



STAFF REPORT

TO: Council

FROM: Trudy Payne, Chief Administrative Officer

DATE: October 13, 2020

SUBJECT: **Memo from Transportation and Infrastructure Renewal
Western; Crosswalk Request**

DISCUSSION:

Council directed staff to contact the Department of Transportation and Infrastructure Renewal about installing a cross walk in the Shelburne Industrial Park. Staff reached out to their Traffic Officer who conducted an investigation in which their findings and decision by the Department are detailed in the attached letter. Staff has reached out to Shelburne Computer to get a rough estimate on how much it would cost to have two signs made that would be posted in the industrial area to warn those entering the Park to slow down and to provide warning that heavy equipment is in use. Pricing was estimated to be at \$150 each plus HST.

RECOMMENDATION

It is recommended that the Council of the Municipality of the District of Shelburne install two signs in the Shelburne Industrial Park to warn people to slow down and about heavy equipment being operated.



Transportation and
Infrastructure Renewal
Western

67 Crescent Drive Bus: 902 679-4308
New Minas, Nova Scotia Fax: 902 679-6124
B4N 3G7

To: Pamela Mehlman-Shand - Area Manager,
From: Doug Pulsifer - District Traffic Supervisor, Western
Date: September 18, 2020
Subject: Request for Crosswalk – Adamant Drive, Shelburne Co.

I completed my initial investigation in response to the request you received from the Municipality of Shelburne for a crosswalk on Adamant Drive within the Industrial Park.

Crosswalks may be used at mid-block locations to assign right of way to pedestrians where it is normally assigned to vehicles. This is typically done where traffic volumes are high enough that gaps in traffic large enough to allow pedestrians to cross the road do not normally occur. Once in place, vehicular traffic must yield to pedestrians using the crosswalk.

The Department may approve a crosswalk requested by a Municipal Government if the following conditions exist:

- Pedestrian volumes are high enough to show a demonstrated need for a crosswalk and traffic volumes are high enough that adequate gaps in traffic do not exist.
- Stopping sight distance at the proposed crosswalk location is sufficient for the approach speeds and grade of the road.

As part of my investigation a speed radar was deployed to capture the 85th percentile speed (the fastest speed which traffic engineering determines to be reasonable and prudent). The speed limit on Adamant Drive is 50 km/h and the radar samples showed this speed zone is getting voluntary compliance with an 85th percentile speed of 39 km/h.

In conjunction with the speed data captured, the radar unit also recorded vehicle volumes for Adamant Drive. Over a five-day period, the average was 306 vehicles per day. Assuming a twelve-hour workday from 06:00 to 18:00 hours, the hourly vehicle counts were averaged for each hour of the twelve-hour day. The hourly volumes were then used to calculate the time gap between vehicles to determine the available time for pedestrians to cross safely. The shortest gap between vehicles averaged was 1.9 minutes, the longest was 7.3 minutes with the rest falling within the 2.3 to 3.2-minute range. The Transportation Association of Canada allows for a crossing speed for the general population of 1.0 metres per second. Considering Adamant Drive is approximately 9 metres wide from curb to curb, a crossing time of 9 seconds would be considered sufficient.

Adamant Drive has low traffic volume, the 85th percentile speed is below the posted limit (the fastest speed measured was 67 km/h) and the road has excellent sight lines with ample sufficient time gaps existing between vehicles, the unhindered crossing opportunities are numerous. Therefore, the Department's requirements to install a marked crosswalk at this location have not been met and therefore the crosswalk will not be approved.

If you have any other questions or concerns, please contact me.

Time	Avg Vehicles per Hour	Avg Min Between Vehicles
6:00 - 7:00	18.6	3.2
7:00 - 8:00	19.6	3.1
8:00 - 9:00	23.6	2.5
9:00 - 10:00	20.2	3.0
10:00 - 11:00	26.0	2.3
11:00 - 12:00	19.6	3.1
12:00 - 13:00	31.0	1.9
13:00 - 14:00	22.2	2.7
14:00 - 15:00	23.2	2.6
15:00 - 16:00	18.6	3.2
16:00 - 17:00	25.0	2.4
17:00 - 18:00	8.2	7.3