



September 29, 2020

Mr. Justin Mamone, BES, MCIP, RPP
VANDYK Group of Companies
1944 Fowler Drive
Mississauga, ON L5K 0A1

Re: Proposed Residential and Commercial Development, Greenly Drive, Cobourg, ON – Regarding Concerns of Increased Traffic

Dear Mr. Mamone,

TRANS-PLAN has reviewed the concerns from the local community in the letter dated July 30, 2020, regarding the lack of a second exit from the private condominium laneways for fire trucks / emergency vehicles, and increased traffic on Greenly Drive north of Carlisle Street. We recommend “no parking” signage to be installed along Greenly Drive between Carlisle Street and the proposed Cowin Circle roadway, to minimize potential obstructions if truck reverse movements are required from the private laneway.

However, we do not recommend a new potential roadway connection from Greenly Drive and the proposed townhouses to Elgin Street West, because a new intersection would not meet spacing requirements for major arterial roads (based on the Transportation Association of Canada (TAC) Geometric Design Guide 2017) given the vicinity to Wilkins Gate and the existing Canadian Tire full-moves driveway. Spacing between intersections is required to provide sufficient storage and deceleration distance for left turn vehicles from Elgin Street West. The proposed commercial site driveway is acceptable because it is restricted to right-in / right-out movements. A vehicular connection between the townhouses and the proposed commercial plaza is also not recommended, because the plaza is expected to generate 4 to 5 times more traffic than the townhouses and a connection would increase traffic on Greenly Drive.

Based on our traffic analysis, the Carlisle Street and Greenly Drive intersection is expected to continue operating well with the added townhouse traffic. We conclude that the future traffic volumes on Greenly Drive with the proposed townhouses are acceptable for the local residential roadways.

Should you have any questions, please feel free to contact me.

Sincerely,



Anil Seegobin, P.Eng.
Partner, Engineer



Jonathan Li, B.Eng.
Transportation E.I.T.

Trans-Plan Transportation Inc.
Transportation Consultants



9.4.2.1 Arterials

Along signalized arterial roads, vehicular traffic volumes are generally high. It is therefore desirable to provide spacing between signalized intersections that is consistent with the desired vehicular traffic progression speed and signal cycle lengths. By spacing the intersections uniformly, based on known or assumed running speeds and appropriate cycle lengths, signal progression in both directions can be achieved. Progression allows platoons of vehicles to travel through successive intersections without stopping. For a progression speed of about 50 km/h and a cycle length of 60 s, the corresponding desired spacing between signalized intersections is approximately 400 m. As speeds increase, the optimal intersection spacing increases proportionately.

Where an arterial corridor must accommodate a variety of road users (e.g., vehicles, cyclists, and pedestrians), vehicle operations and the consequent intersection designs must balance the various needs while recognizing that the priority of arterial roadways is generally servicing vehicular traffic movement.

A typical minimum intersection spacing along arterial roadways is 200 m, generally only applicable in areas of intense existing development or restrictive physical controls where feasible alternatives do not exist. The 200 m spacing allows for minimum lengths of back to back storage for left turning vehicles at the adjacent intersections.

The close spacing does not permit signal progression; therefore, it is normally preferable not to signalize the intersection that interferes with progression along a major arterial. Intersection spacing at or near the 200 m minimum is normally only acceptable along minor arterials, where optimizing traffic mobility is not as important as along major arterials.

Where intersection spacing along an arterial does not permit an adequate level of traffic service, many alternatives can be considered to improve traffic flow. These include, but are not limited to:

- Converting two-way to one-way operation
- Implementing cul-de-sacs for minor connecting roads
- Introducing channelization to restrict turning movements at selected intersections to right turns only.

The designer's options may be substantially limited by the policies of the local jurisdiction.

On divided arterial roads, a right-in, right-out intersection without a median opening may be permitted at least 100 m from an adjacent all-directional intersection. The distance is measured between the closest edges of pavement of the adjacent intersecting roads.

In retrofit situations, the desired spacing of intersections along an arterial is sometimes compromised in consideration of other design controls, such as the nature of existing adjacent development and the associated access needs.

9.4.2.2 Collectors

The typical minimum spacing between adjacent intersections along a collector road is 60 m.

9.4.2.3 Locals

Along local roads, the minimum spacing between four-legged intersections is normally 60 m. Where the adjacent intersections are three-legged, a minimum spacing of 40 m is acceptable.