

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 Scale Site		Surrounding Property Direction			
		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	Topsoil is stripped and the subdivision roads are clearly visible. The tower site to the north remains forested	The property to the east is being used for construction staging with construction trailers, stockpiles of pipe and what appears to be boulders on the property	Topsoil is stripped and subdivision roads are clearly visible. The property 150 metres south of the Site appears unchanged	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.

Observations	Comment / Source
1 hectare (2.5 acres)	Site Representative
No buildings	Site observations
Not applicable	No building
Not applicable	No building
Not applicable	No building
No evidence of ASTs was observed on the Phase One Property	Site observations
No evidence of USTs was observed on the Phase One Property	Site observations
Not serviced - Water line is stubbed 1 metre into the property line.	Site observations
Not serviced	Site observations
Not applicable	No building
None identified	Site observations
No current or former wells observed on the Site	Site observations
	1 hectare (2.5 acres) No buildings Not applicable Not applicable Not applicable No evidence of ASTs was observed on the Phase One Property No evidence of USTs was observed on the Phase One Property Not serviced - Water line is stubbed 1 metre into the property line. Not serviced Not applicable Not applicable



Topic	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 Activity	Information Source	Rationale for Potential Contribution of the PCA to an APEC
Phase One Study Area (excluding the Phase One Property)	#28 Gasoline and Associated Products Storage in Fixed Tanks – 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.

Laura Jones, MASc, PEng

Environmental Engineer

Paul Smolkin, PEng

Principal, Senior Geo-Environmental Engineer

LJJ/PAS/hw

https://golderassociates.sharepoint.com/sites/116198/project files/6 deliverables/19131354 phase i esa update 16 oct 2019.docx

Attachments: Figure 1 - Key Plan

Figure 2 - Site Plan

Figure 3 - Topographic Map and Areas of Natural Significance

Figure 4 – Surficial Geology Figure 5 – Bedrock Geology Figure 6 – Drift Thickness

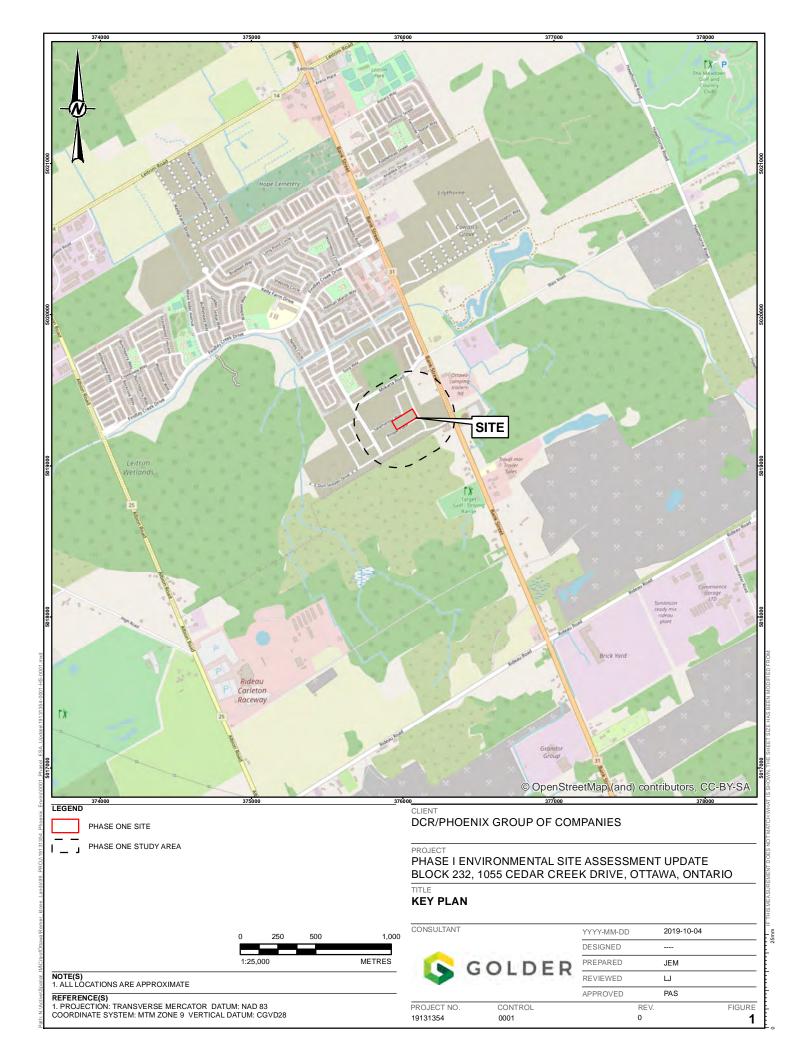
Figure 7 - Soil Survey Complex (Ontario Soils)

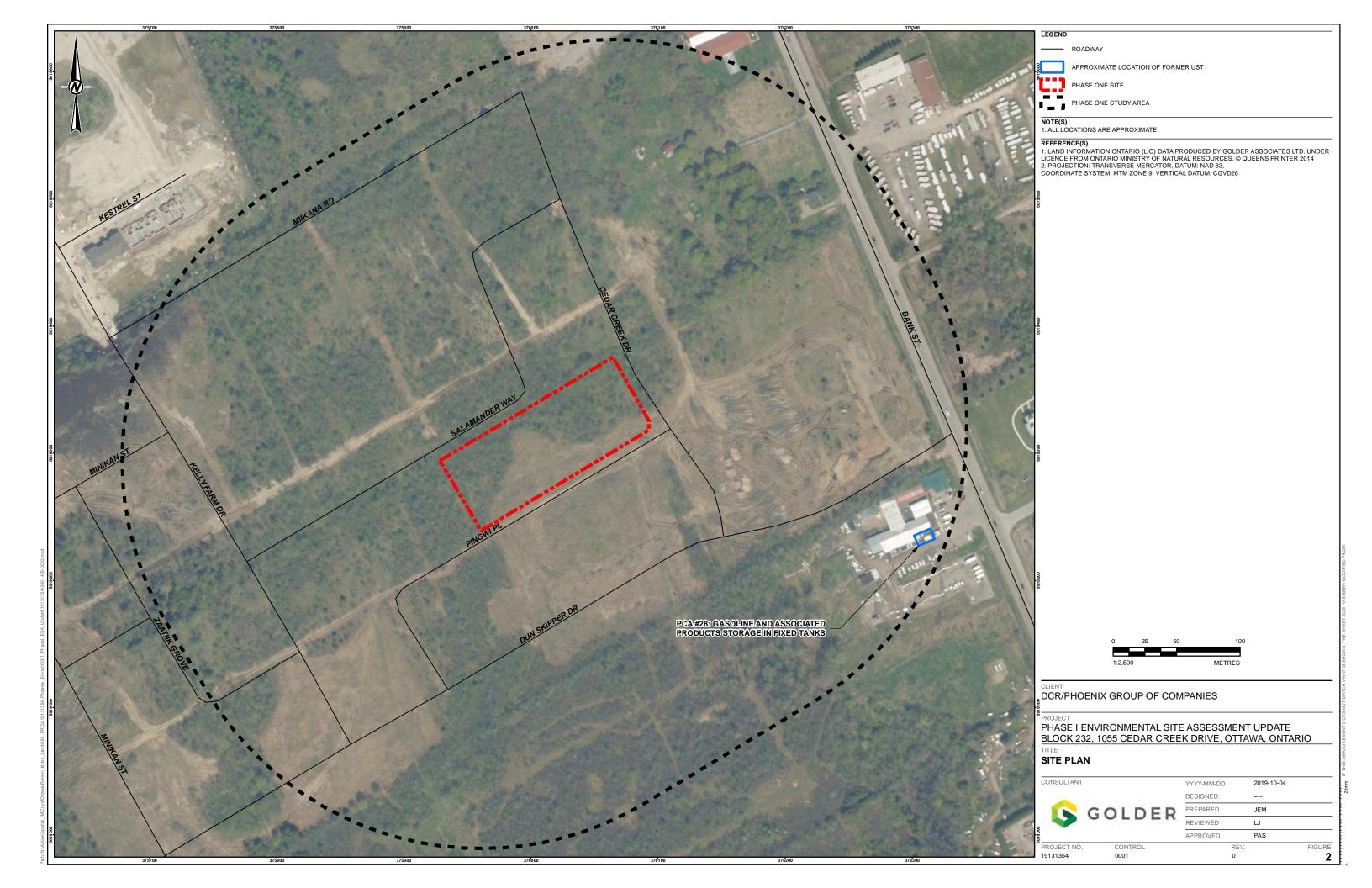
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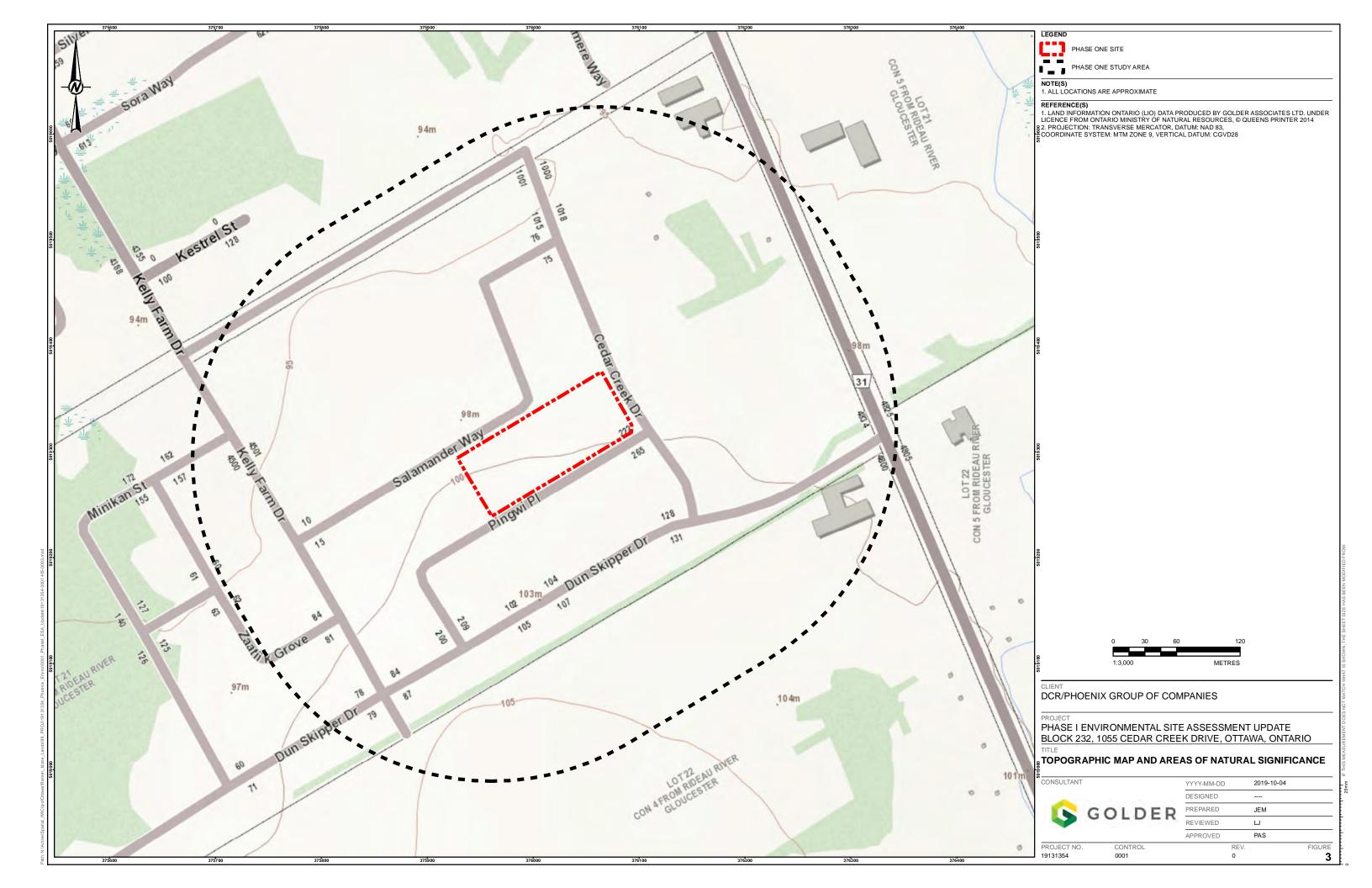
Figure 8 – Physiography Map Attachment A – Plan of Survey Attachment B – Site Photographs

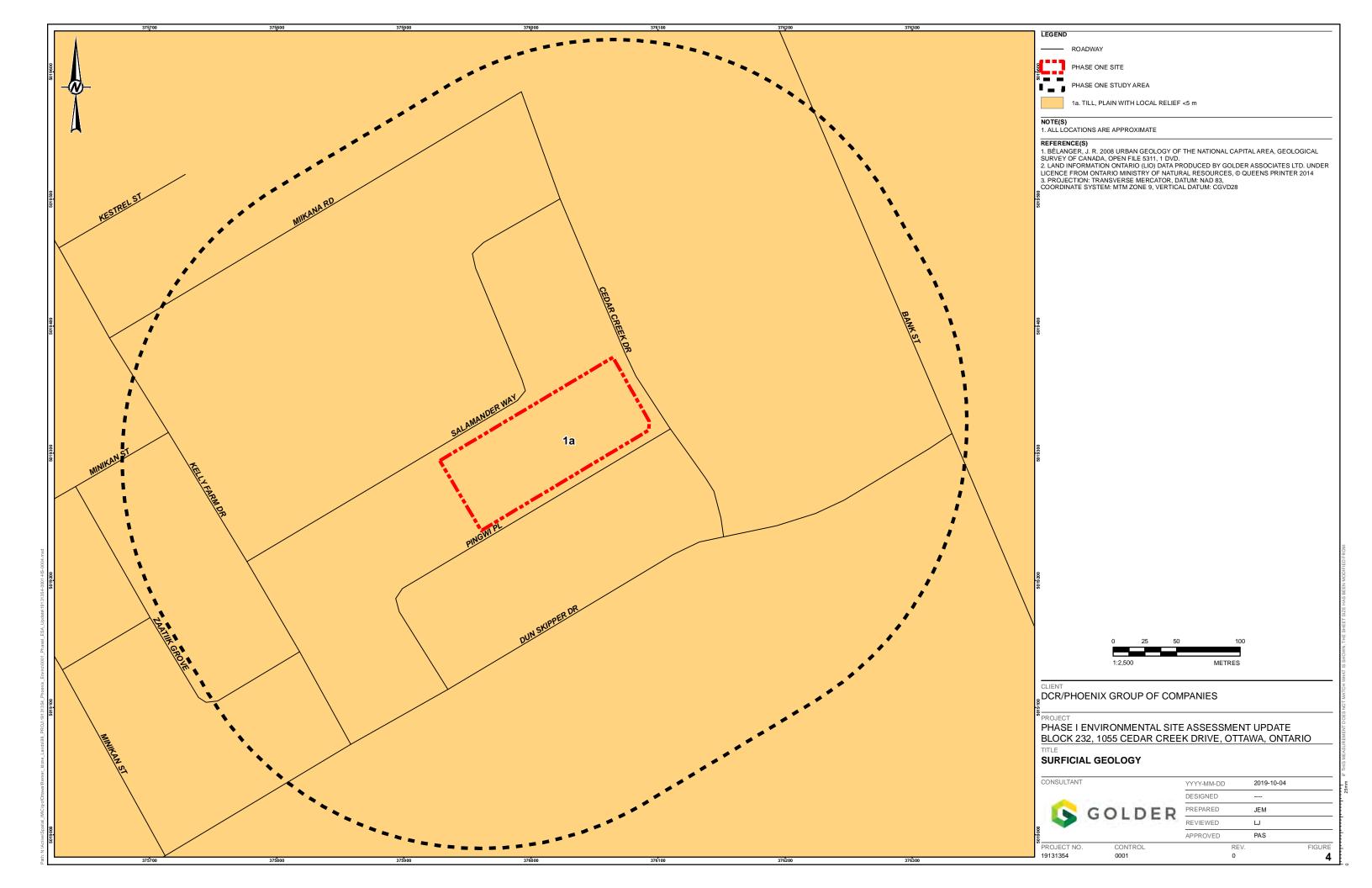


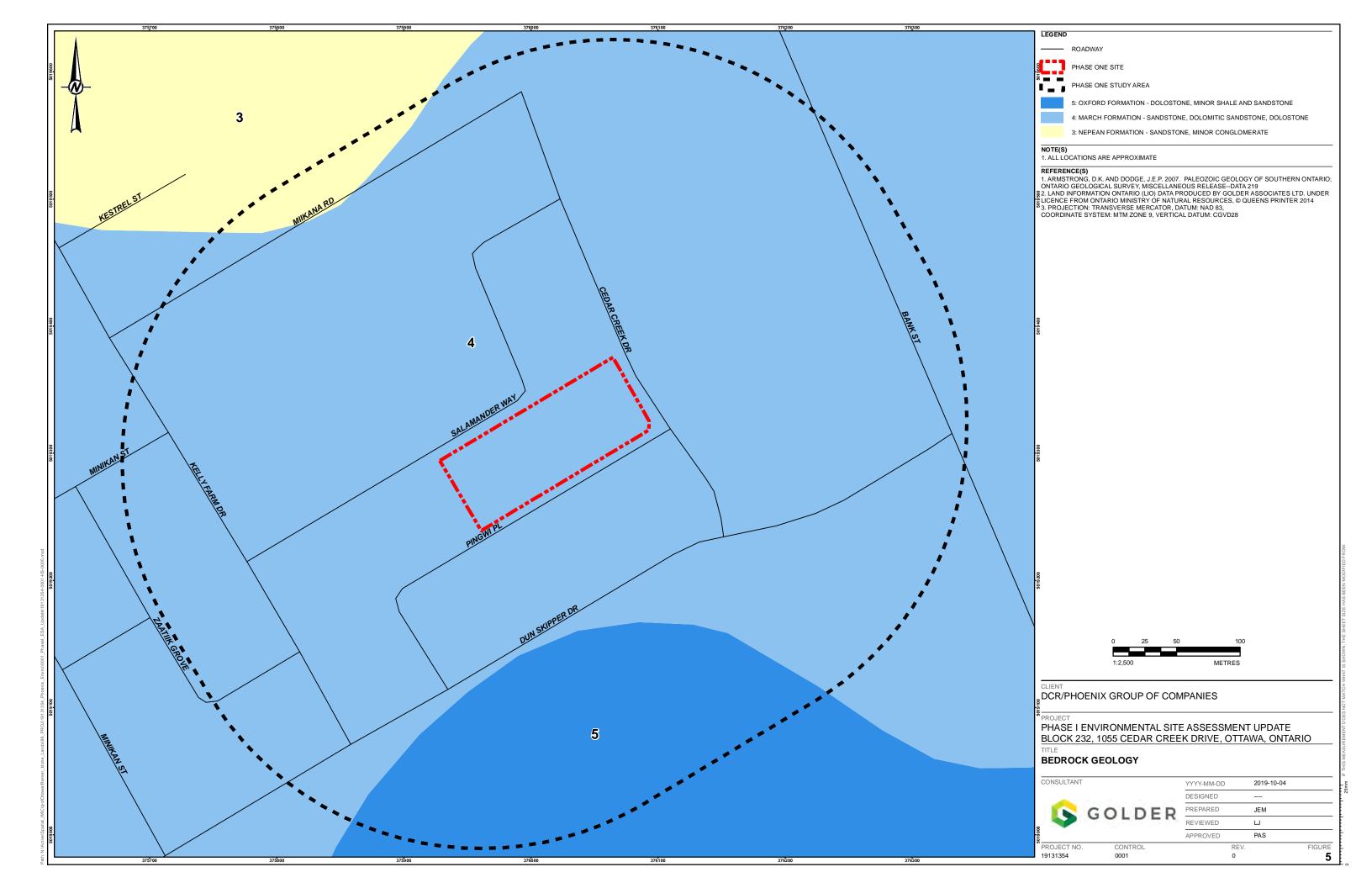
Figures

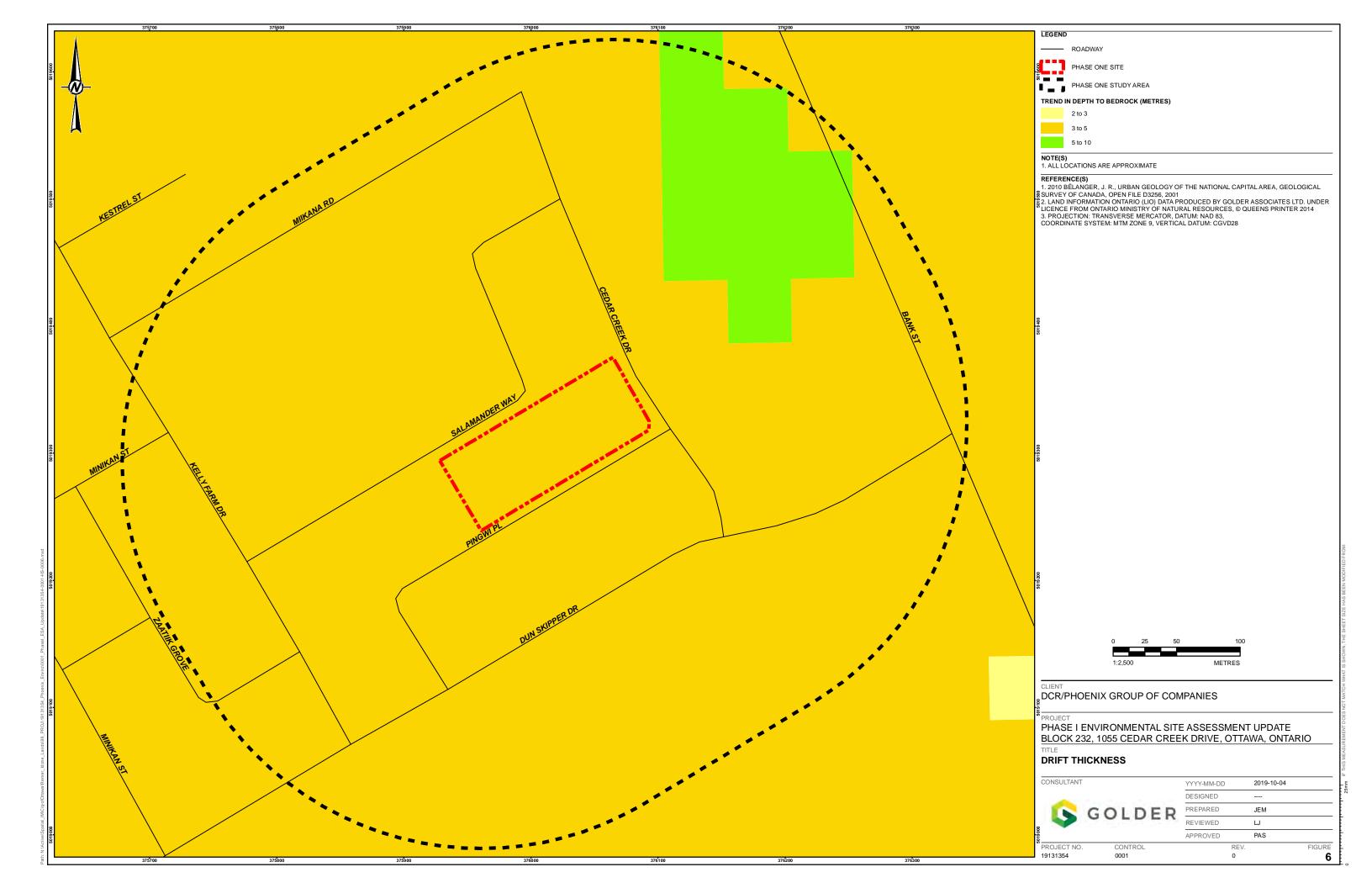


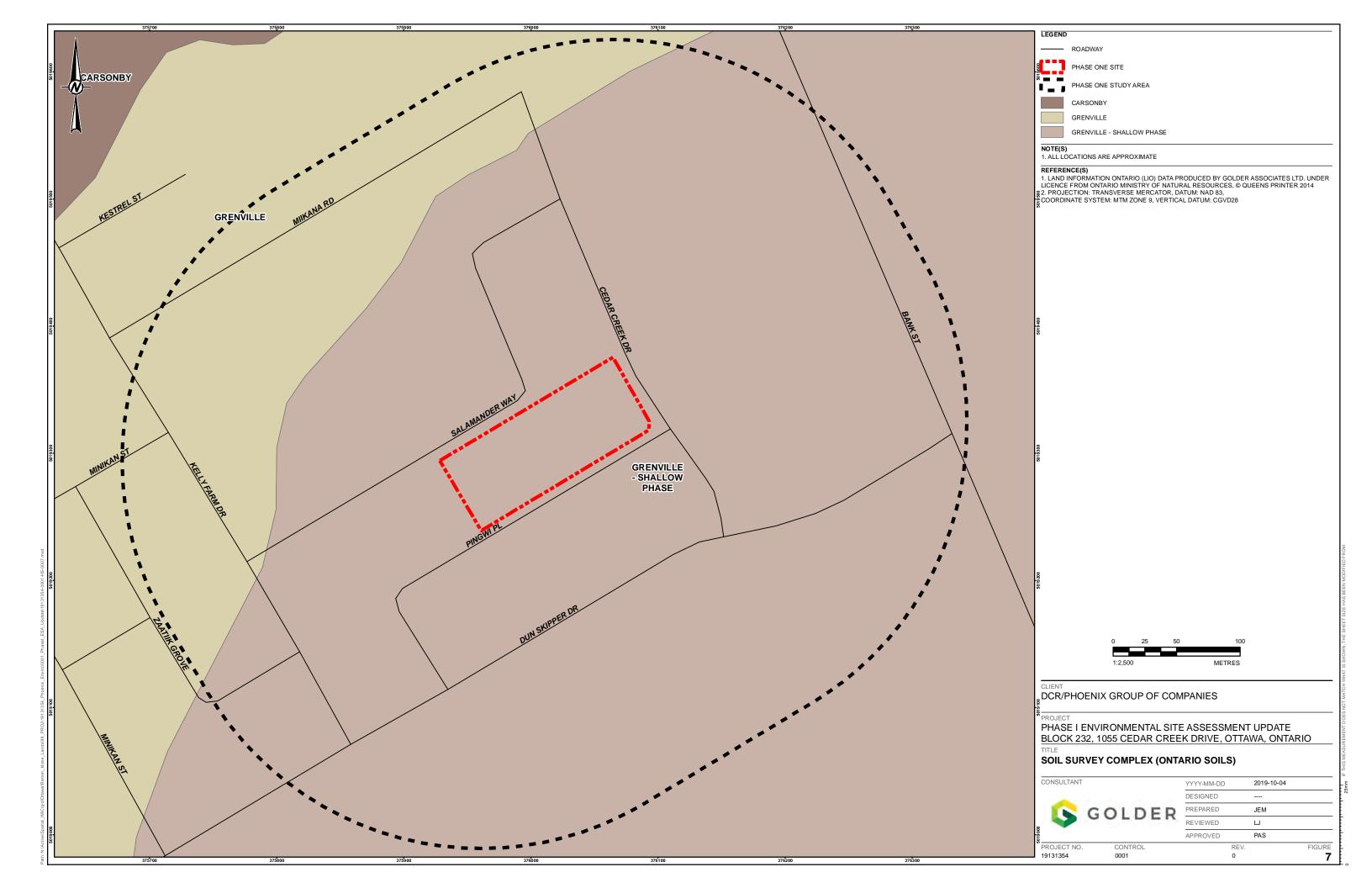


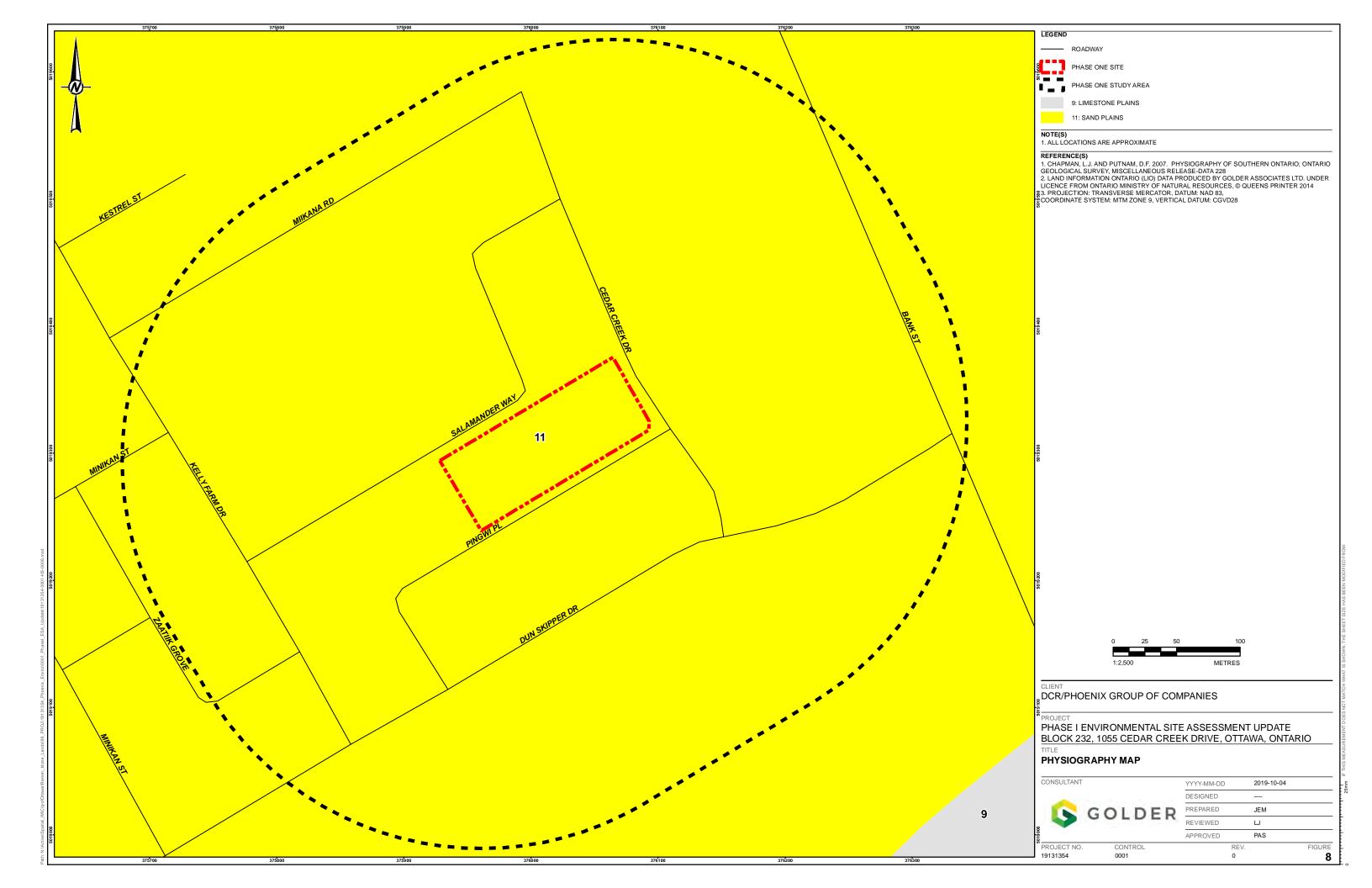












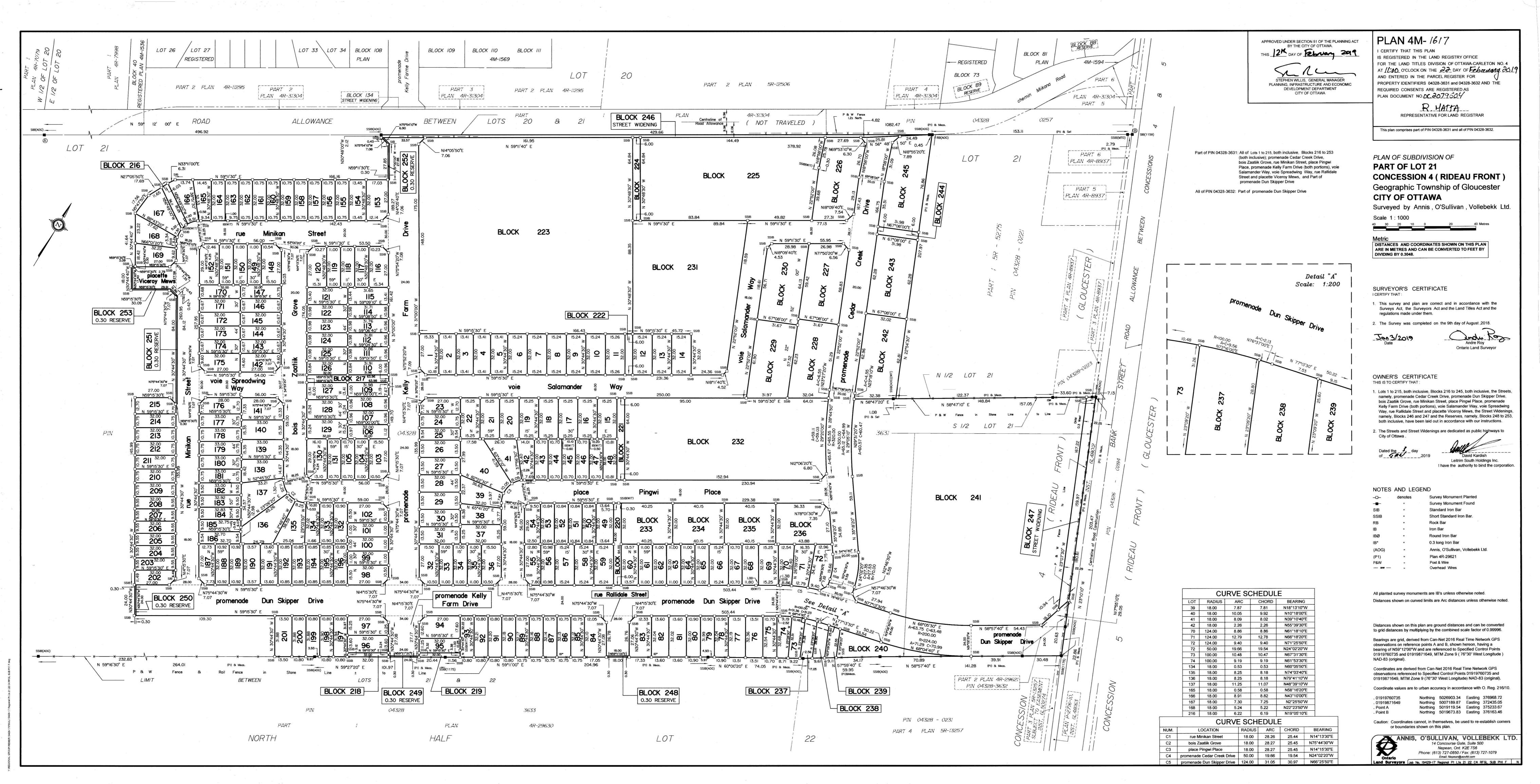
ATTACHMENT A

Project No. 19131354

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Plan of Survey





ATTACHMENT B

Project No. 19131354

16 October 2019

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

DCR/Phoenix Group of Companies

1055 Cedar Creek Drive, Ottawa, Ontario

CONSULTANT



YYYY-MM-DD	2019-10-04
DESIGNED	LJJ
PREPARED	LJJ
REVIEWED	PS
APPROVED	PS

Photographic Record

PROJECT NO. 19131354 REV. 0



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

CLIENT

DCR/Phoenix Group of Companies

PROJEC

1055 Cedar Creek Drive, Ottawa, Ontario

CONSULTANT



YYYY-MM-DD	2019-10-04	
DESIGNED	LJJ	
PREPARED	LJJ	
REVIEWED	PS	
APPROVED	PS	

Photographic Record

PROJECT NO. 19131354 REV. 0

TT THE MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED



Photo 5 - Construction debris located on Site

DCR/Phoenix Group of Companies

1055 Cedar Creek Drive, Ottawa, Ontario

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YYYY-MM-DD	2019-10-04	
DESIGNED	LJJ	
PREPARED	LJJ	
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APPROVED	PS	

Photographic Record

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