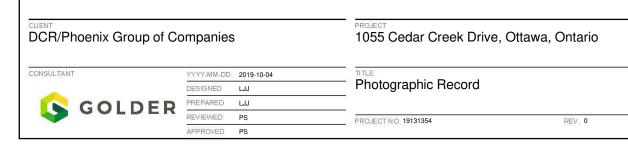




Photo 5 - Construction debris located on Site

CLIENT DCR/Phoenix Group of Companies

 GOLDER
 YYYY-MM-DD
 2019-10-04

 DESIGNED
 LJ

 PREPARED
 LJ

 REVIEWED
 PS

 APPROVED
 PS

PROJECT 1055 Cedar Creek Drive, Ottawa, Ontario

Photographic Record

PROJECT NO. 19131354

CONSULTANT