

ATTACHMENT B – Traffic Control Summaries & Key Maps

SECTION 1: PXO Type B - East Ave at Borden Ave

Data collected from a pedestrian study conducted on November 18th, 2021, was used to determine if a PXO was warranted. In addition to the pedestrian study, vehicle volume was determined using an Automatic Data Recorder installed for approximately one week from June 22, 2023, to June 28, 2023. The results of these studies are shown in Table 1 below, and the warrant summary for the proposed PXO on East Ave at the Borden Ave N is shown in Table 2 below:

Table 1 – Vehicle and Pedestrian Volumes: East Ave		
24-hour average traffic volume	June 22–June 28, 2023	2975 vehicles
Maximum 8-hour traffic volume	November 18 th , 2021	2230 vehicles
Number of Pedestrian Crossings (8 hour)	Thursday, Nov18, 2021	329 pedestrians

Table 2 - Level 2 Pedestrian Crossover Warrant Summary: East Ave at Borden Ave E				
Warrant	Justification	Required Value	Actual Value	Conditions Satisfied?
Level 2 Pedestrian Crossover	1. 8-hour Pedestrian Volume at proposed crossover location	> 100 peds	329	YES
	2. 8-hour Two-Way Vehicle Volume	Min 1185 Max 2250	2230	YES
	3. Distance from Nearest Controlled Crossing	> 200 meters	250	YES



SECTION 2: All-Way Stop – Fairfield Ave & St Leger St

A traffic study was conducted for the intersection of Fairfield Ave & St Leger St on November 21, 2024. The results of the study were compared to the City of Kitchener's all-way stop warrant requirements. These requirements are a set of guidelines based on the all-way stop warrants established by the Ministry of Transportation of Ontario and the Institute of Transportation Engineers. The results are as follows:

Warrant – Local/Minor Road All-Way Stop Warrant Analysis Fairfield Ave & St Leger St

Warrant Factors - "4-Leg" Intersection	Results	Warrant Met
The total vehicle volume on all intersection approaches exceeds 200 vehicles per hour for each of the highest four hours of the day and The combined vehicle and pedestrian volume on the minor street exceeds 75 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of the same four hours as the total volume and The volume split does not exceed 70% / 30% for a four-way control on the major road, or Collisions within a 12 month period averaged over 36 consecutive months susceptible to correction by an All Way Stop	Meets 5 of 8 hours 123 Avg 53% / 47% 0.33 per year	YES YES YES NO (Warrant Value=4)
All-Way Stop Warranted		YES

As the results above indicate, the intersection of Fairfield Ave & St Leger St warrants installation of all-way stop control.

Based on the results of the traffic study, Transportation Services is recommending that an all-way stop be installed at the intersection of Fairfield Ave & St Leger St

KEY MAP – Fairfield Ave & St Leger St

