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DEPARTMENT OF PUBLIC WORKS
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To: Municipal Services Committee
From: Eric Lom, City Traffic Engineer
Date: June 17, 2020
Re: Intersection traffic control at the Tigerlily Drive / Wayfarer Lane intersection
Follow-up to a Six-Month Trial Period

Based on our annual crash records analysis, the Traffic Section reviewed the traffic control at the intersection of Tigerlily Drive and Wayfarer Lane and subsequently initiated a six-month trial period to change from uncontrolled to two-way stop control. This is a four-legged intersection that is located two blocks north of Evergreen Drive, and approximately four blocks east of Richmond Street. The land use in the area of this intersection is residential.

In a typical intersection control study, we consider traffic volumes, crash history, safe approach speeds, etc. In this case, the estimated entering volume of this intersection is low, at approximately 500 vehicles per day (estimated). A review of crash records indicated one crash for the recent five-year period of 2015 through 2019. The critical approach speed for the intersection was found to be approximately 7 mph due primarily to a large evergreen tree located in the northeast quadrant of the intersection (inside the legally-defined vision corner). Both streets are classified as *local*.

More relevant, however, is that the *Manual on Uniform Traffic Control Devices*, for the sake of consistency, states that intersection control should be installed at uncontrolled intersections which are located in predominantly controlled areas (stops, yields, signals). We have interpreted this to mean that if more than 75% of the four-legged intersections in a particular area (whose boundaries are typically defined by collector or arterial roadways) are controlled, the remaining uncontrolled four-legged intersections should have an appropriate form of control added. While there are several uncontrolled T-intersections in the vicinity, the subject intersection is one of only two four-legged intersections in this area that had remained uncontrolled.

Based on the above, we recommend maintaining the two-way stop control that was implemented for the trial period.

To accomplish this, the following ordinance action is required:

1. **Create:** "Install stop signs on Tigerlily Drive at Wayfarer Lane."