



December 13<sup>th</sup>, 2021

JDE Project 20116

***Deltini Commercial Developments Inc.***

***Deltini (Mulmur) Inc.***

***Deltini (Primrose) Inc.***

c/o Marika Zigon

1350 Shawson Drive

Mississauga, ON L4W 1C5

**RE: Professional Engineering Services – Entrance Analysis  
Primrose Industrial Subdivision, Hamlet of Primrose, Township of Mulmur**

**JD Northcote Engineering Inc.** [JD Engineering] is pleased to submit the following traffic letter in support the proposed industrial development in the Hamlet of Primrose, Township of Mulmur [Township], County of Dufferin [County].

#### **1.0 BACKGROUND**

The subject site is municipally known as 636040 Prince of Wales Road, 506249 Highway 89 and 506243 Highway 89, located on the north side of Highway 89, west of Prince of Wales Road.

Access to the development is proposed via new municipal road with a full-movement entrance onto Prince of Wales Road (Dufferin Road 19). The Proposed Draft Plan of Subdivision by Jones Consulting Group Ltd. is shown in the **Appendix**.

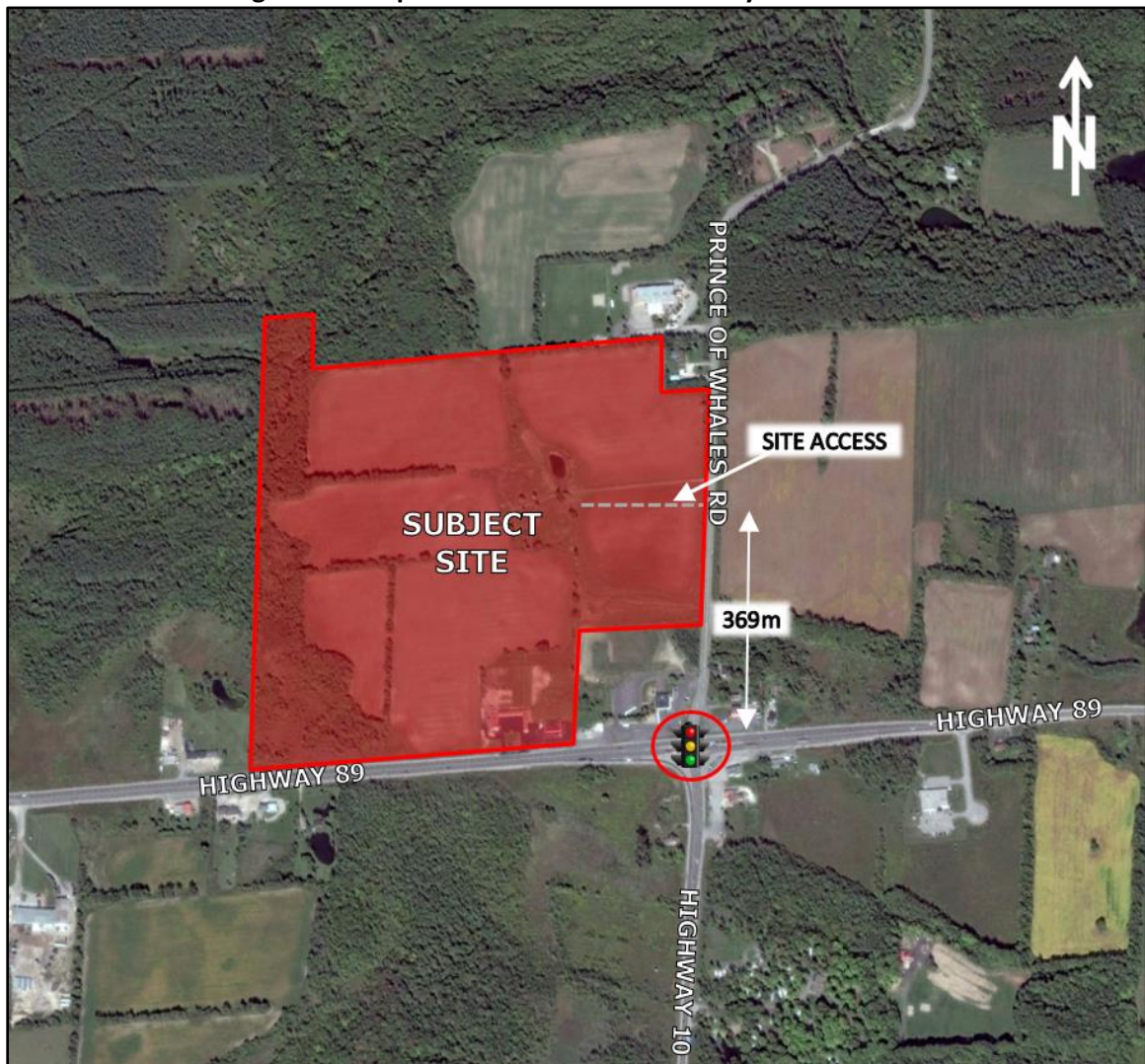
The Township/County has requested an Entrance Analysis in support of the proposed industrial subdivision and rezoning application for the subject property.

**Figure 1** illustrates the location of the subject site in relation to the surrounding area.



**JD Engineering**  
Phone: 705.725.4035  
Email: Info@JDEngineering.ca

Figure 1 – Proposed Site Location and Study Area



## 2.0 INFORMATION GATHERING

**Prince of Wales Road (Dufferin Road 19)** is designated as a County Road within the County's Official Plan with a two-lane rural cross-section through the study area. Prince of Wales Road provides one lane of travel per direction with a posted speed limit of 60 km/h. Prince of Wales Road is under the jurisdiction of the County.

**Highway 89** is designated as Class 2B – Arterial road with a two-lane rural cross-section east of Prince of Wales Road and a four-lane rural cross-section to the west. The posted speed limit on Highway 89 through the study area is 80 km/h. Highway 89 is under the jurisdiction of the MTO.

### 3.0 SIGHT DISTANCE ANALYSIS

A review of the available sight distances at the Site Access on Prince of Wales Road intersection completed as part of this analysis. Sight distances were measured during a site visit, based on the existing vertical and horizontal sight constraints at the proposed entrance location.

The sight distance was evaluated based on the County of Dufferin Entrance Policy 5-3-17 [Entrance Policy]. According to Entrance Policy 6a(ii), for a posted speed of 60km/h, the minimum sight distance for commercial entrances is 180 metres.

The available sight distance was identified through field observations. The photographs provided in the **Appendix** illustrate the available sight distance from the critical location (driver's eye height of 1.05 metres and object height of 0.6m), as identified in the TAC Guidelines. **Table 1** summaries the sight distance review.

**Table 1 – Sight Distance Review**

Turning Movement Description	Entrance Policy (60km/h posted speed)	Available Sight Distance	
		North	South
Intersection Sight Distance	180m	202 m	311m

As outlined above, the sight distances at the Site Access are greater than the minimum sight distance requirements as identified in the Entrance Policy for the posted speed.

As such, the available sight distance at the Site Access is acceptable for the intended use.

### 4.0 SITE ACCESS SPACING

The proposed spacing between the Site Access and the existing residential driveway to the north (greater than 150 metres) and commercial driveway to the south (greater than 150 metres) meet the minimum spacing requirements for an entrance adjacent to a side road as specified in Entrance Policy 6d) (65 metre spacing required on a County Road with a posted speed limit of 60km/h).

The proposed spacing between the Site Access and Highway 89 (approximately 369 metres) meets the side road spacing requirement specified in Entrance Policy 7b) (300 metre spacing required for County Roads with speed limit less than 80km/h).

The proposed spacing between the Site Access and the north property line (more than 100 metres) and the south property line (more than 100 metres) meets the Entrance Policy - Entrance Standard 1) (20 metre minimum distance from side property line to centreline of industrial entrance).

## 5.0 PEDESTRIAN CONNECTION

JD Engineering has completed a review of the warrant for a pedestrian connection from the existing Primrose Elementary School, north of the subject site, through to the existing restaurant located at the northwest corner of the intersection of Prince of Wales Road / Highway 89.

In general, the volume of pedestrian trips between an elementary school and a single restaurant (located approximately 600 metres away), would be very low. A pedestrian connection through the subject site would require a mid-block pedestrian crossing on Street 'A', which is not typical in an industrial subdivision of this size. It is anticipated that some form of pedestrian crossing infrastructure would be required due to the size of vehicles on an industrial road and the potential for children crossing at a non-standard location. Furthermore, a pedestrian connection through the subject site would require a connection through the undeveloped section of the existing property to the south, to link the pedestrian walkway into the developed restaurant parking lot.

From an operations and maintenance perspective, the most efficient location for a pedestrian connection between the existing elementary school and the existing restaurant would be along the west side of Prince of Wales Road. It is noted that there are no other sidewalks in the area, consequently, winter maintenance would require an additional trip to this area with a smaller plough.

The existing cross-section for Prince of Wales Road does not currently provide a "complete streets" approach to accommodate pedestrian traffic. The additional heavy vehicle traffic from the subject site does not specifically trigger or change the requirement for a "complete streets" approach. Providing a paved shoulder or a sidewalk within the Prince of Wales Road right-of-way would improve pedestrian safety for the existing condition and for the future condition with the proposed development within the subject site.

Based on our review of the pedestrian trip demand, a dedicated pedestrian link through the subject site from the existing Primrose Elementary School to the existing restaurant located at the northwest corner of the intersection of Prince of Wales Road / Highway 89, is not recommended.

## 6.0 CONCLUSION

This section summarizes the conclusions and recommendations from the study.

- 1) The available sight distance at the Site Access is greater than the minimum sight distance requirements as identified in the Entrance Policy for the posted speed limit;
- 2) The proposed spacing between the Site Access and the existing residential driveway to the north and commercial driveway to the south are greater than the minimum corner clearance requirements as identified in the Entrance Policy for the posted speed limit;
- 3) The proposed spacing between the Site Access and Highway 89 is greater than the side road spacing requirements as identified in the Entrance Policy for the posted speed limit;
- 4) The proposed spacing between the Site Access and the adjacent property lines are greater than the entrance standards identified in the Entrance Policy; and

- 5) A pedestrian connection through the subject site from the existing Primrose Elementary School and the existing restaurant located at the northwest corner of the intersection of Prince of Wales Road / Highway 89, is not recommended.

We trust that you find this proposal satisfies your requirements.

Yours truly,  
**JD Northcote Engineering Inc.**



John Northcote, P.Eng.  
President



## **APPENDIX**



**PICTURE 1**



Picture taken from Site Access facing north



**PICTURE 2**



Picture taken from Site Access facing south



**PICTURE 3**



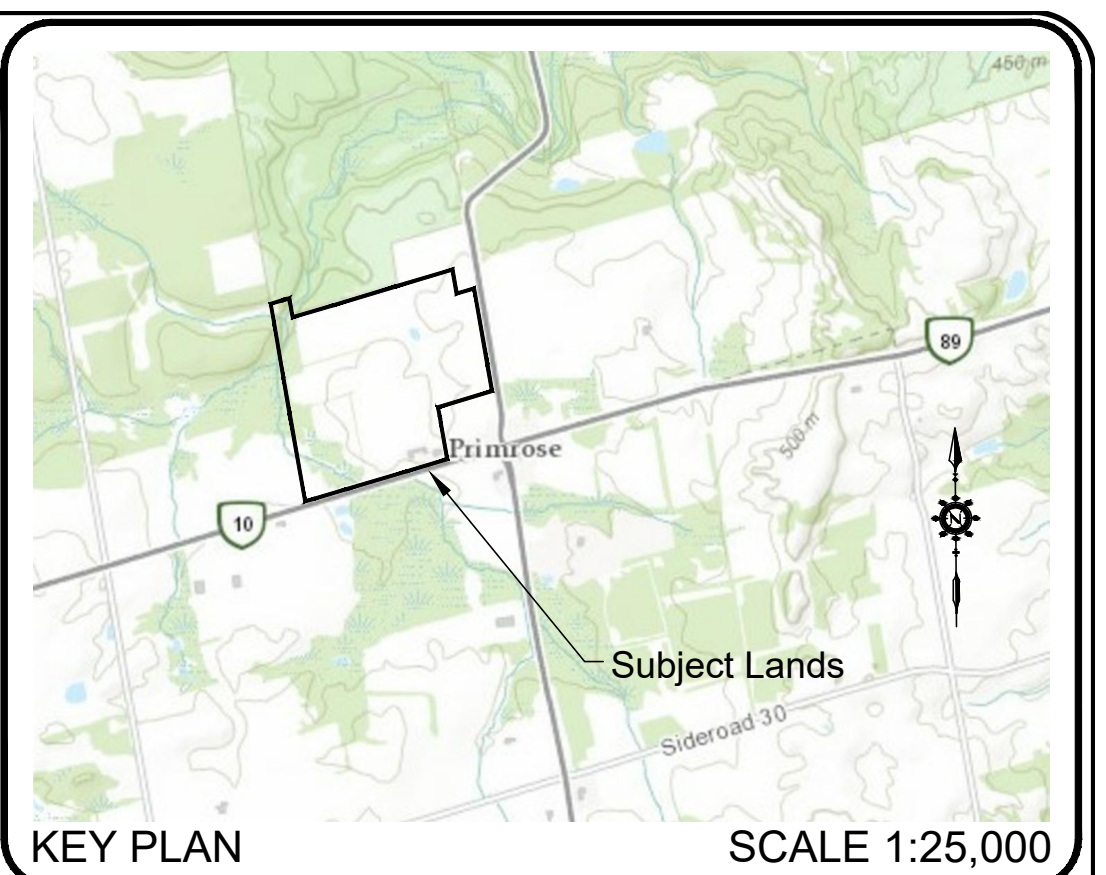
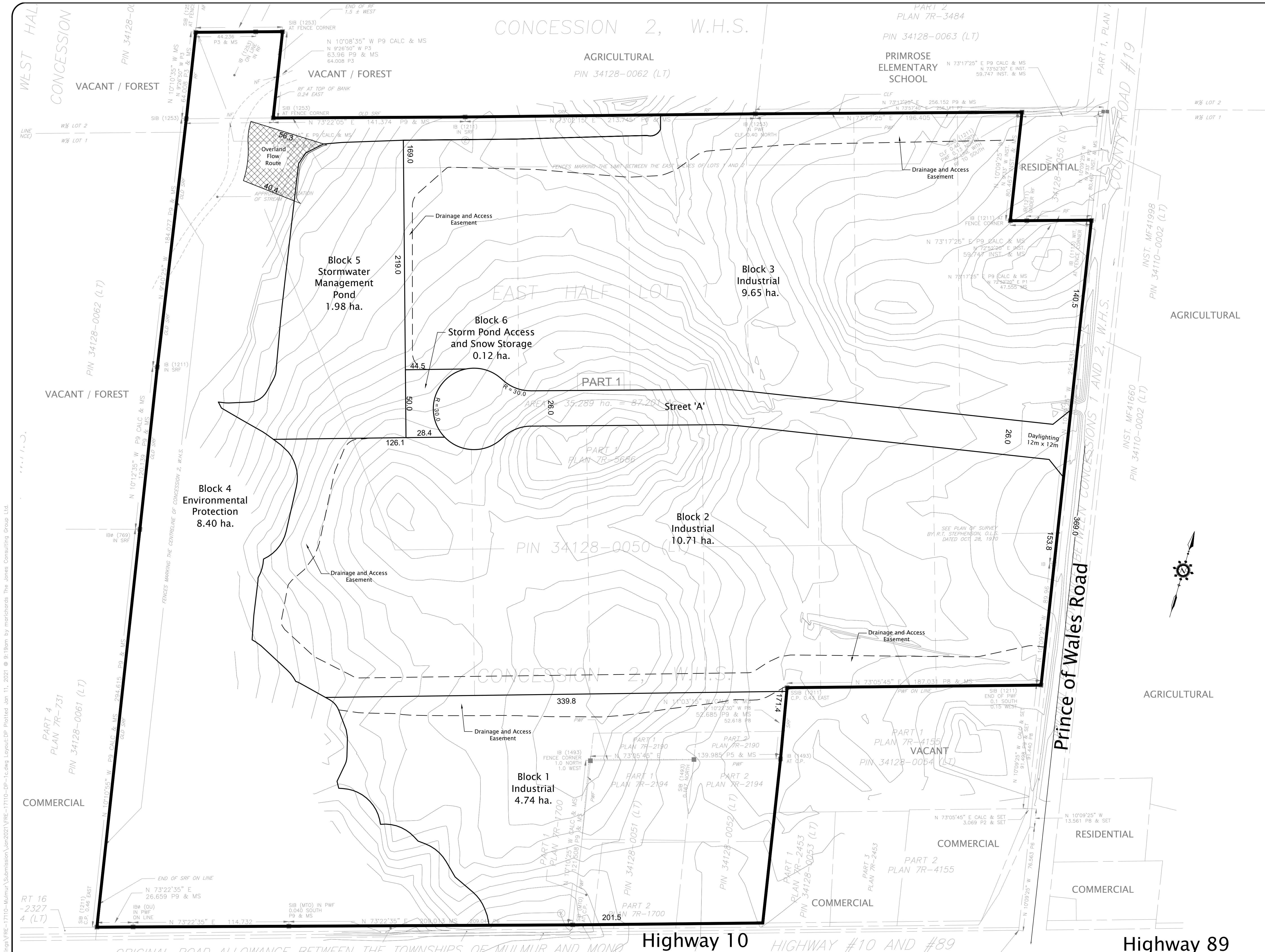
Picture taken from north facing Site Access

**PICTURE 4**



Picture taken from south facing Site Access





# Draft Plan of Subdivision

Part of the East Half of Lot 1 And,  
Part of the East Half of Lot 2, Concession 2,  
West of Hurontario Street  
Township of Mulmur  
County of Dufferin  
2021

**OWNER'S CERTIFICATE**  
I, THE UNDERSIGNED, BEING THE REGISTERED OWNER OF THE SUBJECT LANDS, HEREBY AUTHORIZING THE JONES CONSULTING GROUP LTD., TO PREPARE THIS DRAFT PLAN OF SUBDIVISION AND TO SUBMIT SAME TO THE TOWNSHIP OF MULMUR FOR APPROVAL.

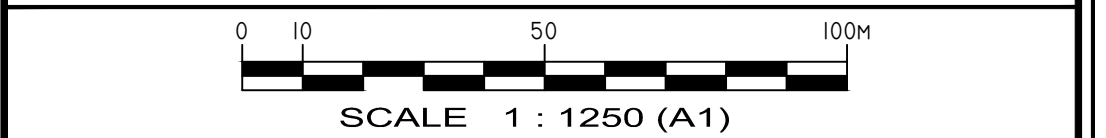
**DATE** 636040 Prince of Wales Road:  
Deltini Commercial Developments Inc.  
506249 Highway 89: Deltini (Mulum) Inc.  
506243 Highway 89: Deltini (Primrose) Inc.

**SURVEYOR'S CERTIFICATE**  
I CERTIFY THAT THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

**DATE** P.J.WILLIAMS, OLS

- ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT**
- |                         |                                          |
|-------------------------|------------------------------------------|
| a) SHOWN ON DRAFT PLAN  | g) SHOWN ON DRAFT PLAN                   |
| b) SHOWN ON DRAFT PLAN  | h) MUNICIPAL PIPED WATER TO BE PROVIDED  |
| c) SHOWN ON KEY PLAN    | i) SANDY/CLAY LOAM                       |
| d) INDUSTRIAL, EP & SWM | j) SHOWN ON DRAFT PLAN                   |
| e) SHOWN ON DRAFT PLAN  | k) ALL MUNICIPAL SERVICES TO BE PROVIDED |
| f) SHOWN ON DRAFT PLAN  | l) SHOWN ON DRAFT PLAN                   |

STATISTICS	AREA (ha.)
Industrial Blocks (BLOCKS 1 - 3)	25.10 ha.
Environmental Protection (BLOCK 4)	8.40 ha.
Stormwater Management (BLOCK 5)	1.98 ha.
Snow Storage (BLOCK 6)	0.12 ha.
Road (STREET 'A')	1.37 ha.
TOTAL	36.97 ha.



MULMUR PROPERTY  
PROPOSED DRAFT PLAN OF SUBDIVISION

Raymond J. Dufresne  
REGISTERED PROFESSIONAL ENGINEER  
R.P.P.

Date Issued: JULY 9, 2020

Checked By: RD

Project No.: FRE-17110

Drawn By: m.c.r.

Drawing Name: FRE-17110-DP-1c.dwg

**JONES**  
CONSULTING GROUP LTD.  
PLANNERS & ENGINEERS  
225 Mapleview Drive East, Unit 1, Barrie, Ontario L4N 6W5  
Phone: 705-734-2538 Fax: 705-734-1056  
www.jonesconsulting.com

SCHEDULE OF REVISIONS		
DATE	DESCRIPTION	DRAWN
OCT. 20/2020	REVISIONS AS PER COMMENTS	m.c.r.
JAN. 11/2021	REVISIONS AS PER ENG COMMENTS	m.c.r.

# DRAFT PLAN OF SUBDIVISION

## HAMLET OF PRIMROSE, TOWNSHIP OF MULMUR

G:\Planning Drawings\FRE-17110-Mulmur\Submission\Mon2021\FRE-17110-DP-1c.dwg Layout.DP Plotted Jan 11, 2021 @ 9:19am by mardwards The Jones Consulting Group Ltd.