Craig Henry Drive Area Traffic Management Study

Traffic Calming Plan Report

February 2021

Summary

Based on the feedback received from public from Online Consultation 1, staff reviewed and investigated raised traffic concerns and potential for solutions suggested by public. In developing alternative plans, the conditions of Craig Henry Drive and relevant plans and guidelines were reviewed. The intent of the alternatives is to create a more amiable context for Craig Henry Drive as a community street. Most of the recommended measures are common to the two alternative plans developed and, in addition, Alternative 1 includes horizontal deflection measures and Alternative 2 includes vertical deflection measures.

Review of Public Feedback

Visibility concerns were investigated at various locations along Craig Henry Drive. Hedge trimming was recommended on the southwest corner of the intersection of Craig Henry Drive and Bainbridge Avenue, and on the southwest corner of the intersection of Craig Henry Drive and Shoreham Avenue. Visibility from Markham Avenue was also limited due to a fence. It is advised that drivers on Markham Avenue move close to Craig Henry Drive over the stop line before commencing a turn to improve visibility of approaching traffic along Craig Henry Drive.

Traffic signals, pedestrian traffic signals, pedestrian crossovers and all-way stops were common requests. These measures are traffic control devices that need to be justified to ensure safety of all road users and efficient traffic operation. An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location was performed to determine whether installation of a traffic control devices is justified at particular locations. Most of the traffic control devices suggested by the survey respondents did not meet the warrants for such devices.

A potential for a raised crossing with cross-rides was reviewed at Shoreham Avenue. Consultation with the City's cycling group yielded that it would be more effective to

consider this measure in a separate cycling study in the future, and therefore it was not pursued as part of the Craig Henry Drive Area Traffic Management study.

Review of Conditions and Guidelines

In developing alternative plans for Craig Henry Drive, existing conditions were considered along with the recommendations from the City's Traffic Calming Design Guidelines, as summarized below:

- Craig Henry Drive is divided by a median and each side of Craig Henry Drive is approximately 6m wide.
- Craig Henry Drive is identified as a key emergency response street by Ottawa Fire Services. It is recommended to avoid speed humps and speed tables on key emergency response streets. Speed cushions offer a potential alternative to speed humps. Description of speed cushions can be found on page 66 (pdf) of the Traffic Calming Design Guidelines. An example of speed cushions can be found on Knudson Drive in Kanata.
- Craig Henry Drive is identified as a frequent transit route. On a frequent transit route, speed humps are not considered appropriate except under special circumstances, but speed cushions and raised intersections may be considered if other traffic calming measures are insufficient or not feasible. A brief description of vertical deflection measure can be found here, and for more detailed description of individual measures please refer to the Traffic Calming Design Guidelines above.
- Craig Henry Drive is designated as a local cycling route in Ottawa Cycling Plan.
- Maintenance class of Craig Henry Drive according to Recommended Maintenance Quality Standards for Roads and Sidewalks/Pathways is 3A. On a maintenance class 3A road, the Traffic Calming Design Guidelines recommend to avoid curb-to-curb road surface widths less than 4.0m at any point where one-way travel is permitted.

Recommendations

Two alternatives have been developed based on a review of background data and public input from Online Consultation 1. Both alternatives include bicycle lanes and edge lines, pedestrian crossovers, and a short sidewalk segment. Alternative 1 includes horizontal deflection measures, and Alternative 2 includes vertical deflection measures.

Recommended Measures Common to Both Alternatives

Bicycle lanes and edge lines

Each side of Craig Henry Drive is approximately 6 metre wide, and divided into approximately 4.5m wide traffic lane and 1.5m wide shoulder by edge lines. It is recommended to reduce the width of the traffic lanes along Craig Henry Drive to approximately 3.5-4 metres to discourage speeding and improve safety of pedestrians and cyclists, by adding bicycle lanes where parking demand is low, and with edge lines where provision of parking is important.

The proposed bicycle lane is 2 metre wide with 0.5 metre buffer between the bicycle lane and the traffic lane. Based on the current parking demand, bicycle lane is recommended from Greenbank Road to Bertona Street on the eastbound Craig Henry Drive, and from Aldridge Way to Greenbank Road on the westbound Craig Henry Drive.

A bicycle lane is a portion of a roadway which has been designated by pavement markings and signage for the preferential or exclusive use of cyclists. Parking and stopping is not allowed on a bicycle lane. An example of bicycle lanes with buffer can be found on Cyrville Road.

Figure 1 Buffered bicycle lanes on Cyrville Road

For the remainder of Craig Henry Drive, edge lines are recommended to be moved from 1.5m from the curb to approximately 2m from the curb. The intention of the relocation of

the edge lines is to reduce the width of the traffic lane and to encourage drivers not to park partially on the sidewalk.

Edge Lines are solid white lines that delineate the separation of traffic lanes and shoulders when the shoulder is to the right of the traffic lane in the direction of travel. The shoulder is not a bicycle lane and parking and stopping is permitted on the shoulder.

The locations of bicycle lanes and edge lines are shown in Figure 2.

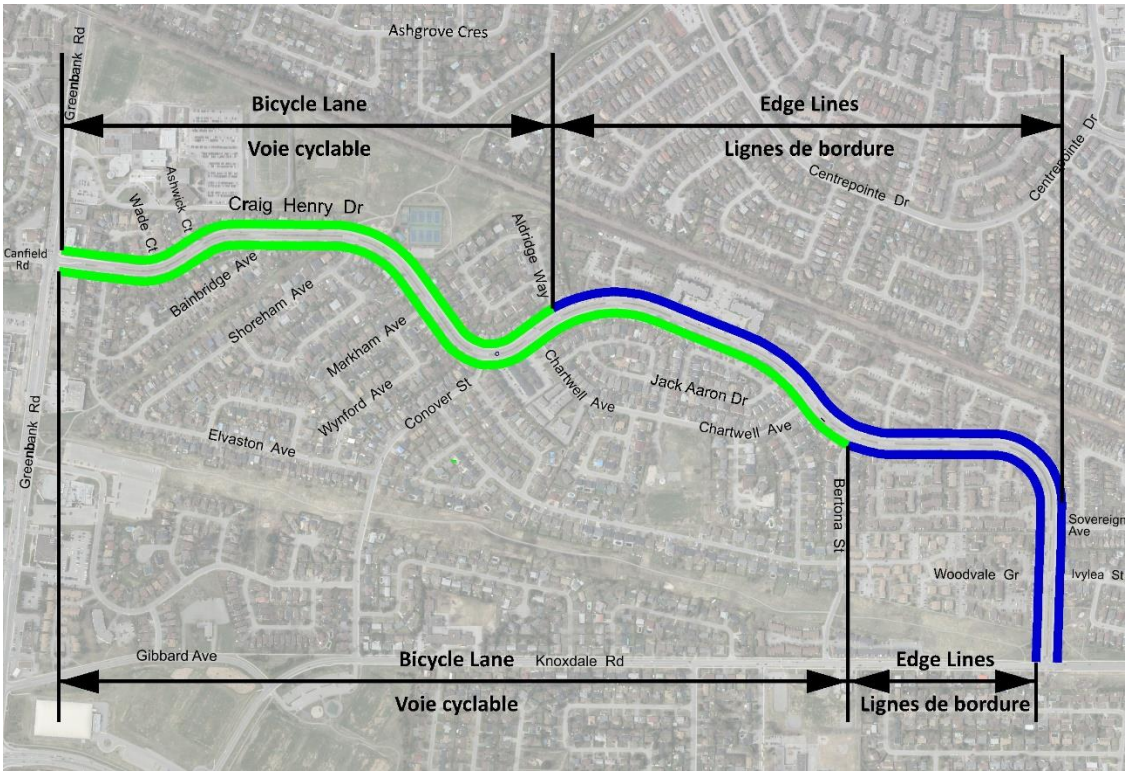

Figure 2 Locations of bicycle lanes and edge lines

Pedestrian Crossovers

To improve safety of pedestrians crossing Craig Henry Drive, pedestrian crossovers are recommended. The school crossing on the west side of the intersection of Craig Henry Drive and Bertona Street meets the warrant for a pedestrian crossover. Another candidate location is the east side of the westerly intersection of Craig Henry Drive and Chartwell Avenue. Feasibility for this second pedestrian crossover is under review and is dependent on the results of updated pedestrian volume counts following.

Sidewalk

A short section of sidewalk is recommended between the bus shelter on the eastbound Craig Henry Drive west of Markham Avenue and Markham Avenue to improve safety of pedestrians accessing the bus stop.

Recommended measures for Alternative 1

In addition to the measures common to both alternatives, four ride-over cycle-friendly bulb-outs are recommended at the following locations:

On the eastbound Craig Henry Drive,

- Southwest corner of Craig Henry Drive and Elvaston Avenue
- Between 30 and 32 Craig Henry Drive

On the westbound Craig Henry Drive,

- Northeast corner of Craig Henry Drive and Ashwick Court
- Northeast corner of Craig Henry Drive and Wade Court

Recommended measures for Alternative 2

Although horizontal deflection measures are preferred to vertical deflection measures along Craig Henry Drive, speed cushions could be an acceptable alternative for a key emergency street and a frequent transit route. In addition to the measures common to both alternatives, speed cushions are recommended at the following locations:

On the eastbound Craig Henry Drive,

- 21m east of Elvaston Avenue
- 14m west of Ashwick Court
- 15m west of Bainbridge Avenue
- In front of 52 and 54 Craig Henry
- 35m north of Woodvale Green
- 53m north of Knoxdale Road

On the westbound Craig Henry Drive,

- 53m north of Knoxdale Road
- In front of 93 and 95 Craig Henry
- 14m east of Wade Court

Conclusion

Feedback from the public has been reviewed along with traffic data and existing conditions on Craig Henry Drive in order to prepare two alternative options for traffic calming measures. The alternatives both include bicycle lanes and edge lines, pedestrian crossovers and a short sidewalk segment. Alternative 1 includes horizontal deflection measures, whereas Alternative 2 includes vertical deflection measures. The public will be consulted for their input on the two alternatives via Online Consultation 2, and a final recommendation will be prepared for this study.