Request for Pedestrian Crossing Protection on Kipling Avenue, North of Mount Olive Drive/Panorama Court (Ward 1 - Etobicoke North)

(City Council on June 18, 19 and 20, 2002, adopted this Clause, without amendment.)

The Etobicoke Community Council recommends the adoption of the report (May 10, 2002) from the Director, Transportation Services, District 2.

The Etobicoke Community Council reports, for the information of Council, having requested the Director, Transportation Services, District 2, to consult with the appropriate staff of the Toronto District School Board with respect to any changes that are being planned by North Albion Collegiate Institute that may affect vehicular traffic.

The Etobicoke Community Council submits the following report (May 10, 2002) from the Director, Transportation Services, District 2:

Purpose:

To present the results of traffic studies conducted on Kipling Avenue, north of Mount Olive Drive/Panorama Court.

Financial Implications and Impact Statement:

The funds associated with new traffic control signal installations are contained in the Works and Emergency Services Capital Program under Project No. CTP-702-01. In 2002, $1.6 million has been approved in the Transportation Services budget for new traffic control signal installations. The estimated cost of installing pedestrian signals on Kipling Avenue, north of Mount Olive Drive is $81,000.00, with installation being subject to scheduling and competing priorities.

Recommendations:

It is recommended that:

(1) pedestrian signals be installed on Kipling Avenue, 150.0 metres north of Mount Olive Drive/Panorama Court; and
(2) the appropriate City officials be authorized and directed to take the necessary action to
give effect thereto, including the introduction in Council of any bills that may be
required.

Background:

A petition was presented at the Etobicoke Community Council meeting held on April 3, 2002.
This petition contained 1,370 signatures from community members, students and staff from
North Albion Collegiate Institute. This petition was prompted following a fatal collision
involving a student from North Albion Collegiate Institute. According to the collision report
provided by the Toronto Police Service, the student was waiting in the centre painted median on
Kipling Avenue, approximately 150.0 metres north of Mount Olive Drive/Panorama Court to
complete her crossing, when she was struck by a southbound motorist who drove on this centre
median to pass a queue of vehicles stopped in the travel lanes.

Etobicoke Community Council subsequently requested “the Director, Transportation Services,
District 2, to submit a report to the Etobicoke Community Council for its meeting scheduled to
be held on June 5, 2002, on the results of a pedestrian safety control study for the
Kipling Avenue area at North Albion Collegiate Institute”.

Comments:

Kipling Avenue between Annabelle Drive/Rowntree Road and Mount Olive Drive/
Panorama Court is a five-lane cross-section with a centre paint median and left turn lanes
providing access to high-density apartments and a plaza on the east side of Kipling Avenue.
Kipling Avenue is designated in the City’s Road Classification System as a “Major Arterial”,
and built to urban standards. The road provides sidewalks on both sides, and also provides a
generous grassed boulevard area between the travelled section of the road and the sidewalk. A
bicycle path also exists on the east side of Kipling Avenue.

North Albion Collegiate Institute is located on the north-west corner of Kipling Avenue and
Mount Olive Drive/Panorama Court. North of the school are single family homes with reverse
frontage onto Kipling Avenue. Traffic control signals are located 150.0 metres south of the
study location at Kipling Avenue and Mount Olive Drive/Panorama Court, as well as
320.0 metres to the north of the study location at Annabelle Drive/Rowntree Road. A map of the
area is Attachment No. 1.

The speed limit on Kipling Avenue, in the area of North Albion Collegiate Institute is 50 km/h.
Adequate school area warning signs are posted for northbound and southbound motorists on
Kipling Avenue both in advance of Mount Olive Drive/Panorama Court as well as in advance of
Annabelle Drive/Rowntree Road. Parking is prohibited on both sides of Kipling Avenue.

The TTC operates the Kipling 45 bus service on this portion of Kipling Avenue.
To assess traffic conditions on Kipling Avenue, the following information was obtained:

(a) an 8-hour pedestrian crossover study on Kipling Avenue between Mount Olive Drive/Panorama Court and Annabelle Drive/Rowntree Road;

(b) a 24-hour automatic traffic count on Kipling Avenue between Mount Olive Drive/Panorama Court and Annabelle Drive/Rowntree Road;

(c) a radar speed study on Kipling Avenue between Mount Olive Drive/Panorama Court and Annabelle Drive/Rowntree Road; and

(d) a review of the 7-year collision history on Kipling Avenue between Mount Olive Drive/Panorama Court and Annabelle Drive/Rowntree Road.

The justification for the installation of a pedestrian crossover (PXO) is based on a technical warrant established by the Ministry of Transportation of Ontario (MTO). The analysis of this warrant is based on the pedestrian peak 8-hours. The results of the study are summarized in the following table.

<table>
<thead>
<tr>
<th>PXO WARRANT</th>
<th>REQUIRED VOLUME</th>
<th>RECORDED VOLUME</th>
<th>COMPLIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Pedestrian Volume</td>
<td>220</td>
<td>402</td>
<td>190%</td>
</tr>
<tr>
<td>Pedestrian Delays &gt; 10 seconds</td>
<td>75</td>
<td>142</td>
<td>190%</td>
</tr>
</tbody>
</table>

To warrant the installation of a pedestrian crossover, compliance levels of 100 percent or more are required in both categories, which is the case on Kipling Avenue, in the vicinity of Mount Albion Collegiate Institute.

The PXO warrant provides an adjustment factor of two for senior citizens, “unassisted” children and physically disabled pedestrians. “Unassisted” children, as defined in the PXO warrant, are those who are not assisted by an adult, an adult school crossing guard or a police officer. During the peak 8-hours, 397 pedestrians were recorded crossing Kipling Avenue between Mount Olive Drive/Panorama Court and Annabelle Drive/Rowntree Road, of which, 5 were “unassisted” children and the remainder classified as youths or adults.

The majority of the pedestrians who were recorded crossing Kipling Avenue during our study were students from North Albion Collegiate Institute. These students tended to cross immediately north of the north driveway to the school, approximately 150.0 metres north of Mount Olive Drive/Panorama Court. Although students were crossing at this mid-block location, we also observed that many students would walk further south to utilize the crossing
protection provided by the traffic control signals at Kipling Avenue and Mount Olive Drive/Panorama Court.

To determine the most appropriate form of crossing protection, staff conducted a pedestrian crossover safety audit. This audit included a detailed review of this location compared with the recommended design standards, or "environmental standards", for pedestrian crossovers as developed by the Province of Ontario in consultation with Ontario municipalities. These criteria describe a roadway environment suitable for this type of control, and exposure factors, which would make a pedestrian crossover unsuitable or potentially unsafe. The following table outlines our review of these criteria and whether they are satisfied at this location.

<table>
<thead>
<tr>
<th>Standards or Criteria to be Met for Physical Suitability of a PXO</th>
<th>Met/Not Met</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle operating speed less than 60 km/h.</td>
<td>Not Met</td>
<td>85th percentile is 61 km/h.</td>
</tr>
<tr>
<td>Not more than four lanes wide on a two-way street.</td>
<td>Not Met</td>
<td>Five lanes including centre hatched area.</td>
</tr>
<tr>
<td>Traffic volume less than 35,000 vehicles per day (total both directions).</td>
<td>Met</td>
<td>17,141 vehicles per day.</td>
</tr>
<tr>
<td>No driveways or entrances nearby.</td>
<td>Not Met</td>
<td>Apartment and school driveways on the east and west side of Kipling Avenue.</td>
</tr>
<tr>
<td>No significant volume of turning movements which interfere with PXO.</td>
<td>Met</td>
<td>No significant turning movements from driveways.</td>
</tr>
<tr>
<td>No visibility problems exist for either pedestrians or motorists.</td>
<td>Met</td>
<td>Sightlines are appropriate.</td>
</tr>
<tr>
<td>No loading zones (including TTC) in the immediate vicinity.</td>
<td>Met</td>
<td>No TTC bus stops immediately at the intersection.</td>
</tr>
<tr>
<td>Not less than 215 metres to another PXO or traffic control device.</td>
<td>Not Met</td>
<td>150 metres to traffic control signals at Mount Olive Drive.</td>
</tr>
</tbody>
</table>

As described previously, the existing PXO fails to meet several of the key environmental standards.

Consideration was given to installing a split pedestrian crossover at this location. However, one critical concern was the relatively close proximity to the traffic control signals at Kipling Avenue and Mount Olive Drive/Panorama Court. Consideration was given to moving the crossing protection further north to be a greater distance away from the traffic control signals, however, our concern is that we would be moving the crossing protection away from the natural desired crossing location and we would anticipate that many pedestrians would not use the crossing protection provided.
Considering the less than ideal spacing of where pedestrians are crossing in proximity to the existing traffic control signals at Mount Olive Drive/Panorama Court, we feel that pedestrian actuated traffic control signals would operate more successfully at this location.

The following table summarizes the number of reported collisions on Kipling Avenue between Mount Olive Drive/Panorama Court and Annabelle Drive/Rowntree Road by type for the period January 1, 1995 to December 31, 2001.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ANGLE</th>
<th>REAR END</th>
<th>SIDE-SWIPE</th>
<th>CYCLIST</th>
<th>PED.</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>1996</td>
<td>3</td>
<td>8</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>1997</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>1998</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>1999</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>2000</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>2001</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18</td>
<td>23</td>
<td>5</td>
<td>2***</td>
<td>3**</td>
<td>4</td>
<td>55</td>
</tr>
</tbody>
</table>

* Reported collisions that can be verified with a Motor Vehicle Accident (MVA) report.

** Two of the collisions involved pedestrians crossing Kipling Avenue, and one occurred with a motorist striking a pedestrian on the sidewalk. All collisions occurred at low speeds with minimal or minor injuries.

*** Both cyclist collisions involved cyclists riding on the sidewalk and colliding with motorists exiting from driveways.

Conclusions:

Considering the results of our operational safety review and the proximity to the existing traffic control signals, we do not believe that a pedestrian crossover is a physically suitable pedestrian crossing device for this location. Accordingly, the installation of pedestrian signals is justified.

The installation of pedestrian actuated traffic control signals will provide safe and convenient access for pedestrians, and will not compromise the integrity of the arterial road network. In addition to the signals, we will also arrange the installation of a left turn lane into the north driveway to the school. This lane will provide a designated area from where motorists are to turn left into the school.

Contact:

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E-mail: clayton@city.toronto.on.ca
Karl Sprogis, Principal, North Albion Collegiate Institute, appeared before the Etobicoke Community Council in connection with the foregoing report.

(A copy of Attachment No. 1, referred to in the foregoing report, was forwarded to all Members of the Etobicoke Community Council with the agenda for its meeting on June 5, 2002, and a copy is on file in the City Clerk’s Office, Etobicoke Civic Centre.)