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Traffic Brief

PROPOSED RESIDENTIAL DEVELOPMENT

514504 Second Line
Town of Amaranth

October 24, 2024
Project No: NT-23-166

October 24, 2024

The Cellular Connection Ltd.
78 Farnham Avenue
Toronto, ON M4V 1H4

Attention: Mr. Stuart Turk

**Re: Traffic Brief
Proposed Residential Development
514504 Second Line, Town of Amaranth
Our Project No. NT-23-166**

Nextrans Consulting Engineers, a Division of NextEng Consulting Group Inc., ("Nextrans") is pleased to present the enclosed Traffic Brief for the above noted site in support of an Official Plan Amendment, Rezoning and Plan of Subdivision applications.

The subject site is located southwest of Side Road 20 and 2nd Line within the Town of Amaranth. The subject lands are currently occupied by the property owner's residence and some existing hydro equipment. Based on the latest proposed site plan provided, the concept is to develop a total of 24 single family detached dwelling units. One (1) northerly unsignalized full movement access will be provided to connect the internal subdivision road network to Second Line. There is an existing driveway and is currently being used by the property owner to access his home. It is noted that this access will remain and will not be upgraded to public road standards though the property owner will grant an easement over the driveway to the Town for emergency access to the subdivision. As such, the homeowners will use the northerly access at all times. It is also noted that Block 29 will be retained by the current owner and will grant Lot 6 an easement over Block 29.

Given the number of weekday AM and PM peak hour trips that will be generated from the subject development, the subject development will be sufficiently accommodated by the existing road network and will generate an acceptable traffic impact to the surrounding road network.

We trust the enclosed sufficiently addresses your needs. Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

NEXTRANS ENGINEERING

Prepared by:



Marc Dimayuga
Transportation Analyst

Reviewed and Approved by:



Richard Pernicky, MITE
Principal

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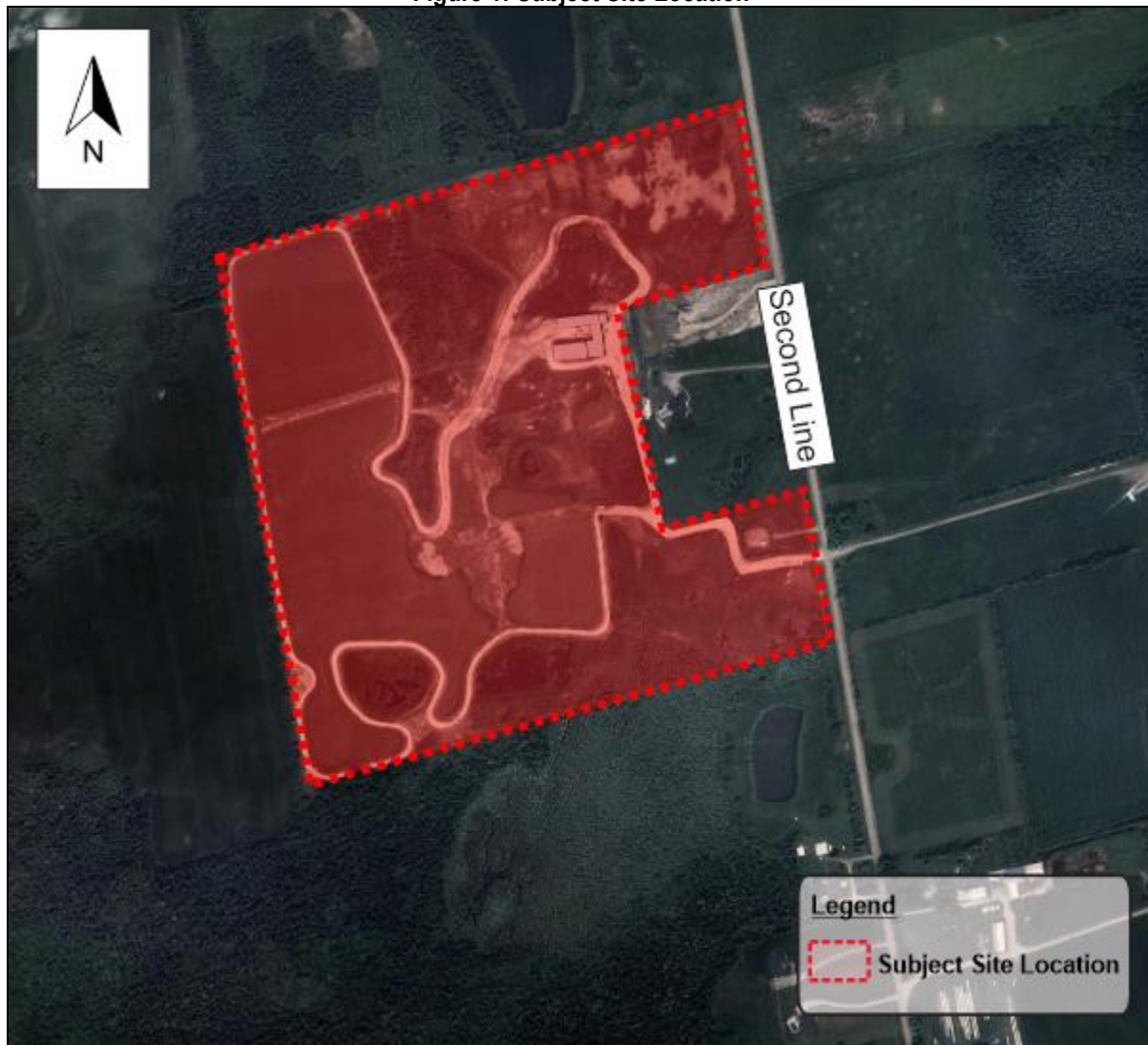
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1.0 INTRODUCTION

Nextrans Consulting Engineers (“Nextrans”), a Division of NexEng Consulting Group Inc., has been retained by The Cellular Connection Ltd. (the “client”) to undertake this Traffic Brief in support of an Official Plan Amendment, Rezoning and Plan of Subdivision applications for the proposed residential development located southwest of the intersection of Sideroad 20 and 2nd Line at 514504 Second Line (herein known as the “subject site”), within the Town of Amaranth (herein known as the “Town”).

The subject site is currently developed with a single detached dwelling. The subject site location is provided in **Figure 1**.

Figure 1: Subject Site Location



1.1. PROPOSED DEVELOPMENT

The development proposal is to develop a total of 24 single family detached dwelling units. One (1) northerly unsignalized full movement access will be provided to connect the internal subdivision road network to Second Line. There is an existing driveway and is currently being used by the property owner to access his home. It is noted that this access will remain and will not be upgraded to public road standards though the property owner will grant an easement over the driveway to the Town for emergency access to the subdivision. As such, the homeowners will use the northerly access at all times. It is also noted that Block 29 will be retained by the current owner and will grant Lot 6 an easement over Block 29.

The proposed site plan is shown in **Figure 2** and enclosed in **Appendix A**.

Figure 2: Proposed Site Plan



2.0 EXISTING TRANSPORTATION CONDITIONS

This section will identify and consider the existing transportation conditions for the road, transit, and pedestrian networks located immediate to the subject site.

2.1. ROAD NETWORK

Immediately adjacent roads of interest to the subject site are described as follows:

- **Sideroad 20** is an east-west road under the jurisdiction of the Town and consisting of a two (2)-lane cross-section (one (1) travel lane per direction). Sideroad 20 maintains an assumed and unposted speed limit of 50km/h in the vicinity of the subject site.
- **Second Line** is a north-south road under the jurisdiction of the Town and consisting of a two (2)-lane cross-section (one (1) travel lane per direction) nearby the subject site. Second Line maintains a posted speed limit of 60km/h.

2.2. EXISTING TRANSIT FACILITIES

Currently, there are no existing transit facilities within the surrounding area of the subject site.

2.3. CYCLING NETWORK

Currently, there are no existing cycling facilities within the surrounding area of the subject site.

2.4. PEDESTRIAN NETWORK

Currently, there are no existing pedestrian network within the surrounding area of the subject site.

3.0 SITE TRAFFIC

The following section discusses the modal split and the calculation, distribution, and assignment of trips generated by the site.

3.1. SITE TRIP GENERATION

The auto site trip generation was derived from the Institute of Transportation Engineers (ITE) Trip Generation Manual 11th Edition using land use code (LUC) 210 Single-Family Detached Housing for the proposed dwelling units. The weekday AM and PM peak hour trip generation volumes for the proposed residential development were calculated using the fitted equation for LUC 210 for the weekday AM and PM peak hour of adjacent street traffic.

The summary of the site trip generation is shown in **Table 1**.

Table 1: Trip Generation for Proposed Residential Development

Land Use	Units	Parameter	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Single-Family Detached Housing (LUC 210)	24	Trip Rate	0.21	0.64	0.85	0.67	0.41	1.08
		ITE Gross Trips	5	15	20	16	10	26
Auto Trips Generated			5	15	20	16	10	26

The resultant net total trip generation for the proposed development yields 20 trips in the AM peak hour (five (5) inbound, 15 outbound) and 26 trips in the PM peak hour (16 inbound, 10 outbound). **The number of site trips is expected to have an acceptable impact on the road network surrounding the subject site given the low site trip generation and the assumed low traffic volumes along Second Line.**

4.0 SITE PLAN REVIEW

4.1. PROPOSED SITE DRIVEWAY LOCATION ON SECOND LINE

One (1) unsignalized full movement access that provides connection to the internal driveway is proposed along Second Line. The proposed driveway location is appropriate given the following.

Local street with low traffic volumes

Vehicular trips circulating Second Line will be predominantly local in nature, with existing corridor traffic volumes along Second Line expected to be low during the weekday AM and PM peak hours given that Second Line is a street with few existing developments.

Low site trip generation during AM and PM peak hours

The site trip generation in the AM and PM peak hours will be low, with 20 trips in the AM peak hour (five (5) inbound, 15 outbound) and 26 trips in the PM peak hour (16 inbound, 10 outbound) or less than (1) site trip per minute within the AM and PM peak hour. As such, the existing roadway operations will be minimally impacted by the site driveways operations in the AM and PM peak periods.

In summary, given the road context of Second Line, assumed existing low volumes, low site trip generation of the proposed development, it is Nextrans' opinion that the location of the proposed site driveway is acceptable.

5.0 VEHICULAR PARKING REVIEW

This section will review the proposed parking provision for the proposed development and compare it to the parking requirements defined in The Township of Amaranth Zoning By-law 2-2009.

5.1. VEHICULAR PARKING REQUIREMENTS

The proposed development is currently zoned as Rural. The proposed development is subject to the parking requirements as provided in Table 3.15.8 of Zoning By-law 2-2009 in effect for the subject lands. A summary of the minimum parking requirements and proposed parking supply for the subject site is provided in **Table 2**.

Table 2: Parking Requirements Review

Use	No. of Dwelling Units	Parking Rate	Parking Required
Residential	24	2 spaces per dwelling unit	48
Total			48

Based on the parking requirements defined in the Township of Amaranth Zoning By-law 2-2009, the proposed development requires a minimum of 48 vehicular parking spaces.

6.0 CONCLUSIONS & RECOMMENDATIONS

The conclusions and recommendations of our traffic brief are summarized as follows:

- The proposed development is expected to generate 20 trips in the AM peak hour (five (5) inbound, 15 outbound) and 26 trips in the PM peak hour (16 inbound, 10 outbound).
- The subject site will have an acceptable traffic impact on the road network surrounding the subject site given the number of trips generated.
- The proposed site driveway location is acceptable given the local context and assumed existing low traffic volumes on Second Line, and low site trip generation.
- Based on the parking requirements defined in the Township of Amaranth Zoning By-law 2-2009, the proposed residential development requires a minimum of 48 vehicular parking spaces.

Appendix A - Proposed Site Plan

METRIC: DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

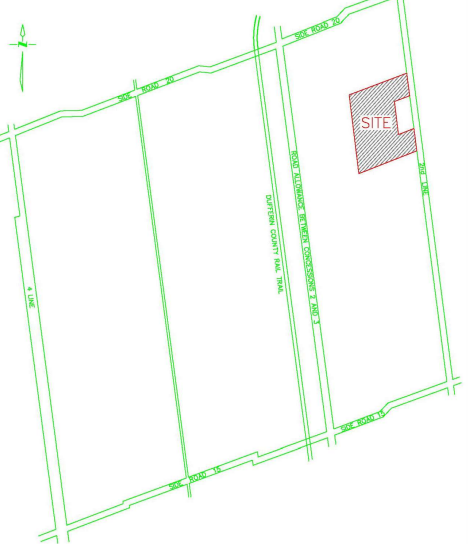
DRAFT PLAN OF
SUBDIVISION

for
PART OF LOT 19
CONCESSION 2
(GEOGRAPHIC TOWNSHIP OF AMARANTH)
TOWNSHIP OF AMARANTH
COUNTY OF DUFFERIN

MARCH 21, 2024

KEY PLAN

NOT TO SCALE



ADDITIONAL INFORMATION REQUIRED
UNDER SECTION 51 (17) OF THE
PLANNING ACT, R.S.O., 1990

- (g) AS SHOWN ON DRAFT PLAN
- (h) AS SHOWN ON DRAFT PLAN AND KEY PLANS
- (i) AS SHOWN ON DRAFT PLAN
- (j) THE LAND IS TO BE USED ACCORDING TO THE SCHEDULE OF LAND USE
- (k) AS SHOWN ON DRAFT PLAN AND KEY PLANS
- (l) AS SHOWN ON DRAFT PLAN
- (m) AS SHOWN ON DRAFT PLAN AND KEY PLANS
- (n) MUNICIPAL WATER SUPPLY TO BE MADE AVAILABLE
- (o) SOIL IS CLAYEY SILT AND SILTY CLAY TO CLAY
- (p) AS SHOWN ON DRAFT PLAN
- (q) FULL MUNICIPAL SERVICES TO BE MADE AVAILABLE
- (r) SUBJECT TO EASEMENTS AS SHOWN ON THE DRAFT PLAN

SCHEDULE OF LAND USE

SCALE 1:1000
(30X36)

OWNER'S AUTHORIZATION

I AUTHORIZE SCHAEFFER DZALDOV PURCELL LTD. TO PREPARE AND SUBMIT THIS DRAFT PLAN OF SUBDIVISION TO THE CITY OF TORONTO FOR APPROVAL.

STUART TURK
THE CELLULAR CONNECTION LTD.

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED AS SHOWN ON THIS PLAN AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DAN DZALDOV
ONTARIO LAND SURVEYOR

DATE _____

SCHAEFFER DZALDOV PURCELL LTD.
ONTARIO LAND SURVEYORS

64 JARDIN DRIVE	CONCORD, ONTARIO L4K 3P3	TEL.(416)987-010
DRAWN ACAD/SL	CHECKED	SCALE 1:1000
		JOB NO. 23-3

October 11, 2024