

COMMITTEE OF THE WHOLE (WORKING SESSION) – JUNE 10, 2003

SIDEWALK POLICY REVIEW

Recommendations

The Commissioner of Engineering and Public Works, in consultation with the Director of Urban Design, Director of Public Works and Director of Planning, recommends:

1. That direction be provided to Staff on the appropriate level of service with respect to the provisions of sidewalks on local roads in new residential subdivisions;
2. That based on the above direction, staff prepare a revised Sidewalk Installation Policy for New Development, if appropriate, for adoption by Council at its meeting on June 23, 2003;
3. That the City's Engineering Design Criteria Manual be revised to reflect any new sidewalk requirements;
4. That requests for sidewalk deletions or additions by persons requesting deputation not be considered by the Committee of the Whole but referred directly to Staff;
5. That Staff continue to require the preparation of Master Sidewalk and Transportation Management Plans as a component of a Block Plan submission to be submitted to Council for approval in conjunction with the Block Plan;
6. That all residential draft plan of subdivisions clearly identify the location of proposed sidewalks within the plan;
7. That provisions be included in the model home, sales trailer and subdivision agreements to require all residential developers/builders to place a plan on the wall of their sales office that clearly indicates where sidewalks and walkways will be constructed within the plan of subdivision;
8. That the proposed sidewalk on Noah Crescent in the United Castlepoint South Subdivision, Plan 65M-3470, be constructed in accordance with the requirement of the subdivision agreement;
9. That the proposed sidewalk on Forest Heights Boulevard and Cedar Glen Court in the Kerrowood North Estates, Plan 65M-2928, be deleted, and that the developer be requested to provide the City with funds equal to the estimated construction cost of the subject sidewalks to be used by the City for the trail system in the Kleinburg/Nashville Community; and
10. That the proposed sidewalk on Arista Gate and Humber Meadow Court be deleted, and the funds for the sidewalk construction held by the City be spent in the immediate community in consultation with the residents of the area.

Purpose

The purpose of this report is to present the conclusions and recommendations stemming from Staff's review of the City's current Sidewalk Location Policy.

Background – Analysis and Options

At its meeting on April 30, 2001, Council directed staff to bring forward a resolution confirming the

City's Sidewalk Location Policy. The following report has been prepared in response to this direction.

Role of a Sidewalk

As every personal trip – made by walking, bicycle, public transit or motor vehicle – begins and ends on foot, the sidewalk is a key component of the public right-of-way. It provides opportunities for all residents in particular seniors, children in strollers, people in wheelchairs and others with limited mobility with a safe and accessible pedestrian connection to community services such as schools, parks, open spaces, businesses and transit. A sidewalk also provides both a place for children's play and for neighbours' socializing. It also acts as an interface between the public and private realms, and can play a role in defining the urban character of a neighbourhood. A city's "walkability" is an important measure of the quality of its public realm, social and economic health and vitality.

Government Policy Statements

It is recognized that sidewalks encourage walking as urban transportation, walking to transit and walking for pleasure. A number of relatively recent Provincial and Regional publications, including the *Alternative Development Standards – Making Choices Guidelines* and the *Transit-Supportive Land Use Planning Guidelines*, recommend that sidewalks be provided on at least one side of all residential streets and both sides of streets with transit services. Only in very low-density settings or very short cul-de-sacs would sidewalks not be necessary.

More specific to the above, the *Alternative Development Standards – Making Choices Guidelines*, prepared for Municipal Affairs and Housing (MAH), states in part that:

- Sidewalks enhance safety and convenience for able-bodied transit users, and are vital for seniors, the disabled, parents pushing baby strollers, or residents pulling shopping carts; and,
- Streets that play a significant connecting role in a neighbourhood should also always have sidewalks on each side, including streets that act as regular routes to local amenities, such as parks, schools, recreation centres, shopping or areas of future development.

In addition, the Ministry of Transportation (MTO) recently published *Strategic Transportation Directions*, which identifies the need for mobility through the development of an integrated transportation system that is safe, efficient, and provides reasonable choice and accessibility.

Moreover, the MTO's *Design of Connectors and Public Spaces* further supports an integrated transportation system, identifying transit as a pedestrian activity. The report states, in part, that since transit cannot usually provide universal door-to-door access, transit users are pedestrians at both ends of the trip — transit users must walk from their homes to the nearest transit stop, and must walk to their destinations at the end of the trip.

Further supporting the above, the Provincial Policy Statement (PPS) identifies the need to provide transportation systems that are safe, environmentally sensitive, and energy efficient, and the York Region Official Plan (ROP) states that an expanded, well-integrated public transit system is required not only to help reduce vehicular traffic, but also to provide transportation access to jobs and services for all residents and employees, including the young, the elderly, the physically challenged and those who do not have access to a private vehicle.

The ROP policies regarding a well-integrated public transit system are further strengthened by York Region Council's policy "to recognize the importance of cycling and walking as a form of transportation and to establish bicycle path and walkway systems in conjunction with local municipalities".

The aforementioned policies are designed to provide direction for local governments to assist in implementing a public transportation system that is safe, efficient and environmentally sound, for all residents, employees, and visitors.

Official Plan Amendment 600

The above mentioned government policies form the foundation for the City's OPA 600 policy objectives, to establish "complementary public transit networks, providing alternative routes and choice of transportation modes throughout communities and City-wide", and "to provide for continuous walkway and bike path systems to link residential areas, employment areas, community and recreational facilities addressing the needs of pedestrian and bicycle movements".

One of the transportation objectives of OPA 600 is to achieve a short and long term transit mode split of 15 percent and 30 to 40 percent, respectively, through the design of the transportation infrastructure. To achieve this goal, it is imperative that a good pedestrian system be in place to support these transit objectives. To this end, the approved Urban Design Guidelines for the OPA 400 Planning Area recommend that:

- Standard sidewalk be provided on both sides of Primary roads and generally on one side of Local roads;
- Direct sidewalk connections be maintained to Greenway corridors, transit stops, parks and schools; and
- Sidewalks should be located so that the majority of residents are connected to institutional, recreational and local commercial destinations.

The policies of OPA 600 are further supported through the City's *Vaughan Vision 2007*, which identifies the need to review all community designs to ensure enhanced safety standards, and to implement innovative traffic management alternatives to improve general traffic safety. The report also identifies the need to support regional and provincial initiatives on transportation infrastructure, and to develop and implement bicycle and pedestrian networks.

Vaughan currently could be described as a car-based community. However, it is widely recognized that community demographics change over time. Given the transportation objectives found in the identified Provincial and Regional publications, the transportation goals and objectives found OPA 600, and the policies supported through the City's *Vaughan Vision 2007*, it is anticipated that the demographics in Vaughan will move to a more pedestrian friendly and transit supportive community in the future. It is therefore important that the appropriate pedestrian routes be implemented in today's developments to accommodate and support the City's long-term transit objectives. Incidentally, Statistics Canada census data reports that 30% of Vaughan's population is under 14 and over 65, therefore many people who are not yet of driving age or who are no longer capable of driving may require alternative modes of safe travel.

Vaughan Pedestrian and Cycling Master Plan Study

As part of the development of the City's Pedestrian and Cycling Master Plan Study, research was conducted on issues related to walking and cycling in Vaughan. "Walkability" and "Bikeability" user surveys were developed for people who walk and cycle along streets or off-road paths in the City of Vaughan.

Of a total of the 72 walkability surveys received, 27% of the respondents identified sidewalks as a problem related to walking in Vaughan. Of the respondents who claimed they did not have enough room to walk, 38% stated that it was because sidewalks started or stopped, and an additional 11% said that they had no room to walk because no sidewalks were available for them. 36% of the respondents thought that more or wider sidewalks would make their walk more enjoyable. 33% suggested that improvements related to sidewalks would encourage walking in Vaughan. Of the 35 respondents who gave additional comments, 11 respondents listed the following:

- “Better sidewalks and connections to plazas”
- “Was not able to walk through community, was forced to walk on muddy shoulders on busy arterial roads”
- “More sidewalks, better connections between neighbourhoods”
- “More sidewalks needed on major roads and internal streets with no sidewalks make walking very difficult”
- “Sidewalks located on wrong side of street”
- “Provide more sidewalks appropriately”

At the City’s Pedestrian and Cycling Master Plan Study public open house held on October 2, 2002 at the Vaughan Civic Centre, attendees commented that:

- Children should be able to walk to school but parents didn’t consider it safe because of discontinuous sidewalks and high traffic speeds;
- Roads should be redesigned for multi-use; and
- Provide sidewalk connections to schools, parks, conservation areas, workplaces, community centres and shopping

School Boards

Representatives from the York Regional District and York Region Catholic School Boards reported that although they had no formal survey information, the number of students driving or being dropped off by car is reduced when public transit runs on a regular basis, and there is a public transit stop at the school. To take this one step further, there is likely a link between public transit ridership and sidewalks - we need sidewalks in place so people can get to and from transit stops - the easier the connections, the more people will use the system.

Current Sidewalk Location Policy

The function, volume and speed of traffic on a street are important considerations in determining the need for sidewalks. Where traffic volumes and speeds are high, sidewalks are necessary to ensure pedestrian safety. Sidewalks are also required where they will form part of a walkway system or pedestrian route.

To ensure consistency with respect to the location of sidewalks on City streets, Council adopted a Sidewalk Location Policy on February 26, 1996 - a copy of which is included as Attachment 1 to this report. This Policy formalizes which roads in new subdivisions require sidewalks, whether they are required on one or two sides of the street, and where they may be located within the municipal right-of-way.

The key criteria of the City’s 1996 Sidewalk Location Policy are highlighted below:

1. Sidewalks are required where they will form part of a walkway system.
2. Sidewalks are required in locations where pedestrian routes connect to local amenity areas such as schools, parks, transit routes, retail areas, etc.
3. One sidewalk is required on a residential street where there are between 40 and 100 units tributary to the sidewalk route.
4. Two sidewalks are required on a residential street where there are over 100 units tributary to the sidewalk route.
5. Sidewalks are required on both sides of feeder, collector and arterial roads.
6. Sidewalks are required on one side of industrial roads.

This Policy struck a balance between the level of service that Vaughan residents expect and the fiscal demands imposed by winter snow clearing and infrastructure life cycle costs. Since its adoption, the 1996 Sidewalk Location Policy has proven beneficial to both Staff and the

development industry by clarifying the requirements for sidewalks and serving to expedite the approval of development applications. One criticism of the existing policy, however, is that its application can be subjective because the requirements are based on the number of units “tributary” to a sidewalk route as opposed to units “fronting” or “serviced” by a street.

Survey Of Neighbouring Municipalities

Subsequent to Council's request to confirm the City's Sidewalk Location Policy, Staff conducted a telephone survey of sixteen municipalities within the Greater Toronto Area including Brampton, Mississauga and Markham to determine if Vaughan's Policy is in line with other neighbouring municipalities. The results of this survey are highlighted on Attachment 2.

The results of the survey confirmed Vaughan's Sidewalk Policy is consistent with all the other municipalities surveyed with respect to the requirement for sidewalks on both sides of the street for all higher order roads including feeders, collectors and arterials, and for a sidewalk on at least one side of the street where it will connect to a local community amenity area and form part of a walkway system. However, the survey revealed one key difference in relation to the requirement for sidewalks on local residential roads.

Vaughan's Policy requires one sidewalk on a residential street including cul-de-sacs where there are between 40 and 100 units tributary to the sidewalk route. In contrast, thirteen of the municipalities surveyed require at least one sidewalk on all local residential roads except cul-de-sac regardless of the number of units on the street. The City of Brampton requires a sidewalk where there are between 25 and 50 units fronting onto the street. The Town of Caledon takes a slightly different approach by relating the need for a sidewalk to the Average Annual Daily Traffic on the street. The City of Burlington is similar to Vaughan in that it ties the need for a sidewalk to the number of units tributary to the pedestrian route. However, Burlington applies a lower threshold of 30 units.

The application of Vaughan's Policy would result in considerably fewer sidewalks being installed in a typical subdivision than in other municipalities. The survey of the GTA municipalities revealed that the industry standard is to have sidewalks on at least one side of local roads.

Local Road Sidewalk Policy Alternatives

Vaughan's Sidewalk Policy is consistent with many of the other municipalities in the GTA with the exception of the requirement for sidewalks on local residential roads. Based on the above, there is a technical, social, connectivity and safety rationale for changing the City's current policy to require the installation of more sidewalks on local roads in new residential subdivisions. However, since level of service is also an important consideration in establishing an appropriate policy, Staff is seeking direction from Council on the requirement for sidewalks on local residential roads. For consideration and discussion, Staff offers the following criterion alternatives:

1. Status Quo – maintain current criteria.
2. Provide one sidewalk on all local roads, crescents and cul-de-sacs with more than 40 units fronting on the street.
3. Provide one sidewalk on all local roads except crescents and cul-de-sacs with less than 40 units fronting the street.
4. Provide one sidewalk on all local roads, crescents and cul-de-sacs.
5. Provide sidewalks on both sides of local roads, and one side on crescents and cul-de-sacs.

To illustrate the impact of varying criteria, alternatives 1 to 3 are shown on Attachments 3 to 5, respectively. For comparison purposes, alternative 1 (Status Quo) is the base case. Block 39 was chosen to reflect a typical full block development.

Financial Considerations

The financial implications associated with the operation and capital replacement of sidewalks are important considerations in establishing a sidewalk installation policy for local roads.

The initial installation of sidewalks in a new subdivision is undertaken by the developer at a cost of about \$50 to \$60 per metre. In 2000, there were approximately 720 Kilometres of sidewalk in the City. Winter maintenance (snow plowing and sanding) is currently being carried out by City forces at a cost of about \$770 per Kilometre of sidewalk per season. Concrete sidewalk generally has a life span between 25 to 40 years depending on its location and frequency of use. A City-wide program is in place to replace cracked and damaged sidewalk. In 2002, approximately 2.0 Kilometres of damaged sidewalk was replaced.

If more sidewalks are provided in new subdivisions, then the developer would incur additional cost to initially service the subdivision, and the City's annual operation and replacement costs would also increase.

Design Standards Review

In December 2001, Council endorsed the Design Standards Review Report prepared by Brook McIlroy Inc. and Totten Sims Hubicki Associates. Included in this document is a recommended 17.5 metre Local Residential Road Right-of-Way Standard that would be compatible with the proposed zoning setbacks. This Standard identifies the locations of above and below ground utilities within the municipal right-of-way including a new sidewalk location at a distance of 1.5m from the street line. The combination of the new zoning setbacks for garages and sidewalk location provides for sufficient room to park a car between the garage door and the sidewalk. Accordingly, Staff believes that these new standards will in part address some of the parking concerns that in the past have prompted requests for sidewalk deletions.

Engineering Staff has reviewed this new Local Residential Road Standard and is satisfied the proposed sidewalk offset is feasible. Once finalized, Staff will proceed to implement this new local road standard within all future Block Plan developments together with developments within Blocks 10 and 39 that currently have not progressed to the detailed design stage. In addition, Staff will make the necessary revisions, where feasible, to the other residential road standards to reflect this new sidewalk location.

Master Sidewalk and Transportation Management Plan

For some time now, Engineering Staff has required the preparation of a Master Sidewalk and Transportation Management Plan as part of the supporting documentation for a Block Plan submission. The block developers' engineering team prepares this Master Plan in consultation with City Staff. To date, Staff has approved Master Sidewalk and Transportation Management Plans for Blocks 53 (Woodbridge Expansion Area), 39 (Vellore Village), 33 East, 32 West (Vellore Woods), 32 East (Vaughan Centre), and 17.

It is recommended that all subsequent Master Sidewalk and Transportation Management Plans for the Blocks within OPA 600 which are not yet approved for development continue to be submitted to Council for approval in conjunction with the Block Plan approval process.

Notice to Homebuyers Regarding Sidewalk Locations

Subsection 19.2 of the City's standard subdivision agreement requires that:

"The Owner shall cause to be displayed, in any sales office which he operates or which is operated in respect to the Plan, a copy of the relevant Official Plan Amendment and a land use plan which shows not only the Plan and its proposed and future uses, but also the uses

designated in the Official Plan for abutting lands, including any proposed extensions of roads in the Plan, any proposed highways and hydro transmission lines within 500 metres of the Plan, including interchange and tower locations, the location and extent of any existing or proposed berms and fencing along lot boundaries; locations of all sidewalks, community mail boxes, bicycle paths, railway lines, storm water management ponds, existing and future schools and parks, existing and future commercial areas, existing and future areas of differing residential densities and possible future transit routes. The necessary display plans shall be provided by the Owner and approved by the Director of Planning prior to the Building Standards Department issuing any building permits. The Owner shall advise the Director of Planning when the displays are in place within the sales pavilion and this shall be confirmed in a clearance letter from the Director of Planning to the Director of Building Standards prior to the issuance of building permits.

If at any time the required plans and information is not displayed in the sales office the City may draw on the municipal service letter of credit and cause the plans to be displayed or take other appropriate measures as necessary.”

Staff proposes to revise the provisions of the model home, sales trailer and subdivision agreements to require all residential developers to place a separate plan in a prominent location on the wall of their sales office that clearly indicates where sidewalks and walkways will be constructed within the plan of subdivision.

Sidewalk Deletion Requests

Occasionally, Staff receives petitions from residents requesting the deletion of a proposed sidewalk. There are a number of reasons that are commonly noted for the deletion requests including not being able to park two cars in tandem on a driveway, trespassing and privacy concerns, and a perception of a reduced front yard. Currently, there are three sidewalk deletion requests on the deferred list pending the review of the current sidewalk policy. These outstanding requests are discussed in further detail below.

Council, on August 26, 2002, resolved the following with respect to sidewalk deletion requests:

“THAT when requests for sidewalk deletions are received, staff be directed to advise the residents of the City’s Sidewalk Policy; and

THAT Members of Council be informed of such requests by memorandum, and not by reports to the Committee of the Whole.”

Staff is currently following the above procedure. Based on the survey, sidewalk deletion requests are common in all of the neighbouring municipalities. Like Vaughan, many municipalities have directed staff to deal with these types of resident requests. In other municipalities, sidewalk deletion petitions are generally rejected when the proposed sidewalk conforms to a Council approved Sidewalk Warrant Policy. Accordingly, for staff to effectively deal with sidewalk deletion petitions, it is imperative that the approved sidewalk policy be clear and not open to a variety of interpretations. In addition, Staff recommends that requests for sidewalk deletions or additions by persons requesting deputation not be considered by the Committee of the Whole but referred directly to Staff.

Sidewalk Deletion Requests on the Deferred List

Currently, there are three sidewalk deletion requests on the deferred list pending the review of the current sidewalk policy. The following provides a brief explanation of each case and recommends a course of action.

United Castlepoint South Subdivision, proposed sidewalk on Noah Crescent

The proposed sidewalk on Noah Crescent is located on the east boulevard and extends from Julia Valentina Avenue to a walkway between Lots 15 and 16. This sidewalk will provide the area residents with a safe walkway system to a proposed trail system in the adjacent the Humber Valley. The installation of the sidewalk on Noah Crescent conforms to criterion 1. of the current Sidewalk Location Policy that was adopted by Council in February 1996; "Sidewalks are required where they form part of a walkway system". Following the review of the Sidewalk Policy, Staff is not recommending a change to this criterion. Accordingly, Staff recommends that the proposed sidewalk on Noah Crescent in the United Castlepoint South Subdivision, Plan 65M-3470, be constructed in accordance with the requirement of the subdivision agreement.

Kerrowood North Estates, proposed sidewalk on Forest Heights Boulevard and Cedar Glen Court

The Kerrowood North Estates is a suburban residential subdivision comprising 41 estate lots. Under the Kerrowood North Estates subdivision agreement, the developer is required to construct a sidewalk on the east side of Cedar Glen Court and along the south boulevard of Forest Heights Boulevard from Cedar Glen Court to the west end of the street. Under the current Sidewalk Policy, a sidewalk is not required in very low density settings such as estate subdivisions. However, the subject sidewalks were proposed to provide a pedestrian link between the Village of Kleinburg and the future Inter-Regional Trail System within the Humber River Valley. Since traffic volumes within estate subdivisions are very low, pedestrians can walk with relative safety on the road. For this reason, sidewalks are not normally required in estate subdivisions. Accordingly, Staff recommends that the sidewalk on Cedar Glen Court and Forest Heights Boulevard be deleted, and that the developer be requested to provide the City with funds equal to the estimated construction cost of the subject sidewalks to be used by the City for the trail system in the Kleinburg/Nashville Community.

Islington Woods Subdivision, proposed sidewalk on Arista Gate and Humber Meadow Court

In May 1999, Staff reported to Council that a petition had been received from a number of residents in the Islington Woods Subdivision requesting that the proposed sidewalk on Arista Gate and Humber Meadow Court be deleted. Council directed that if unanimous consent to delete the sidewalk was not received, a one year trial period pass during which time residents could consider whether they wanted the sidewalk to be constructed or not. During this one year period, residents expressed their views both for and against the construction of the sidewalk.

In October 2000, Council directed staff to explore ways and means of constructing the sidewalk to minimize any negative impact in the area and on the driveways. Staff has reviewed various sidewalk design alternatives, but conclude that the construction of the sidewalk now will be problematic and very disruptive to the area given the mature state of the subdivision. Accordingly, notwithstanding the Sidewalk Policy, Staff recommends that the proposed sidewalk on Arista Gate and Humber Meadow Court be deleted, and the funds for the sidewalk construction held by the City be spent in the immediate community in consultation with the resident of the area.

Conclusions

Vaughan's current Sidewalk Location Policy is consistent with many other municipalities in the GTA with the exception of the requirement for sidewalks on local residential roads. Based Staff's review, there is a strong technical, social, connectivity and safety rationale for changing the City's current

policy to require the installation of more sidewalks on local roads in new residential subdivisions. Since "Level of Service" is an important consideration in establishing criteria for the installation of sidewalks on local residential roads, Staff is seeking direction from Council.

Attachments

1. Sidewalk Location Policy – February 26, 1996
2. Survey of Neighbouring Municipalities Sidewalk Installation Criteria
3. Block 39, Sidewalk Master Plan – Alternative 1 (Status Quo)
4. Block 39, Conceptual Sidewalk Master Plan – Alternative 2 (40 Units Fronting)
5. Block 39, Conceptual Sidewalk Master Plan – Alternative 3 (all local roads)
6. Draft Sidewalk Installation Policy for New Development

Report prepared by

Michael Frieri, Senior Engineering Assistant, Engineering Planning & Studies, ext 8729
Jason Sheldon, Planner, Community Planning Department, ext 8320
Andrew Pearce, Manager of Development Services, ext 8235
Diana Birchall, Director of Urban Design, ext 8411

Respectfully submitted,

Bill Robinson, P. Eng.
Commissioner of Engineering and Public Works

ATTACHMENT No. 1

CITY OF VAUGHAN SIDEWALK LOCATION POLICY – ADOPTED BY COUNCIL ON FEBRUARY 26, 1996

There are two key issues concerning sidewalks:

- On which roads they are required (and whether they are required on one or two sides of the street); and
- Where they should be located within the right-of-way.

With regard to the first issue, sidewalks are multi-functional spaces that allow places for pedestrian movement, children's play and neighbours socializing.

The need for a sidewalk or sidewalks is based on assessing the conditions likely to warrant the need:

- the density of development,
- the type of street – it's function and traffic volume, and
- the connections that the street provides to local amenities.

As the density of development area increases it makes sense to provide adequate provisions for sidewalks to accommodate additional pedestrian volumes. The Province's Transit-Supportive Land Use Planning Guidelines recommend that sidewalks be provided on at least one side of all streets and both sides of streets with transit services.

The traffic function, volume and speed of traffic on a street are also important considerations in determining the need for sidewalks in a neighbourhood. Traffic volumes vary with the density of adjacent development and generally do not exceed 3,000 vehicles per day for local urban roads and range between 1,000 and 12,000 vehicles per day for collector urban roads. Where traffic volumes are high, sidewalks are necessary to ensure pedestrian safety.

Streets that play a significant connecting role in a neighbourhood should provide sidewalks on both sides. This includes streets that act as regular routes to local amenities such as parks, schools, recreation centres, shopping centres or areas of future development. Only in very low density settings or very short cul-de-sacs would sidewalks not be necessary.

The following guidelines shall be used to determine the need for sidewalks within new subdivision developments.

1. Sidewalks are required where they will form part of a walkway system.
2. Sidewalks are required in locations where pedestrian routes connect to local amenity areas such as schools, parks, transit routes, retail areas, etc. as follows:
 - a) one sidewalk where 40 to 100 units are tributary to the sidewalk route
 - b) two sidewalks where over 100 units are tributary to the sidewalk route
 - c) where only one sidewalk is required, it shall be located on the side of the street that provides the most direct route to the local amenity
3. Sidewalks are required on both sides of feeder, collector and arterial roads.
4. Sidewalks are required on one side of industrial roads.
5. Sidewalks may be located 1.2m from the curb for local and feeder residential roads as an alternative to the standard 3.25 metre offset. Sidewalk may meander between the standard and alternative sidewalk location to ensure that additional landscape area is achieved at rear and flankage locations even if it is not desirable for the entire street.

ATTACHMENT No. 2

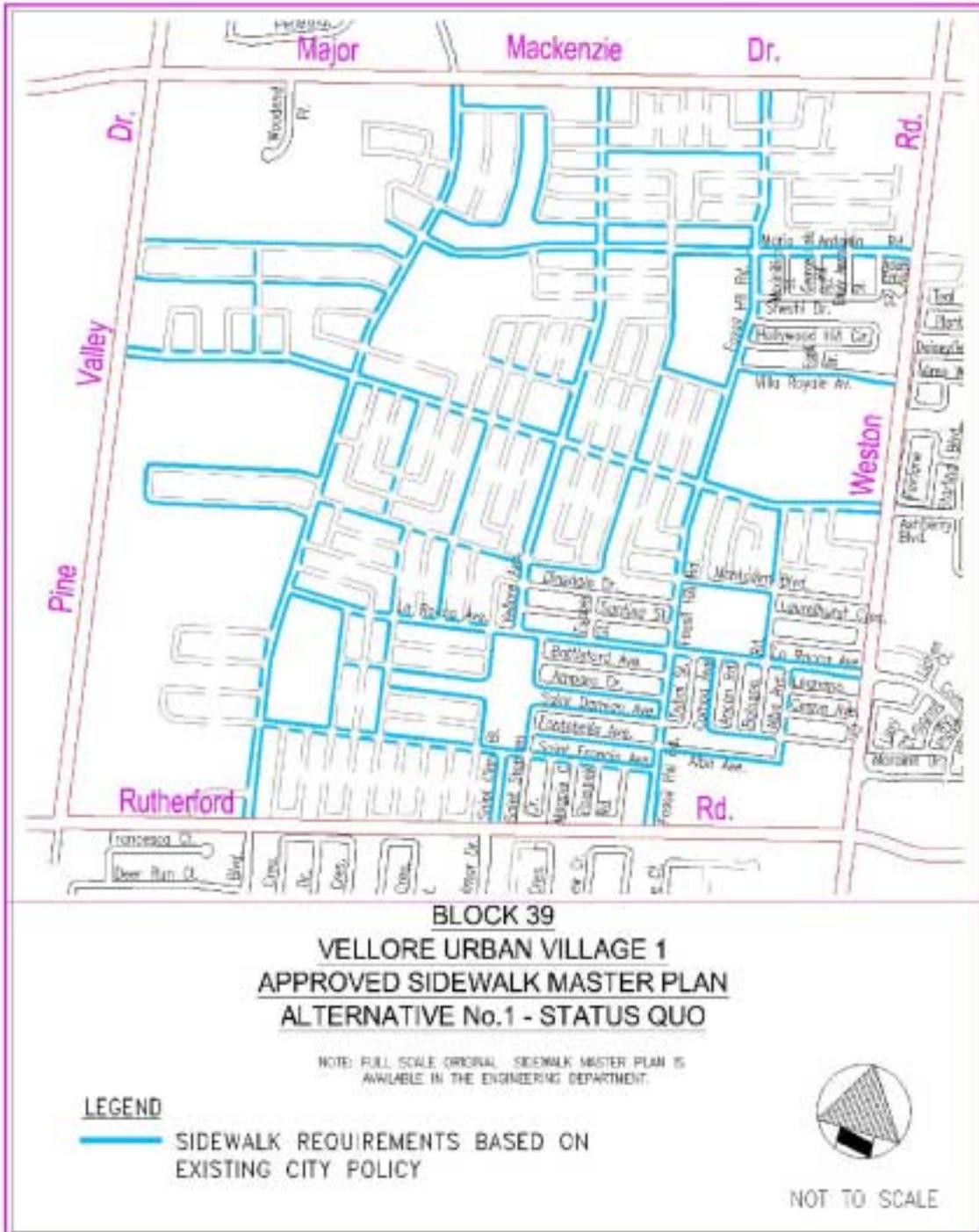
SUMMARY OF SURVEY OF NEIGHBOURING MUNICIPALITIES SIDEWALK INSTALLATION CRITERIA FOR LOCAL ROADS

MUNICIPALITY	ONE SIDE CUL-DE-SACS	ONE SIDE LOCAL ROAD	BOTH SIDES LOCAL ROAD
Vaughan	>= 40 units tributary	40 to 100 units tributary	> 100 units tributary
Burlington	> 30 units tributary	30 to 100 units tributary	> 100 units tributary
Brampton	> 25 units tributary	all local roads	> 50 units fronting
Caledon	AADT >= 100	100 to 1000 AADT	> 1000 AADT
Georgina	>=150 metres street length	All local roads	Not required
Markham	>= 30 units tributary	All local roads	Not required
Hamilton	>= 30 units tributary	All local roads	Not required
Richmond Hill	> 25 units tributary	All local roads	Not required
East Gwillimbury	All Cul-de-Sacs	All local roads	Under special circumstances
Oakville	Not required	All local roads	>= 100 units fronting
Newmarket	Not required	All local roads	Not required
Aurora	Not required	All local roads	Not required
Whitchurch-Stouffville	Not required	All local roads	Not required
Mississauga	Not required	All local roads	Not required
Milton	Not required	All local roads	Not required
Halton Hills	Not required	All local roads	Not required
Whitby	Not required	All local roads	Not required

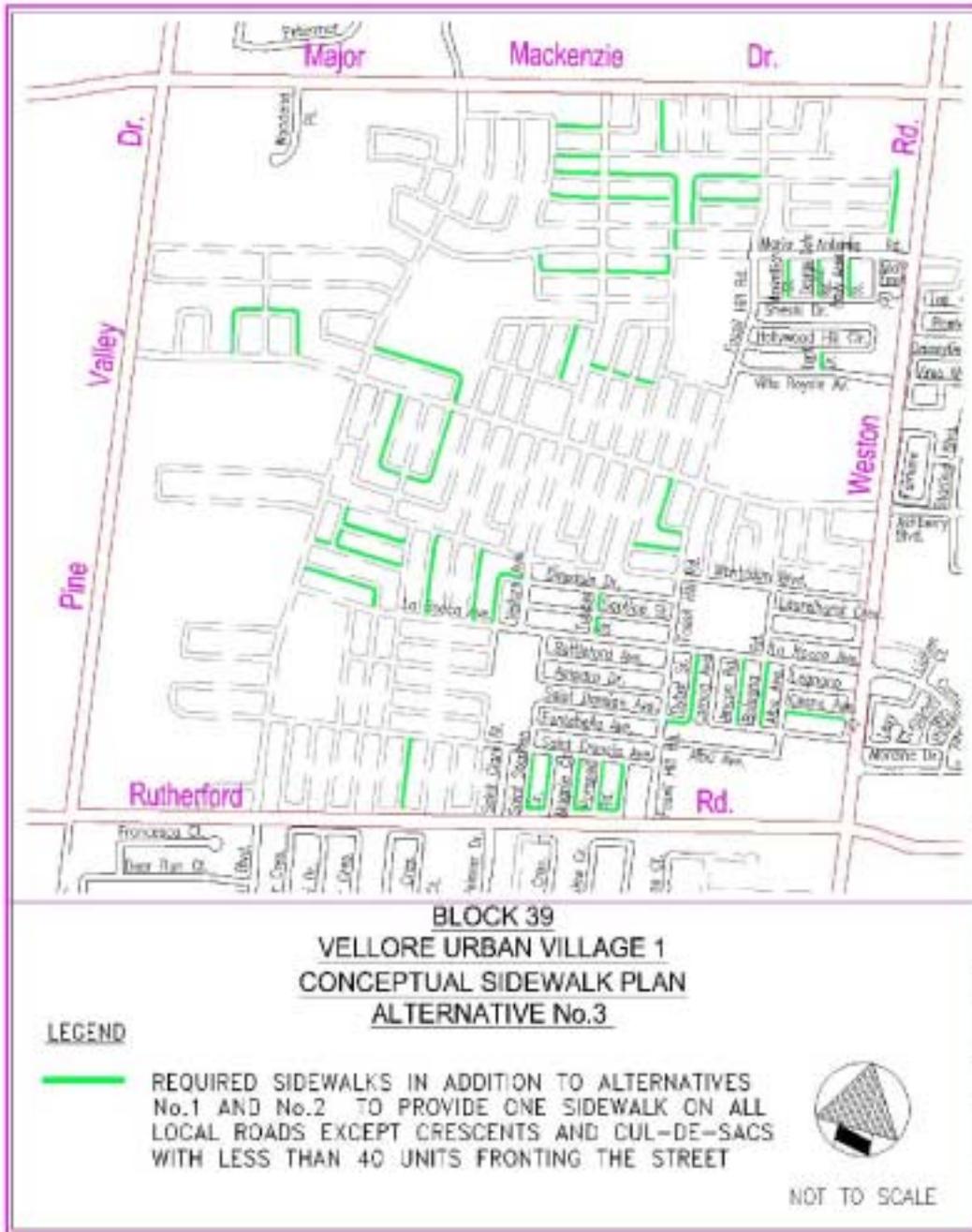
Notes;

1. All municipalities surveyed require sidewalk on both sides of minor and major collector and arterial roads.
2. All municipalities surveyed require sidewalk where it will connect to a park, school, open space, commercial plaza and local amenities.
3. Telephone survey conducted on January 2002 and reconfirmed June 2003.
4. AADT is an acronym for Average Annual Daily Traffic.

ATTACHMENT No. 3



ATTACHMENT No. 5



ATTACHMENT No. 6

CITY OF VAUGHAN
DRAFT
SIDEWALK INSTALLATION POLICY FOR NEW DEVELOPMENT
JUNE 2003

Walking should be valued as the most sustainable of the means of travel; hence, a sidewalk is a key component of the public right-of-way. It provides opportunities for all Vaughan residents particularly seniors, children in strollers, physically challenged and others with limited mobility with a safe and accessible pedestrian connection to community services such as schools, parks, open spaces, businesses, place of work and transit. A sidewalk provides both a place for children's play and for neighbours' socializing. A sidewalk also acts as an interface between the public and private realms, and can play a role in defining the urban character of a neighbourhood.

Sidewalks connect communities together, thus connecting people together, and people to natural spaces, which of course is critical for the health and vitality of any community. Accordingly, to encourage walking and to provide a balanced transportation system that supports transit, the following criteria shall be used to establish the requirement for sidewalk in new subdivision development:

1. Sidewalks are required on both sides of Primary, Feeder, Collector and Arterial roadways.
2. Sidewalk is required on one side of Industrial roads
3. Sidewalk is required on roadways where pedestrian routes connect to local amenities such as a park, school, transit, open space, walkways, trail systems, commercial / retail areas and to provide connectivity in the sidewalk network as determined by the Manager of Development Services.
4. Sidewalk is required on one side of local through roads except in low density rural/suburban estate residential subdivisions.
5. Sidewalk is required on one side of a crescent that services more than 40 units fronting the street.
6. Sidewalk is not required on cul-de-sacs with less than 40 units fronting the street unless there is a walkway or other path leading from the cul-de-sac to another street, park, school, open space, commercial plaza, etc., then one sidewalk.

The placement of sidewalk shall generally be in the following priority:

1. Same side as schools, parks, and other areas used by the walking public;
2. North and east side of the road to take advantage of the sun;
3. Minimum driveway crossings;
4. Reduced road crossings;
5. Inside side of road elbows

Where an existing road without a sidewalk is being reconstructed through the City's Capital Plan, then the requirement for sidewalk shall be determined in consultation with the residents on the street at the pre-design stage of the project using the above sidewalk installation criteria for new development as a guideline.