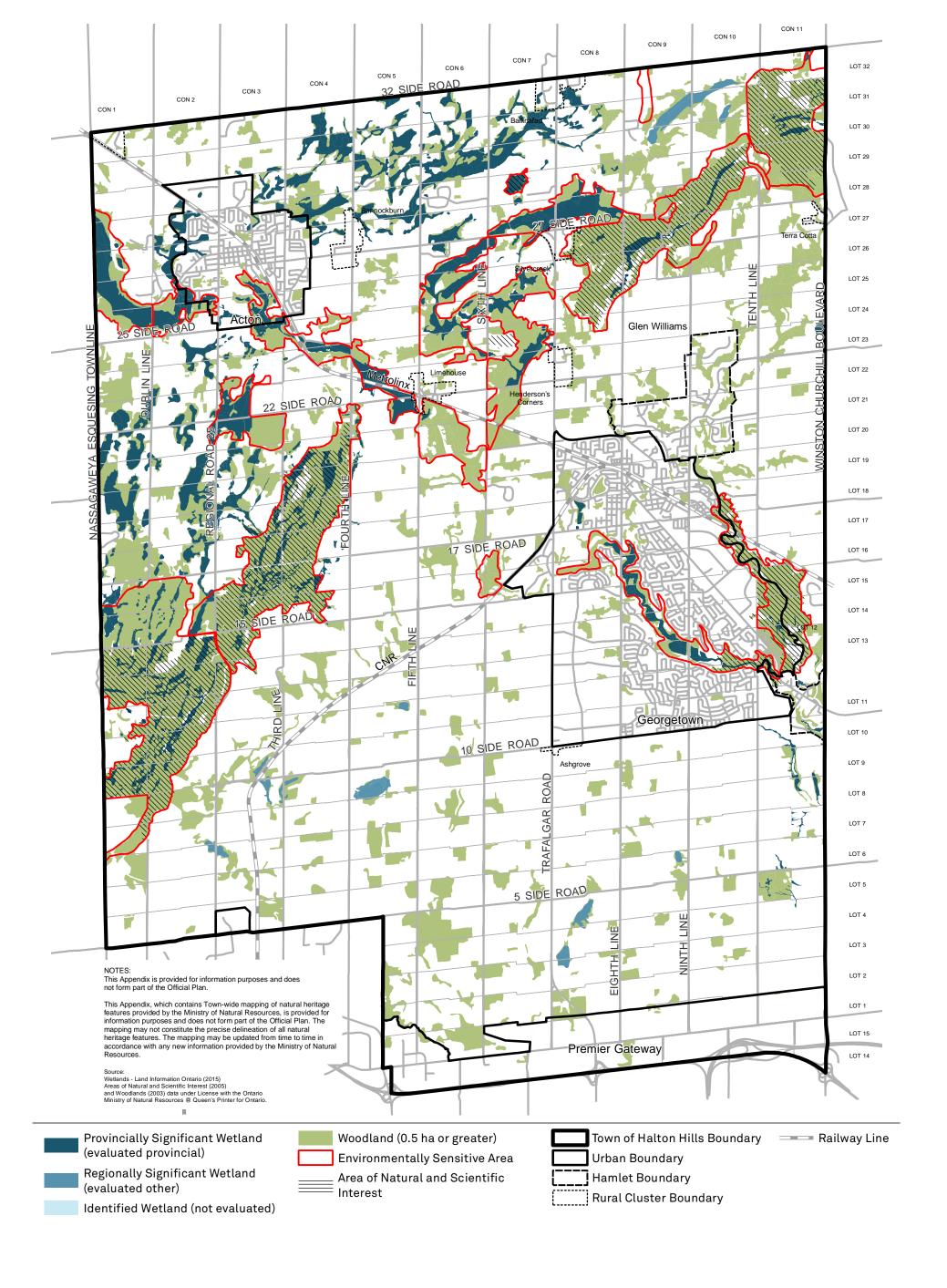
X1 INTRODUCTION

The appendices do not form part of the operative part of the Official Plan. They contain additional information to assist in implementing the Official Plan. Modifications to the appendices will not require an amendment to this Plan.

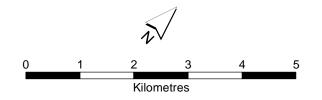
The appendices are comprised of the following:

- Appendix X1A Environment Natural Areas;
- Appendix X1B Environment Water Resource Areas;
- Appendix X2 High Potential Mineral Aggregate Resource Areas;
- Appendix X3 Waste Disposal Sites;
- Appendix X4 Town of Halton Hills Urban Design Guidelines;
- Appendix X5 Hamlet of Norval Design and Heritage Protection Guidelines;
- Appendix X6 Hamlet of Glen Williams Design and Heritage Protection
 - Guidelines; and,
- Appendix X7 Hamlet of Glen Williams Terms of Reference for
 - Environmental Implementation Reports.

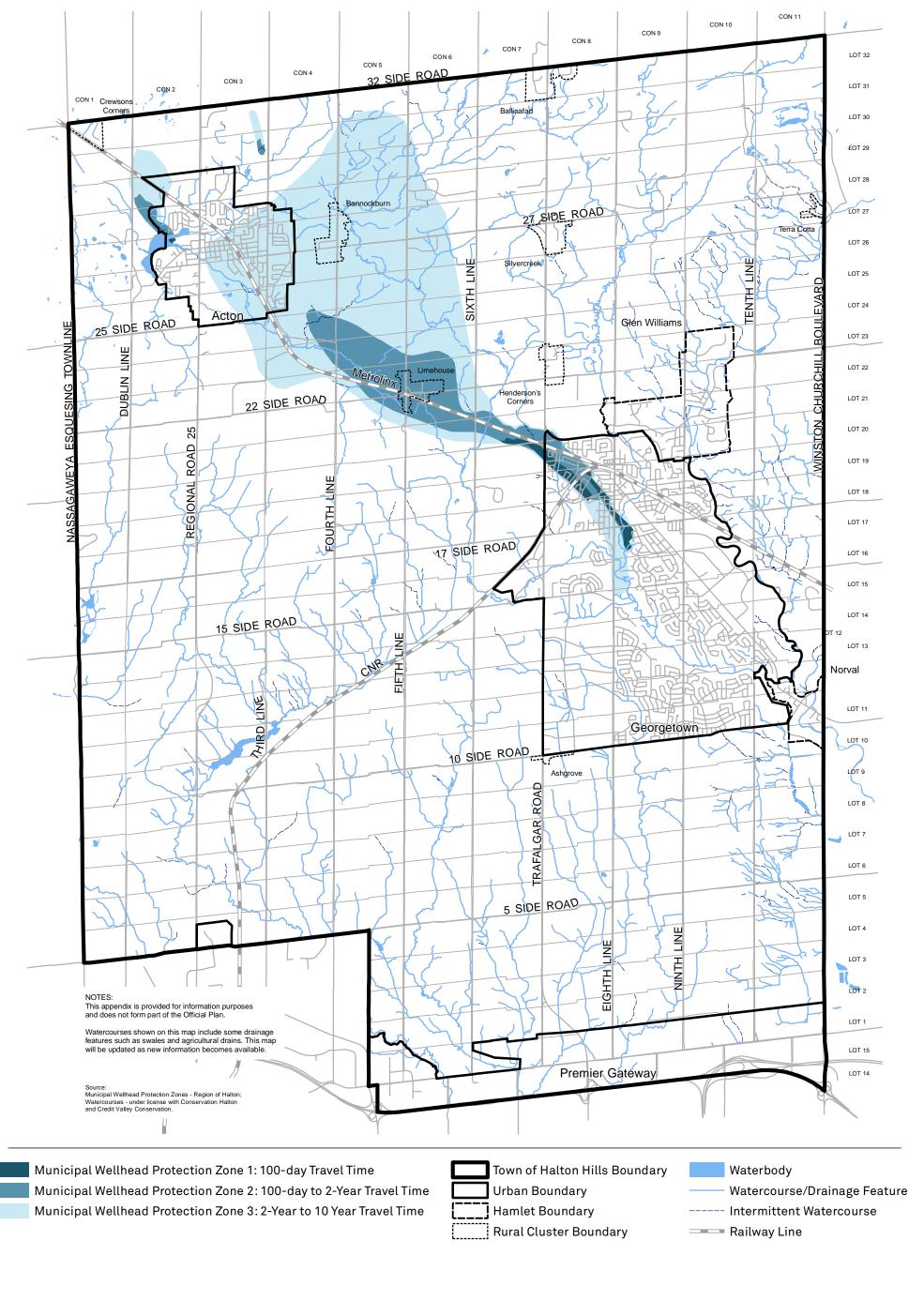


CONSOLIDATION



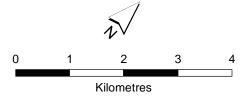


APPENDIX X1A ENVIRONMENT NATURAL AREAS

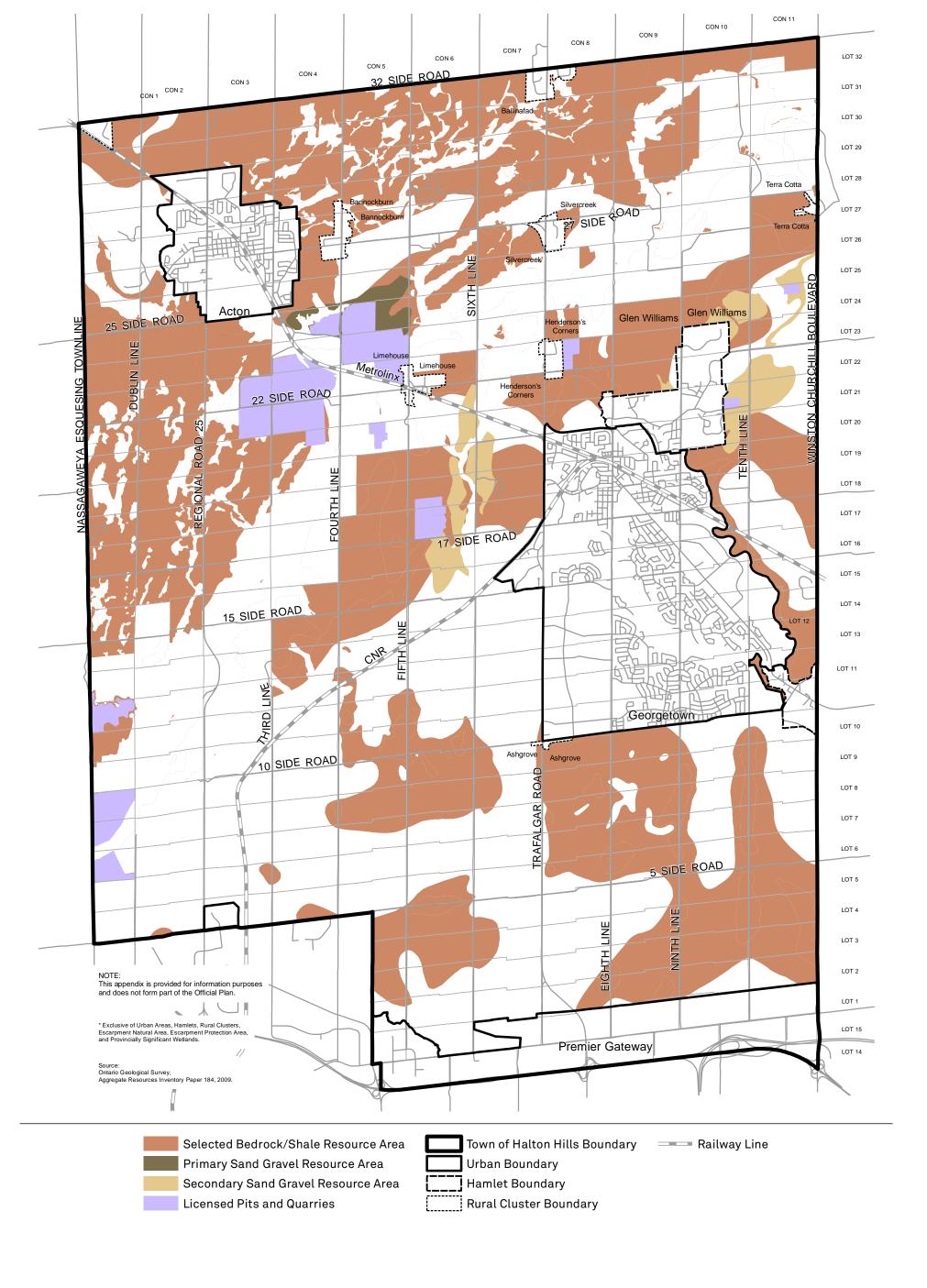


CONSOLIDATION



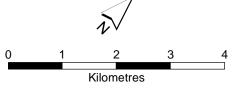


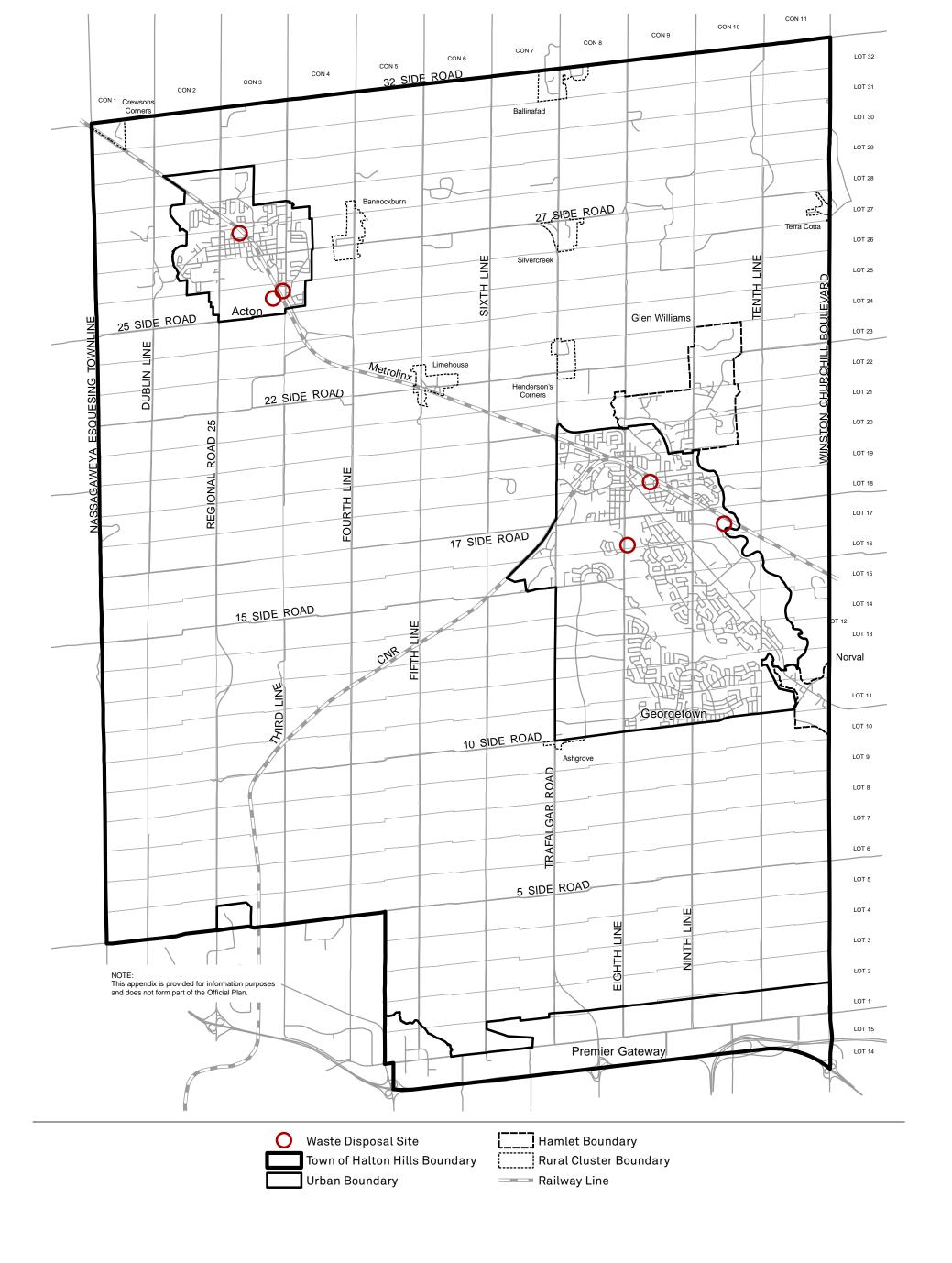
APPENDIX X1B ENVIRONMENT WATER RESOURCE AREAS



CONSOLIDATION

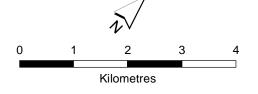






CONSOLIDATION





X4 TOWN OF HALTON HILLS URBAN DESIGN GUIDELINES

X4.1 GEORGETOWN DOWN TOWN DISTRICT

The following urban design guidelines are applicable to the Georgetown Downtown District.

X4.1.1 BUILTFORM

X4.1.1.1 Historical Preservation

Inner and Outer Core

- Where a new or infill development is to be constructed adjacent to a building of architectural or historical significance, consideration with regard to built form, scale, detailing, colour, and materials should be given to ensure harmony with the features of the existing building (Figure X4.1).
- For exterior improvements or renovation of buildings of architectural or historical significance within North Precinct of the Inner Core as defined herein, the requirements established in "Georgetown Façade Improvement Project" and "Façade Improvement Plan" should be applied.



Figure X4.1: Undesirable Infill Elevations

X4.1.1.2 Building Setbacks

Inner Core

- Front building walls will be encouraged to align with the front walls of adjacent buildings in order to maintain a consistent building mass along the street line (Figure X4.2).
- In the North Precinct, front building wall of new infill buildings should occupy a majority of the lot frontage to minimize the unwarranted gap in between buildings. It ensures the creation of a consistent street façade. Traditional urban form is established by small scale attached buildings with no open space between them. The only exception is well-lit public passageways to the rear parking area (Figure X4.3).
- For corner lots in the North Precinct, the design of the side wall of the building should be extended along the exterior side lot line to at least 60% of the lot depth and this side wall should be located within 3m of the side lot line,
- Where breaks in the street building wall occur, the continuation of the linear street form will be encourages with the use of site elements such as street trees, planters, gates or low walls.
- The provision of landscaped open space and amenity areas such as entrance plazas, forecourts and outdoor cafes are encouraged in places where buildings are not built to the street line. These open space areas can provide added interest to the street environment.



Figure X4.2: Main Street Streetscape



Figure X4.3: Public passages between buildings on Main Street

X4.1.1.3 <u>Building Height and Massing</u>

Inner Core

- Maintain a consistent "base building" height of two to three storeys within the North Precinct. This base height should be equivalent to the heights of the adjacent buildings (Figure X4.4).
- Generally, a minimum two to three storey "base building" height should be maintained for proposed buildings within the South Precinct.
- Any portion of the building greater than the specified base height should be set back or tapered above the base.
- Maximum building heights should not exceed the height limits established in a new comprehensive zoning by-law.
- Continue the finer grain of architectural massing established in the North Precinct by discouraging new buildings with monolithic facades.
- To contribute to the District's identity, taller decorative building structures should be encouraged at the Main Street/Mill Street intersection (Photo 6) at corner lots.
- Taller new buildings should have regard to micro-climate control to minimize shadow impacts to public open spaces, private amenity areas and important public sidewalks, and to protect pedestrians from negative effects of wind induced by buildings.

Outer Core

- Maintain heights of up to three storeys for proposed low density residential building.
- Maintain maximum residential building heights in medium density areas of three to four storeys.
- Maximum building height for high density residential building is four to six storeys, except as otherwise specified in the Zoning By-law.
- In low density residential areas, proposed residential building massing and height should be related to the adjacent buildings to enhance the existing neighbourhood character.
- Multiple unit residential buildings should be designed to retain the general massing character of large detached homes. The exterior walls should not have the appearance of an overly massive building block.
- Row or townhouse blocks should not exceed widths of eight attached units.
- Individual residential units should have clear identities through varying architectural treatment, (i.e. varying façades, window sizes/styles, columns, etc.) but should remain consistent in overall theme.
- Residential units on corner lots which are exposed to a public street and in public view, should have upgraded elevation treatments for both the fronting and flanking sides of the buildings.

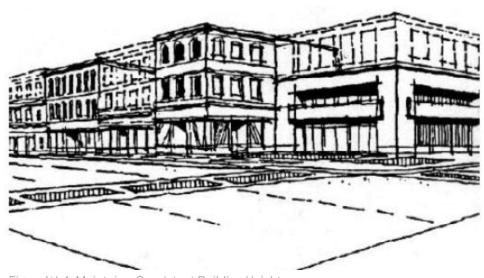


Figure X4.4: Maintain a Consistent Building Height

X4.1.1.4 Building Elements

Inner Core

- Buildings should accentuate the corners of significant street intersections through the
 use of both prominent building massing, addressing the intersection as well as the
 street fronts, and building features to provide landmarks within the Town's street
 system.
- New buildings should be designed and sites to preserve and enhance special street views and significant buildings.
- The use of blank walls that are visually prominent is discouraged. Where such façades
 exist, the use of murals or landscaping to screen walls and provide visual interest will
 be encouraged.
- Spacing, proportions, dimensions, quantity and general patterning of windows in new buildings should be sympathetic and similar to buildings of historical and architectural significance, and to adjacent existing buildings. Rows of windows should be used to define each floor level.
- Continuation of the rhythm of storefront windows in new developments along Main Street South of the North Precinct will be encouraged. Storefronts at the street level traditionally have large window openings to expose goods within shops to passers-by and to promote retail activity.
- The use of large sheets of reflective glass at street level should be discouraged.
- The provision of retail or personal service uses along pedestrian routes is encouraged in order to provide for pedestrian interest and security.
- The roof forms of proposed buildings should complement those of existing adjacent buildings. In particular, flat roof forms should be encouraged along the main commercial streets where most existing buildings have flat roofs.
- Pitched roof forms are appropriate along side streets with a more residential nature, assuming existing buildings along these streets have pitched roofs.
- Parapet walls should be used to screen rooftop equipment where flat roofs are proposed.
- Materials and colours for proposed building, and for additions or renovations to existing structures, should complement and be compatible with adjacent buildings.
- The use of fine architectural detailing in the building façades is encouraged, especially
 around windows, and at the building's cornice lines. A variety of architectural details
 adds richness and interest to façades, and can build on the tradition of craftsmanship
 established in heritage buildings of Downtown Georgetown. Detailing should be
 compatible and in harmony with adjacent buildings.
- The use of canopies should be encouraged as canopies and awnings add colour and interest to streetscapes, and they provide weather protection for pedestrians and for

merchant's goods. Canopies also reinforce the identity of individual retail and service outlets and may be used to accent entrances to residential buildings located on main streets.

- Canopies should have a minimum 1m depth from the building face and a minimum clearance above sidewalks of 2.4m. The encroachment of any canopy is subject to the Zoning By-law.
- Grade changes at the street level should be minimized to allow pedestrians to move directly from the street into buildings. Where a grade change is necessary, the difference in elevation between street level and building entrance should not exceed 1.0m at the exterior face of the building. In these cases, steps should be expansive to allow for maximum pedestrian movement, and ramps for barrier free access must be provided.

Outer Core

- The roof forms of proposed buildings should be compatible with those of existing adjacent buildings, Pitched roofs are characteristic in the Outer Core, and are recommended for proposed residential buildings.
- Building materials, colours and details should be compatible and complement those of adjacent buildings.
- Pedestrian entrances to both single and multiple residential buildings should be spatially and architecturally prominent and welcoming.
- The façades of buildings should have windows that overlook streets and/or lanes, in order to maintain the character of a safe and pedestrian friendly community.
- Garages for low and medium density residential buildings should not form the prominent feature of the dwelling façade. Garages should be well integrated into the overall residential building design.
- For block residential developments, garages and parking structures should not be located in front of medium and high residential buildings.

X4.1.2 STREETSCAPE

X4.1.2.1 Main Street: North and South Precinct

Inner Core

- Sidewalk widths should be maintained or increased, where possible, along retail commercial streets of the North Precinct, as ease of pedestrian movement is an important factor in retail areas.
- A continuous and consistent streetscape should be developed along Main Street South and selected side streets through the selection of suitable streetscape elements, such as street trees, sidewalk materials, and lighting, and repeating these elements along the Main Street.

- Design detailing and scale of streetscape amenities should be coordinated with the overall streetscape design and architectural character.
- Paving materials and patterns for the Main/Mill Street intersection should complement the historic architectural character, and these sidewalk patterns and materials should be continued along Main Street South.
- The Main Street streetscape theme should be extended along selected side streets, pedestrian laneways, walkways and forecourts in order to link streets to parking areas and other mid-block pedestrian connections.
- Pedestrian cross-walk linkages should be created by extending paving materials across key intersections within the Inner Core, such as Main Street South and Mill Street.
- Street tree species that are low maintenance, pollution tolerant, narrow form, and have good year round appearance should be selected.
- Trees should be planted at grade wherever possible for ease of pedestrian movement and to reduce visual clutter.
- At the Main Street South and Mill Street intersection, urban landscaping should be encouraged to emphasize this intersection.
- Where site conditions permit, trees should be spaced an average of 9 metres apart along Main Street South within the North Precinct and the South Precinct. The placement of trees may be impacted by underground and above ground utilities, and the availability of a suitable planting space in the boulevard and between curbs and/or buildings. A tree replacement program should be implemented in areas where the street opens because of tree dieback.
- Where important intersections require that no trees impede sight lines, shrub planting (possibly in planters) should be considered. Where Main Street meets the access to the trails, a row of trees should guide the visitor to and from these trails and to the Inner Core.
- A program to replace wood planters with precast planters should be undertaken.
- Planters should be used for seasonal effects.
- A tree replacement program for mature trees should be established, which replaces those trees with similar tree species.

X4.1.2.2 Residential Local Roads

Outer Core

A sidewalk system should be established throughout the Outer Core and Inner Core to ensure the continuation of pedestrian movement.

- Sidewalks should be added to at least on side of the streets where sidewalks presently
 do not exist and where possible, such sidewalks should be located within the planned
 street right-of-way.
- Existing sidewalk widths and materials should be maintained.
- A tree replacement program for mature trees should be established, which replaces those trees with similar tree species.

X4.1.2.3 Gateway Features

- The entrance points to the Downtown Georgetown District should be visually defined by the use of special streetscape features, such as flags, banners, accent planting or feature structures, to give a sense of arrival. The entrance points occur at the following four intersections:
 - a) Main Street South and Guelph Street (North Gateway);
 - b) Main Street South and Maple Avenue (South Gateway);
 - c) Mill Street and Guelph Street (East Gateway); and,
 - d) Charles Street and James Street (West Gateway).
- At the North and South Gateways, redevelopment of sites in this area should contribute to a visual "framing" of downtown with respect to their contribution to building and awareness of the District.
- At the North Gateway, the triangular landscaped space on the north west corner of the Guelph Street and Main Street intersection should be redeveloped to include signage or other features that draw attention to the downtown, without impeding the vista to the downtown (Figure X4.5, Figure X4.6).
- The East Gateway should be defined at Mill Street and Guelph Street. Elements drawn from the features at the North and South Gateways should be incorporated.
- The West Gateway is James Street at Remembrance Park and should incorporate gateway features from the other downtown gateways, without disturbing the overall park design.
- Where a gateway structure is to be located within the jurisdiction of the Ministry of Transportation (MTO) or the Regional/local municipality, design and construction of the structure will require the approval of the respective authority.

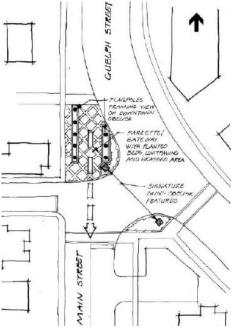


Figure X4.5: North Gateway

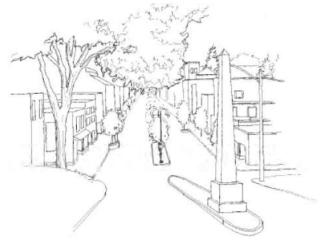


Figure X4.6: Median with Obelisk as an extension of the North Gateway

X4.1.2.4 Street Furnishings

- As existing sidewalks in the North Precinct of the Downtown Georgetown District are fairly narrow, planters within sidewalk areas should be discouraged. Planters may be used along the street line and within the development parcel to define the street edge.
- Hanging flower baskets, as a viable alternative, can be incorporated with pedestrian lampposts as an attractive streetscape element.
- Wherever sidewalk width permits, streetscape elements such as benches, planters, waste receptacles, and newspaper boxes should be grouped together in nodal areas, and located in conjunction with street trees and lights (Figure X4.7).
- In major new development, bicycle racks should be provided (Figure X4.8).

- Pedestrian scale streetlights should be located along intensively used areas such as Main Street South north of Park Avenue, the Main Street and Mill Street intersection, and along pedestrian laneways within the Inner Core.
- Light fixtures should be chosen to integrate into the overall streetscape design and architectural character. Fixtures and poles should provide visual interest and pedestrian scale during daylight hours.
- A style for municipal street signage, which reflects the traditional image of the Downtown Core, should be established.



Figure X4.7: Grouping of streetscape elements



Figure X4.8: Street Furnishings

X4.1.3 OPEN SPACE

X4.1.3.1 Remembrance Park

Development of a gateway at this location should be explored to incorporate
 Remembrance Park as part of enhanced streetscape at James and Charles Streets.

Connection of Remembrance Park to the Inner Core should be enhanced, where feasible, by the construction of a continuous special walkway on the south side of James Street, subject to pedestrian safety, paved in concrete and pavers. This special walkway will require the partnership of landowners on the south side of James Street, the Georgetown Downtown BIA and the Town. Parking should be maintained, where possible. Further, consideration should be given to expanding the walkway on the commercial building front. New developments between Main Street and Remembrance Park should be required to construct a sidewalk to provide and continue this connecting link.

X4.1.4 ACCESS AND CIRCULATION

X4.1.4.1 <u>Vehicle Access and Circulation</u>

- Access into, and circulation within, an individual site should provide safe and welldefined routes.
- Proper lighting, landscaping, and pedestrian amenities along the circulation routes
 will enhance overall site appearance, promote public safety, and encourage the use of
 public transit in the future, Reference should be made to the relevant Regional or
 municipal documents in regards to safety.
- Landscaped traffic islands should be used, where possible, to delineate the main drive aisles, subdivide large parking areas into smaller "courts", and improve edge conditions between the public street and adjoining properties.

X4.1.4.2 Pedestrian and Cycling Routes

- Identifying markers should be installed at the corner of Park Avenue and Main Street to direct cyclists and pedestrians to the multi-use pathway, as referenced in the Trails and Cycling Master Plan.
- Markers should be installed on the multi-use trail to identify the direction to the Downtown Core.
- Markers should be installed to connect Cedarvale Park and the Downtown Core.
- The markers should be designed with similar architectural characteristics to that of the Downtown Core.
- Lighting levels along pedestrian routes should provide appropriate, continuous illumination.
- The design of pedestrian and cycling routes should have regards to the relevant Regional or municipal documents in regards to safety.

X4.1.5 PARKING AND SERVICE AREAS

X4.1.5.1 On-Street Parking

Parking on all side streets should be allowed, where feasible.

X4.1.5.2 Off-Street Parking

- Large expanses of grade-level parking areas, especially those located in front of buildings, should be discouraged.
- Where surface parking for new development is necessary, parking lots should be located at the rear of buildings.
- Vehicular entrances to parking structures and areas should be located on side streets and entrances along Main Street should be avoided, wherever possible.
- The number of vehicular site entrances from the street should be kept to a minimum.
- A clearly defined pedestrian access route should continue through all driveways into parking areas and facilities.
- Surface parking area should be well lit to ensure pedestrian safety.
- Where possible, the integration of small, interconnected parking areas distributed throughout the site should be encouraged.
- Large surface parking areas should be visually softened by introducing street trees, planters and clearly defined parking routes.
- Delineate parking areas that abut streets with the use of attractive low walls, fences or planters, or with rows of small street trees (Figure X4.9).
- Incentives for the provision of public parking in the new infill development should be promoted.
- Designated barrier free parking spaces should be located close to the barrier-free building entrances and clearly identified by signs or markings.
- Adequate bike racks should be provided in the parking lot and/or near the building entrances.



Figure X4.9: Fence and landscaping to screen parking area

X4.1.5.3 Structured Parking

- To increase parking capacity, the option of converting the existing parking lot east of Main Street, between Cross and Mill Streets, to a structures parking should be considered.
- Where feasible, parking should be incorporated into proposed buildings in above grade or underground parking structures.
- Above grade parking structures should be screened at grade and designed as part of the overall building. The design guidelines for building details also apply to parking structures.
- Retail or personal service uses should be encouraged at the street level of parking structures, where feasible.
- When exiting from the parking structure, vehicles should have a clear view of the pedestrian zone. Every entry into and exit from the parking structure should have a minimum stacking area equal to tone car length or 6.0 metres behind the property line. The gradient of this stacking area should be less than 5%.
- Parking structures should be well lit to ensure pedestrian safety and provide for ease of identification.
- The exteriors of pedestrian entrances to parking structures should be illuminated with overhead lighting.

X4.1.5.4 Parking Strategy Plan

 Update of the Parking Study (1990) for the Georgetown Downtown District is recommended. Is should be initiated by the local BIA, in conjunction with the Town and the Region (where appropriate), to have an updated analysis of the parking supply and demand and to further develop solutions and implementation strategy for the potential parking shortage, if any.

X4.1.5.5 Service and Loading Areas

- Loading, garbage facilities and other service functions should be screened from the street and from public view. Location of these facilities within or at the rear of buildings is encouraged.
- Coordinate the entrances to service areas with those of parking areas to reduce the amount of vehicular interruptions along pedestrian streets.
- Service area entrance locations along Main Street South should be discouraged and such entrances should be encouraged to locate off side streets, or at the rear of the properties.

X4.1.6 OPEN STORAGE AREAS

No open storage area should be allowed.

X4.1.7 SIGNAGE

- Signage should form a part of the overall design of buildings and design, materials and colours of signage should reflect building scale and complement the building façade.
- The existing signage by-law should be updated, amended and applied as a regulating legislation.

X4.2 GO STATION DISTRICT

X4.2.1 BUILTFORM

X4.2.1.1 Building Setbacks

- In the North Precinct, building setbacks from the street line should reinforce the streetscape edge and allow for a suitable sidewalk, boulevard and landscape strip width for general pedestrian use and the placement of streetscape amenities.
- In the North Precinct, the main wall of a residential building should be located closer to the street line with front entrance(s) oriented toward the street.
- In the South Precinct, new development associated with the GO Station with a King Street frontage should be built to align with the front walls of adjacent buildings, in order to maintain a consistent building mass along the street line.

X4.2.1.2 Building Height and Massing

- In the North and South Precincts, building heights and massing should have regard to the scale, shadow impact, and privacy impact of adjacent properties.
- In the North Precinct, the scale of the new building massing should complement neighbouring properties, particularly where dissimilar land uses abut.
- In the North Precinct, the maximum building height for high density residential uses should be restricted to 6 storeys. However, additional height may be permitted subject to the criteria outlined in the Official Plan. Articulation of the building height and mass to include a 2- to 3-storey base podium, with increased setbacks for the storeys above the base podium, is encouraged in order to establish a unified building edge that related to the adjacent low and medium density residential uses.
- In the North Precinct, taller new buildings should have regard to micro-climate control
 to minimize shadow impacts to public open spaces, private amenity areas and
 important public sidewalks, and to protect pedestrian from negative effects of wind
 induced by buildings.
- In the North Precinct, the maximum building height for medium density residential
 uses should be restricted to 4 storeys. The massing of townhouse dwellings should
 comprise a maximum of eight units to prevent a single monotoncus elevation to the
 street.
- In the South Precinct, the height and massing of any new development within the GO station should be integrated with the existing station building and should complement and relate to the existing residential neighbourhood in order to enhance the existing neighbourhood character (Figure X4.10).
- In the South Precinct, taller non-habitable structures (such as clock towers, decorative poles with banners, and/or specialized lighting) should be encouraged in order to provide a focal point at the entrance to the GO station.

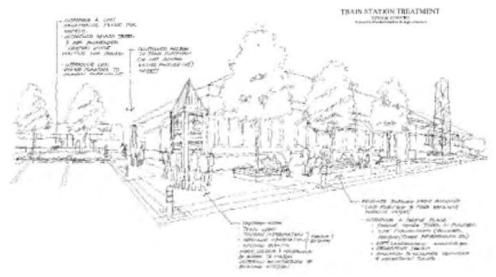


Figure X4.10: Example of enhancement of a train station

X4.2.1.3 <u>Building Elements</u>

- Materials and colours for new buildings, and for additions or renovations to existing structures, should complement and be compatible with adjacent buildings.
- The façades of buildings should have windows, which overlook streets, lanes and parking areas, in order to maintain the character of a safe pedestrian environment.
- The main entrance of the residential buildings should have direct access facing the street.
- Pedestrian entrances to both single and multiple residential buildings should be spatially and architecturally prominent and welcoming.
- Residential units on corner lots which are exposed to the public street and in public view, should have upgraded elevation treatments for both the fronting and flanking sides of the buildings.
- For new residential buildings with the North Precinct, building walls exposed to a public street or public view should be upgraded to a design and material standard equal to the main wall treatment.
- Blank walls demonstrating no specific architectural design are discouraged. Where such façades exist, the use of murals or landscaping to screen walls and provide visual interest will be encouraged.
- The use of reflective (mirror) glass should be discouraged.
- Garages for low and medium density residential buildings should not form the prominent feature of the dwelling façade and garages should be well integrated into the overall residential building design.
- In the South Precinct, new development with pitched roof forms should be encouraged to reflect the residential character of the area.
- Fine architectural detailing in the building façades should be promoted in the South Precinct to complement the 'character streets' and to provide a focal point at the terminus of Queen Street.

X4.2.2 STREETSCAPE

X4.2.2.1 'Character Streets'

- The quality of 'character streets', including the tree-lined boulevard with highly detailed styles of residential dwellings, should be preserved.
- At the gateways to Queen Street and King Street from Guelph Street and Mountainview Road North respectively, Linden trees should be planted in a grouping, together with a gateway sign, to make a visual link with the GO Station entrance.
- A specific gateway design should be created to distinguish this access to the GO station.

- Where a gateway structure is to be located within the jurisdiction of the Ministry of Transportation (MTO) or the Regional/local municipality, design and construction of the structure will require the approval of the respective authority.
- Markers in the form of bollards to match those in the downtown and to reflect the gateways to King and Queen Streets, should be installed along the south sides of King Street and Queen Street at approximate 12-metre intervals (Figure X4.11).

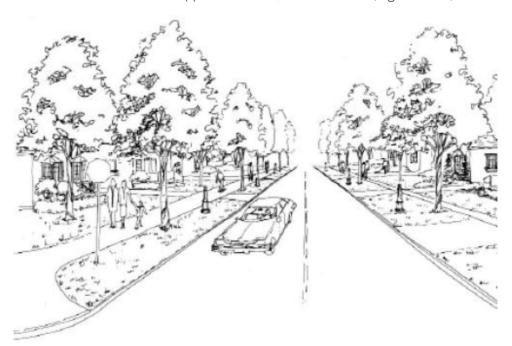


Figure X4.11: Markers along Queen Street as a wayfinding device to the GO station

X4.2.3 LANDSCAPE

- Landowners should be encouraged to provide landscape buffers or islands within parking lots on private lands (Figure X4.12).
- Planting strips with minimum widths of 4.5 metres should be provided between the street line and parking lots.
- Low fencing, combined with low shrubs, may be used along property lines to screen/protect parked vehicles, and also to provide visual interest.
- Decorative fences higher than 1.2 metres, or continuous planting of tall shrubs and coniferous trees, which obscure pedestrian views, should be discouraged.
- On sites where buildings are to be located close to the front lot line and no parking in front of the building is proposed, landscape planting will be required in order to frame the building. Alternatively, the construction of low metal and masonry fences to define the site will be considered and it should be coordinated with the overall streetscape design.

- Landscape treatments should be provided within medians at major access driveways in the form of high branching street trees and low shrub planting, which do not obstruct vehicular views.
- Shrubs should cover a minimum of 50% of the planting strip.
- Screen planting, where provided, should cover a minimum of 50% of the planting strip area and should form a continuous visual screen between properties.
- All landscape plans should be reviewed by Halton Hills staff to ensure that the proposed landscape design is compatible with adjoining land holdings.



Figure X4.12: Existing GO station parking lot

X4.2.4 OPEN SPACE

X4.2.4.1 Parkette

- The design of the parkette north of the track should respect its use as a pedestrian gateway to the GO station. As such, a landscape structure should announce such an entrance.
- A minimum 3-metre wide sidewalk should be provided for pedestrians, cyclists and roller-bladers.
- The parkette's utility should be enhances through the incorporation of a totlot play equipment to serve the surrounding community.

X4.2.5 ACCESS AND CIRCULATION

X4.2.5.1 Vehicular Access and Circulation

 Access into, and circulation within, an individual site should provide safe and welldefined routes.

- Proper lighting, landscaping, and pedestrian amenities along the circulation routes will enhance overall site appearance, promote public safety, and encourage the use of GO transit. Reference should be made to the relevant Regional or municipal documents in regard to safety.
- In the North Precinct, road connections to existing residential streets are encouraged to complete a connected street network. However, any new street connections should have regard to the topographic conditions (i.e. particularly between Rosetta and John Street, and between River Drive and Mountainview Drive/Stuart McLaren Road intersection).

X4.2.5.2 <u>Pedestrian and Cycling Routes</u>

- A multi-use pathway from north of John Street along an abandoned rail corridor should be formalized and linked to the GO station.
- Signage at the GO station should direct cyclists and pedestrians to the trails as illustrated on the Trails and Cycling Master Plan.
- Formal pedestrian link to Dominion Gardens Park through an internal sidewalk system within the neighbourhood should be established.
- The Town's Trails and Cycling Master Plan shall identify a comprehensive pedestrian route system within the vicinity of the GO Station District.
- The design of pedestrian and cycling routes should have regard to the relevant Regional or municipal documents in regards to safety.

X426 PARKING AND SERVICE AREAS

- Parking areas that abut streets should be screened through the use of attractive low walls, decorative fences, planters, low shrubs, or rows of smaller street trees.
- Large surface parking areas should be visually softened by introducing street trees, planters and clearly defined pedestrian routes.
- Deciduous tree planting should provide definition to the street, shade opportunities, wind control or become part of a visually improve planting strip.
- Coniferous trees should provide wind control and become part of a visually improve planting strip.
- Shrub plants shall be used for wind control, visual screening and become part of a visually improved planting strop. Caution is made that any planting should not encourage places for hiding near pedestrian routes.
- In the North Precinct, large expanses of unbroken proposed surface parking for the GO station or high density residential uses should be avoided and elements including landscaping islands incorporated with plantings and light standards, should be used to define smaller, interconnected parking areas.

- Designated barrier-free parking spaces should be located as close as possible to barrier-free access routes and building entrances.
- Adequate bike racks should be provided at the existing and future GO parking lots.
- A clearly defined pedestrian access route should continue through all driveways into parking areas and facilities.
- Surface parking areas should be well lit to ensure pedestrian safety.
- Surface parking areas for the GO station or high density residential uses should avoid light spillage to the adjacent residential properties.
- In the North Precinct, ramps to underground parking structures should not detract from the façade or landscaping of the building.
- For medium density residential uses within the North Precinct, paired driveways should be encouraged to enhance the visual effect of an integrated front yard landscaped area shared between two neighbouring units and to provide copportunities for on-street visitor parking.
- Service (including exterior garbage storage and recycling containers) and loading areas should be located away from the primary building face and the public view, preferable in the rear or side yard of the building and integrated within the building, where possible.
- Appropriate screening of service and loading areas should be incorporated using landscaping or built screens, or a combination of both, Any building materials used to create screens should relate to those of the primary building exterior.

X4.2.7 OPEN STORAGE AREAS

- In the South Precinct, open storage areas for the proposed GO station expansion should not front onto the public streets and should be clearly designated and defined with landscaping and/or architectural edge treatments.
- In the South Precinct, lighting for any open storage areas should not spill over onto adjacent residential properties.
- In the North Precinct, open storage area should be permitted in order not to detract from the residential character of the area.

X4.2.8 RAIL CORRIDOR

X4.2.8.1 Noise, Vibration and Safety Mitigation Measures

- A berm, at approximately 2.5 metres in height, should be constructed as a safety element along the railway (Figure X4.13, Figure X4.14).
- A noise attenuation wall should be provided above the safety berm to protect residential properties.

- Design specifications of the safety berm, noise fence and vibration measure and development setback should conform to the CN's Principal Mainline requirements.
- The noise wall should have a unique design character. Plantings should be provided along the whole north side of the noise attenuation wall to soften the visual impact of the wall, while a low maintenance planting material (such as fescues and wildflowers) should be planted to the rail side to contribute to the ambience of the GO station.
- Tree planting in these areas should be generous, providing high level screening.
 Shrubs should be planted according to their size to create masses and continuous planting beds on 50% of the land surface of the buffers. Grass maintenance should be minimized or eliminated from areas within the jurisdiction of GO transit.



Figure X4.13: Existing site condition north of CPR

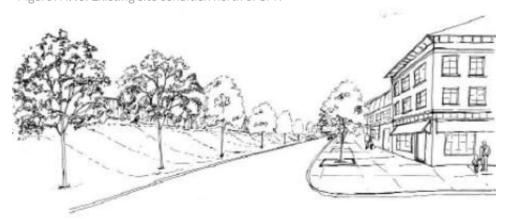


Figure X4.14: Landscaped safety berm for future cevelopment along CPR line

X4.3 GUELPH STREET CORRIDOR DISTRICT

X4.3.1 BUILTFORM

X4.3.1.1 Building Setbacks

- Where feasible, encourage building placement at the minimum set back required by the Zoning By-law, thus avoiding large setbacks and substantial areas of surface parking in the front yard.
- In the East Precinct, building placement should respect the minimum front yard setback as prescribed in a new comprehensive zoning by-law, but also should be restricted in locating no more than 25 metres back from the front lot line. The maximum setback is established on the basis to include maximum two rows of parking, adequate landscape screen and building forecourt (Figure X4.15).
- At the Marketplace Shopping Centre, placement of our buildings closer to the street should be strongly encouraged to foster a visually pleasant and pedestrian friendly streetscape environment, while the overall parking supply should not be compromised (Figure X4.16, Figure X4.17).
- In the Regional Focus Zone, to foster a more urban street related image, the building orientation and placement should address the street frontage with main wall and entrances located close to the minimum street yard setback, where possible (Figure X4.18). Where feasible, building placement should respect the minimum front yard setback as prescribed in a new comprehensive zoning by-law, but also should be restricted in locating no more than 25 metres back from the front lot line. The maximum setback is established on the basis to include maximum two rows of parking, adequate landscape screen and building forecourt.
- Within approximately 200 metres of the intersection of Guelph Street and
 Mountainview Road (the Crossing), a significant built form presence at street frontage
 will be required in order to transform its urban form into a vibrant and intensely
 developed urban center and provides a visual icon in contrast to the rest of Guelph
 Street corridor.
- Street yard setbacks within the Crossing should be restricted to a minimum of 0 metres and a maximum of 3 metres.
- Within the West Precinct along the south side of Guelph Street, mixed use development should be encouraged to intensify the land use along the corridor and to create its own identity for this section of the Guelph Street Corridor. Given the configuration and size of the street blocks, it is preferred that future redevelopment should incorporate buildings within 3 metres of the street line in order to define the street edge, to promote a pedestrian-oriented streetscape and to minimize the impact to the adjoining stable residential neighbourhood.
- Building treatments, such as unenclosed entrance structures, colonnades, overhangs, canopies, awnings, and landscape elements should be allows to encroach into the front yard.

• If alternate site planning demonstrates that the intent of this subsection is achieved, flexibility in the application of these guidelines should be considered.

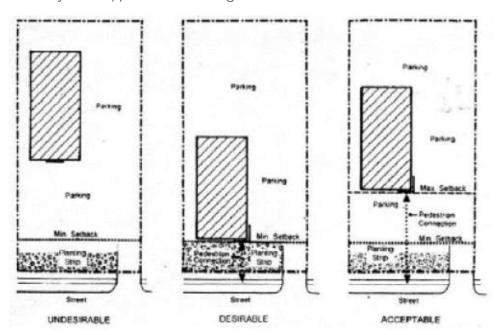


Figure X4.15: Building placement

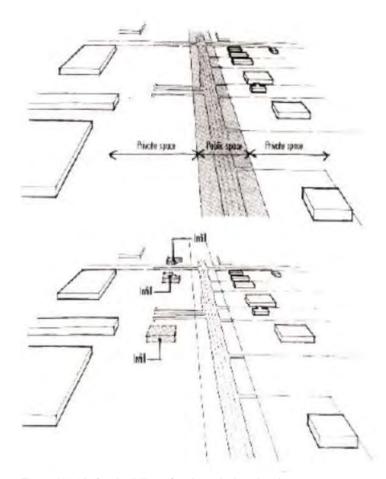


Figure X4.16: Out buildings for the existing development

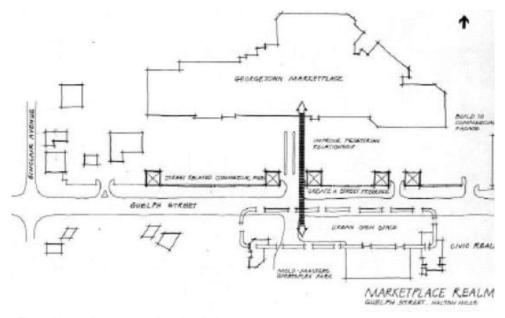


Figure X4.17: Promote pedestrian linkage



Figure X4.18: Commercial building oriented to public street

X4.3.1.2 <u>Building Height and Massing</u>

- Maximum building heights should conform to the relevant zoning by-law.
- At Gateway Nodes, the Crossing, and within the Regional Focus Zone, taller structures should be encouraged in order to contribute to a stronger area identity through inclusion of vertical emphasis at the intersections.
- A minimum two storey and maximum four storey building height should be maintained for the proposed buildings within the West Precinct, and taller structures with architectural articulation anchoring street corners should be promoted (Figure X4.19).
- Within the Crossing, built form should be heightened to signify the intensity and importance of this activity centre of the Guelph Street Corridor (Figure X4.20).
- The bulk or mass of buildings, in conjunction with setback lines, should, where possible, establish a consistent urban streetscape to assist in defining a recognizable street edge.
- The scale of building mass should be integrated with neighbouring properties, particularly where dissimilar land uses abut.
- Building massing should be designed to minimize impacts on adjacent properties with respect to privacy overview, sunlight access, and wind tunneling effect.
- Building massing should include variations in the building envelope to allow for elements such entrances, forecourts, or other specific building articulations. These elements should provide interest and detail when viewed from the public street, particularly at corner locations.



Figure X4.19: Taller structure anchoring street corner



Figure X4.20: Built form to address the intersection

X4.3.1.3 <u>Building Frontage</u>

- A more substantial building façade fronting the public street at the minimum setback line is encouraged, in order to define a more urban street edge.
- In the West Precinct, it is encouraged that a minimum of 2/3 of the main wall of the building should be built within 3m from the street line. Where parking has to be located in front of the building, a continuous and well landscaped green strip should be provided to enhance the streetscape (Figure X4.21), and a well-defined pedestrian connection between the sidewalk and the front entrance of the building should be established to promote pedestrian activity.

The following guidelines relate to built from within the East Precinct:

- To encourage presence of building façade at the street edge, the minimum building frontage should be in proportion to the front yard setback.
- At the minimum front yard setback, a minimum building frontage should be 50% of lot frontage. As the front yard setback increases, the minimum building frontage should increase proportionately up to 60% at the 25-metre front yard setback.
- For the purpose of building frontage calculation, the length of all major building components (primary building façades or extensions of the façade as decorative screens, and colonnades) could be applied cumulatively as a sum of the total building frontage.
- If alternate site planning demonstrates that the intent of this subsection is achieved, flexibility in the application of these guideline should be considered.



Figure X4.21: Landscaped green strip to enhance the streetscape

X4.3.1.4 Corner Buildings

 At Gateway Nodes and the Crossing, corner buildings should be located at the minimum building setbacks in order to enhance the role of these areas as focal points.

- Where possible, major building entrances should also occur at, or near, the corner.
- The height of corner buildings can be stepped back, or other building recessions or projections can be employed to incorporate the entrance or other structures, which mark these as significant locations.
- At Gateway Nodes and at the Crossing, corner buildings could incorporate taller non-habitable structures or freestanding elements (such as clock towers, decorative masts with banners, specialized lighting and/or information displays) to frame and signal the importance of corner locations (Figure X4.22).
- Corner building façades should address both street frontages with equal importance (Figure X4.23).



Figure X4.22: Corner building addresses the intersection



Figure X4.23: Building façades address both streets

X4.3.1.5 Building Elements

- A strong articulation of building façades is encouraged.
- Doorways/entrances to buildings, especially commercial buildings, should be prominent and visible, oriented toward the public street where possible, and emphasized through entrance canopies, awnings, and other architectural elements.

- In multi-tenant development, the use of multiple pedestrian entrances into the building at street level is encouraged.
- Walls parallel to the public street should be required to have windows, display windows, or a high level of architectural detail involving the use of two or more materials.
- Retail area display openings should be provided along pedestrian routes to maintain interest and improve security.
- Windows facing the street frontage, whether display windows for retail use or windows for office space, should be large, occupying a minimum of 30% of the street elevation between the ceiling and floor at grade.
- Clear glass is preferred for glazing, but some tinting based on functional considerations (building orientation, for example) is acceptable. Reflective (mirror) glass at grade should not be used and its use at upper level windows/curtain wall should be examined for architectural merit.
- Although there is no strong preference for any specific materials, exterior finishes should exhibit quality of workmanship and be relatively easy to maintain or, preferable, maintenance free. Materials such as wood or natural stucco should be avoided unless maintenance programmes can be secured.
- Use of architecturally detailed cornices is encouraged to define the top of the building façade.
- Canopies and awnings are encouraged as means of weather protection, shading, as well as adding articulation, colour and interest to the building elevation.
- Blank or single material walls that extend for the entire length of the building, parallel to the public street, should not be permitted.
- Where blank walls occur, the use of additional architectural details and building materials to enhance the visual appearance should be encouraged. Alternatively, the use of murals, painted wall signs, and other sculptural or graphic artwork should be encouraged to promote visual interest. The context of graphics and artwork should be subject to the conformity of the relevant Municipal regulations, where applicable.
- Where steps and ramps provide access, these should be architecturally integrated with the building.
- As a minimum, circulation and building access for pedestrians should conform to barrier-free access requirements as set out by the Ontario Building Code.
- Although the predominant use of flat roofs in commercial development will likely be the norm, pitched or sloped roofs should be permitted providing the design respects the context and the elevations of adjacent buildings. Dormers for fenestration or mechanical venting are encouraged.

- Rooftop mechanical equipment should be integrated with the building design, and rooftop units and vents should be screened using materials complementary to the building, where applicable.
- Where possible, parapets should be used to provide approximate building height continuity between adjacent buildings. Roof uses are acceptable and encouraged where appropriate (i.e., roof 'patios', terraces, etc.).

X4.3.2 STREETSCAPE

X4.3.2.1 Guelph Street (East and West Precincts)

- An enhanced streetscape should be developed to define the street and give travellers a sense of place within the two precincts of this district.
- Continuous sidewalks should be maintained along both sides of Guelph Street.
- Sidewalks should continue across driveways to indicate pedestrian priority.
- Consistent sidewalk widths and materials should be maintained within the East and West Precincts.
- In the East Precinct, street trees should be planted at minimum 15-metre intervals between the Gateway and the Mold-Masters SportsPlex.
- Within approximately 200 metres of the Crossing, street tree planting should be provided at 12-metre intervals to indicate an increasingly urban built-form.
- In the West Precinct, street trees should be incorporated, where possible, at 15-metre intervals.
- Landscape strips that are less than 1.0 metres in width and are adjacent to a hard edge, such as a wall or curb, should be paved with feature paving material.
- Landscape strips between 1.0 and 2.5 metres in width, which are adjacent to grassed private property, should consist of grass or other ground cover.
- Landscape strips that are greater than 2.5 metres in width should consist of grass, ground cover and deciduous/coniferous trees, wherever possible.
- Standard shade trees planted within landscape strips should be spaced as recommended above. Small trees (such as Chanticlear Pear, Shubert Cherry, or Japanese Tree Lilac) should be used beneath hydro wires or in narrow (less than 2m) landscape strips, and planted on 10-metre intervals.
- High branching tree species (such as Honey Locust and maiden hair), or columnar tree species, may be used to allow views through o private commercial development (Figure X4.24).
- Two or three tree species should be used consistently within landscape strips along Guelph Street, and should be comprised of low-maintenance and pollution- and salttolerant species. Groupings of the same species of tree can be used provided that

there are occasional plantings of other species to prevent monocultures and their associated hazards.

- In existing conditions, where the landscape strip in combination with available private property adjacent to the street line exceeds 2.0 metres in width, street tree planting at the street line should be considered.
- Trees that are planted on the street line should become the maintenance responsibility of the Town or the Region.



Figure X4.24: High branching trees to allow through view to commercial site

X4.3.2.2 <u>Guelph Street and Mountainview Road North (the Crossing)</u>

- The Crossing intersection should act as the main focal area of the Guelph Street Corridor (Figure X4.25).
- The Crossing takes a more urban landscape identity than the East and West Precincts.
- The design of the Crossing should be coordinated with the design of Gateway Nodes. Landscape elements should be repeated and emphasized in the Crossing.
- Accent planting, in the form of small flowering trees, may be used at the four corner areas to distinguish this specific road intersection. These planting should be placed to ensure standard sight line clearances.
- Where appropriate, poles with banners should be incorporated into the landscaped corners of the Crossing. Banners should be colourful and may display a logo for the commercial area, or announce special events (Figure X4.26).
- Feature paving bands should be incorporated at all road crossings.

- Streetscape will consist of trees in oversize in-ground planters set in the concrete sidewalk leaving generous space (more than 3 metres) for pedestrian movement between the storefronts and the trees.
- Annuals may be accommodated in planters above ground.
- Tree grates and guards will be used to protect the trees above ground.
- Streetscape furnishing will be in accordance with standards established herein,



Figure X4.25: Built form addressing the major intersection

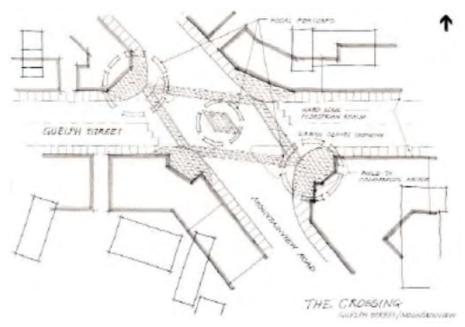


Figure X4.26: Enhanced streetscape at the Crossing

X4.3.2.3 <u>Gateway Features</u>

- To create a sense of arrival into the commercial area, the entrance points should be
 visually defined by the use of special streetscape features such as flags, banners,
 public art, accent planting, floral displays and feature structures. The entrance points
 occur in the vicinity of the following two intersections:
 - a) Guelph Street and Maple Avenue; and,
 - b) Guelph Street and Hall Road.
- The West Gateway feature should be a masonry structure on two sides of the street (Figure X4.27). Although distinct from the downtown, the element should capture similar materials that are emblematic of Halton Hills. For instance the masonry could be sandblasted concrete to match street furnishings.
- A symbol of the Guelph Street Corridor should be incorporated into the West Gateway feature to distinguish it from the Georgetown Downtown District. The back of the structure should indicate that the traveler is leaving the District.
- The East Gateway feature should be a masonry structure on two sides of the street to match the north gateway and to define its limits.
- Where possible, the logo for the Town of Halton Hills should be incorporated on street furnishings.
- Where a gateway structure is to be located within the jurisdiction of the Ministry of Transportation (MTO) or the Regional/local municipality, design and construction of the structure will require the approval of the respective authority.

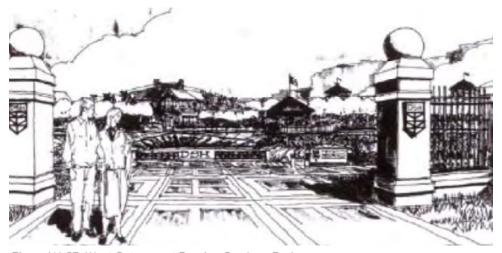


Figure X4.27: West Gateway at Domion Gardens Park

X4.3.2.4 Pedestrian Amenities

• For pedestrian comfort, safety and visual interest, pedestrian amenities should be provided at the Gateway Nodes, at the Crossing, and along Guelph Street. These

- pedestrian amenities include paving, lighting, street furnishings and possible future transit shelters.
- Design detailing and scale of pedestrian amenities should be coordinated with the overall design of the streetscape.
- Feature paving may be used along roads at Gateway Nodes, future transit shelters and at the main intersection, such as Guelph Street and Mountainview Road North, and Guelph Street and Sinclair Avenue.
- Feature paving should be consistent in colour and pattern of use throughout the District.
- Pedestrian crosswalks at the Crossing and at the Gateway Nodes should receive special paving treatment to emphasize their significance. The crosswalks may consist of concrete paving or a mixture of concrete and unit pavers on a concrete base.
- To facilitate safe crossing over wide paved streets (such as Guelph Street and Mountainview Road North), barrier-free pedestrian safety islands should be provided (where possible) at the median as a safe refuge for pedestrians.
- Without inhibiting left turn trading, island medians should be installed at signaled intersections and obvious pedestrian crossings.
- Continuous, hard surface paving treatments should be provided between sidewalks and future transit stops and shelters.
- Pedestrian scale lighting should be post-mounted along Guelph Street when there is sufficient pedestrian activity to warrant.
- Benches and waste receptacles should be provided at future transit shelters, at the Gateway Areas and at the Crossing. Furnishings, such as newspaper boxes and mailboxes, should be grouped together with other site amenities.
- Seating areas should be provided in locations adjacent to a barrier-free path of travel. Street furniture design should consider the ease of use by persons with disabilities.
- To enhance the sense of identity of the East and West Precincts, a medallion with the District's name or logo may be designed for each precinct and incorporated into site furnishings.
- A 'banner' program should be developed for the areas along Guelph Street to create a
 sense of identity and also to identify seasonal events. These banners may differentiate
 the East and West Precincts to emphasize the two areas and their distinct
 characteristics, but should be designed so that it doesn't compete with, or detract
 from banners designed for the Downtown or GO Station Districts within the Town
 (Figure X4.28).
- The use of these banners should be emphasized at the Gateway Nodes and at the Crossing.

Curb ramps should be provided at all street corners to ensure barrier-free
accessibility. To facilitate barrier-free design, it is recommended that the lip height of
curb ramps in the current Town's engineering standards be reviewed.

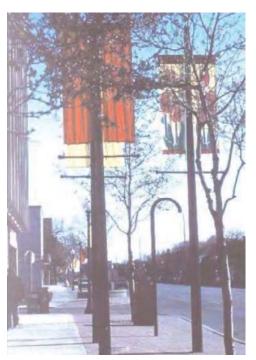


Figure X4.28: Banner as a streetscape element

X4.3.3 LANDSCAPE

- Landowners should be encouraged to provide landscape buffer or islands within parking lots on private lands.
- Planting strips with minimum widths of 4.5 metres should be provided between the street line and parking lots.
- On sites where buildings are to be located close to the front lot line and no parking in front of the building is proposec, landscape planting will be required in order to frame the building (Figure X4.29). Alternatively, the construction of low metal and masonry fences to define the site will be considered and it should be coordinated with the overall streetscape design.
- Low fencing, combined with low shrubs, maybe used along property lines to screen/protect parked vehicles, and also to provide visual interest (Figure X4.30).
- Decorative fences higher than 1.2 metres, or continuous planting of tall shrubs and coniferous trees, which obscure pedestrian views, should be discouraged.
- Landscape treatments should be provided within medians at major access driveways in the form of high branching street trees and low shrub planting, which do not obstruct vehicular views.

- Where a commercial property abuts a residential zone, a planting strip of 3.0 metres minimum width should be provided for vegetation, fencing, and snow storage.
- Where commercial properties have parking lots which are adjacent to each other, a shared landscape buffer with a minimum total of 3.0 metres should be provided between lots, except where shared driveway access occurs.
- Shrubs should cover a minimum of 50% of the planting strip.
- Screen planting, where provided, should cover a minimum of 50% of the planting strip area and should form a continuous visual screen between properties.
- All landscape plans should be reviewed by Halton Hills staff to ensure that the proposed landscape design is compatible with adjoining land holdings.



Figure X4.29: Enhanced landscaping along sidewalk



Figure X4.30: Low fencing and planting to screen parking lot

X4.3.4 OPENSPACE

X4.3.4.1 Dominion Gardens Park

- Dominion Gardens Park, located at the north east corner of Maple Avenue and Guelph Street, is part of the West Gateway and its completion will counter the strip commercial development of the south side of the street.
- Masonry structures in the park near the corner will contribute a visual connection and strength to the North Gateway.

X4.3.4.2 Mold-Masters SportsPlex

• A master plan for the entire site should be prepared to meet these guidelines and to suggest a positive integration to this District.

X4.3.5 ACCESS AND CIRCULATION

X4.3.5.1 Vehicular Access and Circulation

- An access management plan for the District should be initiated by the Town, in conjunction with the Region, to establish an overall strategy for the future consolidation of access points to individual properties (Figure X4.31).
- Where possible, access to parking areas should consolidate access points through shares driveways to minimize disruption of the public sidewalk and to facilitate traffic movement to public roadways.
- Access into, and circulation within, an individual site should provide safe and welldefined routes.
- Proper lighting, landscaping, and pedestrian amenities along the circulation routes will
 enhance overall site appearance, promote public safety, and encourage the use of
 public transit in the future. Reference should be made to the relevant Regional or
 municipal documents in regards to safety.
- Landscaped traffic islands should be used to delineate the main drive aisles, subdivide large parking areas into smaller 'courts', and improve edge conditions between the public street and adjoining properties (Figure X4.32).

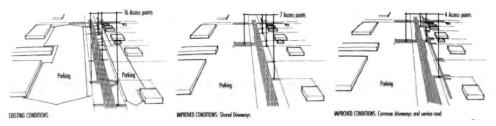


Figure X4.31: Street with and without access management

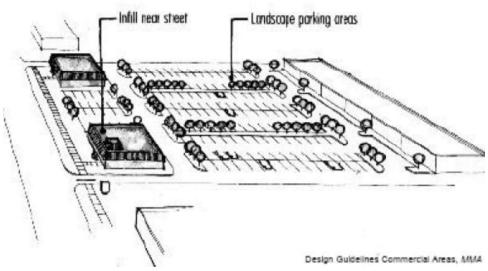


Figure X4.32: Landscaping in parking lot

X4.3.5.2 <u>Pedestrian and Cycling Routes</u>

- Direct, well-lit, and barrier-free pedestrian walkways should be provided between parking facilities and main building entrances, and between future transit stops/shelters and buildings.
- Where possible, conflict between pedestrian and vehicular crossings should be minimized.
- Where possible, pedestrian routes should have priority over vehicular routs where crossings occur, and should be marked accordingly.
- Paving materials other than asphalt should be considered for pedestrian walkways, and they should be continuous across driving aisles (Figure X4.33).
- Lighting levels along pedestrian routes should provide appropriate, continuous illumination.
- Pedestrian-scale light fixtures should be considered either in conjunction with vehicular lighting or as freestanding elements.
- Where appropriate, pedestrian access routes to the adjacent properties should be encouraged.
- To facilitate pedestrian gathering and access, a minimum 3.0 metre walkway and forecourt space should be provided between parking areas and main building entrance(s).
- The minimum pedestrian walkway width should be 2.0 metres.
- Multi-use pathways exist around the Dominion Gardens Park and at the south end of the District leading from the Credit River Valley to the intersection of Delrex Boulevard and Guelph Street. These are the only contacts with the trails system in the Guelph

Street Corridor. The crossings of Guelph Street at Delrex and Maple should indicate by signs and striping that the trails cross there. Construct pedestrian refuge medians on Guelph Street at these locations.

• The design of pedestrian and cycling routes should have regard to the relevant Regional or municipal documents in regard to safety.



Figure X4.33: Paved pedestrian walkway across driving aisles

X4.3.6 PARKING AND SERVICE AREAS

X4.3.6.1 Grade Parking

- Where surface parking for new development is necessary, parking lots should be dispersed around the building. Where possible, parking should be discouraged in a yard fronting on a street.
- In the East and West Precincts, large areas of unbroken surface parking should be avoided.
- Landscaping and landscaped traffic islands (a minimum of 3.0 metres wide) should be used to define smaller parking courts and improve conditions, particularly at the street edge and the principal building façades. If a landscaped traffic island incorporates a pedestrian walkway, the width of the island should be a minimum of 4.5 metres (Figure X4.32).
- In the East Precinct, a maximum of two rows of parking and a drive aisle should occur
 in a yard fronting on a street. The remainder of the setback depth should be used for
 landscaping and the forecourt of the building (Figure X4.34).

- For lands on the south side of Guelph Street in the West Precinct, on-site parking at the rear should be strongly encouraged and non-rush hour on-street parking may be considered subject to the implementation of Georgetown Bypass (Figure X4.35).
- For lands on the north side of Guelph Street in the West Precinct, a maximum of two rows of parking and a drive aisle should occur in a yard fronting on a street. The remainder of the setback depth should be used for landscaping and the forecourt of the building (Figure X4.34).
- Each row of parking spaces should terminate with a landscaped island (minimum 3.0 metres wide).
- Parking areas should not infringe on the forecourt of buildings facing the public street (Figure X4.36). A minimum 2.5 metre strip of land in front of the building face should be maintained for pedestrian circulation, paved entry courts, and landscaping.
- Where feasible, shared parking facilities between multiple uses on a single site should be encouraged to optimize daily usage.
- Light standards in the parking lot should be provided both at the pedestrian level along walkways and at higher levels for security and vehicular circulation.
- Pedestrian walkways should be developed between parking lots and the public street.
 These walkways should be landscaped and lighted to encourage convenient, safe, and frequent public use and should be barrier-free by allowing for unobstructed views from one end to the other.
- Designated barrier-free parking spaces should be located close to the barrier-free building entrances and clearly identified by signs or markings.
- Adequate bike racks should be provided in the parking lot and/or near the building entrances.
- Parking areas adjacent to residential properties should provide landscape planting and opaque fencing to buffer the visual and acoustic impacts of the parking area.
- Lighting for parking areas should not spill over onto adjacent residential properties.
- Parking areas, which abut streets, should be buffered by using attractive low walls, decorative fences, planters, low shrubs, or rows small street trees (Figure X4.37, Figure X4.38).

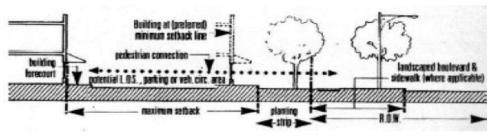


Figure X4.34: Cross section of Guelph Street in the West Precinct

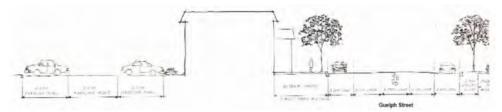


Figure X4.35: Cross section of Guelph Street in the West Precinct



Figure X4.36: Pedestrian walkway in parking lot linking to public street



Figure X4.37: Landscape screen for larger commercial site



Figure X4.38: Landscape screen for smaller parking lot

X4.3.6.2 Structured Parking

- Where feasible, parking should be incorporated into proposed buildings in above grade or underground parking structures.
- Above grade parking structures should be screened at grade and designed as part of the overall building. The design guidelines for building details also apply to parking structures.
- Retail or personal service uses should be encouraged at the street level of parking structures, where feasible.
- When existing from the parking structure, vehicles should have a clear view of the pedestrian zone and every entry into and exit from a parking structure should have a minimum stacking area equal to one car length of 6.0 metres behind the property line. The gradient of this stacking area should be less than 5%.
- Parking structures should be well lit to ensure pedestrian safety and provide for ease of identification.
- The exteriors of pedestrian entrances to parking structures should be illuminated with overhead lighting.

X4.3.6.3 Service and Loading Areas

- Service (including exterior garbage storage and recycling containers) and loading areas should be located away from the primary building face, preferably in the rear or side yard of the building and integrated within the building, where possible.
- Appropriate buffering and screening of service and loading areas should be incorporated using landscaping or built screens, or a combination of both. Any building materials used to create screens should relate to those of the primary building exterior.

- Adjacent properties should be considered in the treatment of service and loading areas and should be suitable buffered or screened.
- Where appropriate, service area access driveways should be separate from access driveways related to the primary building face.

X4.3.7 OPEN STORAGE AND OUTDOOR DISPLAY AREAS

- All inventory merchandise should be placed in the designated open storage area located in side and rear yards.
- The designated open storage area should be screened from view of adjacent streets and properties.
- Tall, opaque fences and/or walls, preferable enhanced with landscaping treatment and integrated with primary building in material and colour, should be used as the screening devices for the open storage area.
- Outdoor display area refers to permanent outside merchandise display area for car dealerships, garden nurseries, home improvement centres and fresh produce markets.
- All merchandise for outdoor display and marketing purposes should be set back from the property line and placed within the designated outdoor display area.
- Along Guelph Street, the frontage of the designated outdoor display area should not
 exceed the primary building frontage facing the same street. This will result in a
 balanced contribution to the street edge among the elements of building façade,
 display area, and landscaping area.
- The designated outdoor display area should be clearly defined on all sides with landscaping and/or architectural edge treatment (Figure X4.39). Landscaping edge treatment may include the combination of low walls, formal hedges, dense planting strips, or architecturally detailed bollards (with heavy duty chain). Architectural treatments may also include independent colonnades or an extension of the building façade.
- The architectural and landscape edge treatments for the outdoor display areas should be integrated by design and also serve as a theft prevention barrier. Chain link and/or barbed wire fences should be prohibited in front yards.
- Lighting for open storage and outdoor display areas should not spill over onto adjacent residential properties.



Figure X4.39: Enhanced landscaping for outdoor display area

X4.3.8 SIGNAGE

- Street signs within the public right-of-way should consider a unified, thematic, appearance that contributes to the urban character of the Guelph Street Corridor (Figure X4.40).
- For clear orientation, larger-sized street signs should be incorporated within the medians at the Gateway Nodes and the Crossing.
- Signs marking the Gateway Nodes should reinforce a sense of arrival to the District. Gateway sign designs and locations should be clearly visible and relate to both the scale of vehicles and pedestrians.
- Freestanding signs addressing private development are encouraged to be consolidated for each development and located within the property line parallel to the street frontage and mounted in a landscaped setting. Sign materials should be consistent with the building design (Figure X4.41)
- Freestanding signs should be located so that they do not obstruct vehicular and pedestrian views.
- Building identification signs should be incorporated as an integral, coordinated element of the principal building façade and should be compatible with the building design in scale, colour, and materials.
- A single primary identification sign should be allowed per business frontage. Where there is a wider building frontage, an additional, small secondary sign may be allowed.
- Secondary storey business signs should be smaller than the first storey signs.
- Multiple tenant retail developments should encourage a thematic sign design to contribute to a unified building presence.
- Street address signs should be clearly visible from the street curb, located at grade on the principal building façade.

• If alternate signage design demonstrates that the intent of this subsection is achieved, flexibility in the application of these guidelines should be considered.

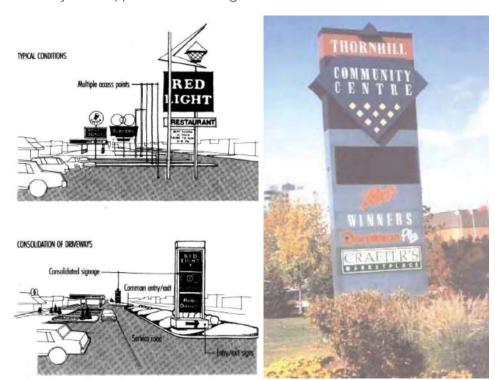


Figure X4.40: Signage consolidation

Figure X4.41: Signage in landscaping

X4.4 ACTON DOWN TOWN DISTRICT AND BEYOND

X4.4.1 BUILTFORM

X4.4.1.1 <u>Historical Preservation</u>

Where a new or infill development is sot be constructed adjacent to a building of architectural or historical significance, consideration with regard to built form, scale, detailing, colour, and materials should be given to ensure harmony with the features of the existing building (Figure X4.42).

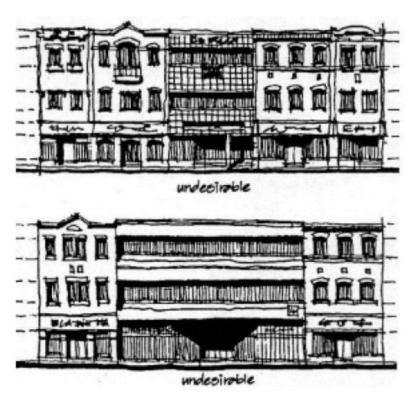


Figure X4.42: Undesirable fenestration design for infill development

X4.4.1.2 Building Setbacks

- Front building walls will be encouraged to align with the front walls of adjacent buildings in order to maintain a consistent building mass along the street line (Figure X4.43).
- In the Mill Street Precinct, front building wall of new infill buildings should occupy majority of the lot frontage to minimize the unwarranted gap in between buildings. It ensures the creation of a consistent street façade (Figure X4.4). Traditional urban form is established by small scale attached buildings with no open space between them. The only exception is well-lit public passageways to the rear parking area.
- For corner lots in the Mill Street Precinct, the design of the side wall of the building should be extended along the exterior side lot line to at least 60% of the lot depth and this side wall should be located within 3m of the side lot line.
- Where breaks in the street building wall occur, the continuation of the linear street form with the use of site elements such as street trees, planters, gates or low walls, will be encouraged.
- The provision of landscaped open space and amenity areas such as entrance plazas, forecourts and outdoor cafes, will be encouraged in locations where buildings are not built to the street line, These open space areas can provide added interest to the street environment.

- Within the Outer Core of the Mill Street Precinct, minimum front yard setbacks for residential buildings should be the established front building line.
- Within the Young and Queen Street Precinct, encourage building placement at the minimum setback required by the Zoning By-law, where feasible, thus avoiding large setbacks and substantial areas of surface parking in the front yard.
- For existing large commercial establishments within the Queen Street Precinct, the placement of out buildings closer to the street is encouraged.
- In the Queen Street Precinct, building placement should respect the minimum front yard setback as prescribed in a new comprehensive Zoning By-law, but also should be restricted in locating to more than 25.0 metres back from the front lot line.
- Building treatments, such as unenclosed entrance structures, colonnades, overhangs, canopies, awnings, and landscape elements should be allowed to encroach into the front yard.



Figure X4.43: Mill Street streetscape



Figure X4.44: Façade defines the street edge

X4.4.1.3 Building Height and Massing

- Maintain a consistent 'base building' height of three storeys within the Inner Core. This base height should be equivalent to the heights of façades of historical and significant buildings (Figure X4.45).
- Within the Mill Street Precinct, any portion of the building greater than the specified base building height should be set back or tapered above the base.
- Maximum building heights should not exceed the height limits established in a new comprehensive Zoning By-law.
- Continue the finer grain of architectural massing established in the Mill Street Precinct (Inner Core) by discouraging new buildings with monolithic façades.
- Minimize the use of space between buildings along the Mill Street Precinct (Inner Core) to ensure the creation of a consistent street façade.
- Within the Downtown District, maintain heights of up to three storeys for proposed low density residential buildings, for storeys for medium density residential buildings, and six storeys for high density residential buildings, except as otherwise specified in the Zoning By-law.
- In low density residential areas, proposed building massing and height should be related to the adjacent buildings to enhance the existing neighbourhood character.
- Multiple unit buildings should be designed to retain the general massing character of large detached homes. The exterior walls should not have the appearance of an overly massive building block.
- Row houses should not exceed widths of eight attached units.
- Individual units should have clear identities through varying architectural treatment (i.e. verifying façades, columns, etc.), but should remain consistent in overall theme.
- End units should receive special design treatment to take advantage of their position.
- At Gateway Nodes, taller non-habitable structures (such as clock tower, decorative
 masts with banners, and/or specialized lighting) should be encouraged in order to
 contribute to a stronger area identity through inclusion of vertical emphasis at the
 intersections.
- At the Four Corners, new developments are encouraged to have taller structures, built to the property line to define the intersection (Figure X4.46).
- Within the Queen Street Precinct, the bulk or mass of buildings, in conjunction with setback lines should, where possible, establish a consistent urban streetscape to assist in defining a recognizable street edge.
- Building massing should be designed to minimize impacts on adjacent properties, with respect to privacy, sunlight access, and wind tunneling.

 Building massing should include variations in the building envelope to allow for elements such as entrances, forecourts, or other specific building articulations. These elements should provide interest and detail when viewed from the public street, particularly at corner locations.



Figure X4.45: Consistent building height for the infills



Figure X4.46: Built form defines the intersection

X4.4.1.4 Building Frontage

- If alternate site planning demonstrates that the intent of this subsection is achieved, flexibility in the application of these guidelines should be considered. More substantial building façade fronting the public street at the minimum setback line is encouraged, in order to define a more urban street edge.
- Within the Mill Street Precinct, for new infill building, a minimum of 75% of the main building wall should be built at the minimum front yard setback.
- In the Young Street Precinct, for new infill buildings, a minimum of 60% of the main building wall should be built at the minimum front yard setback.

- The following guidelines relate to built form within the Queen Street Precinct:
- To encourage the presence of building façade at the street edge, the minimum building frontage should be in proportion to the front yard setback.
- At the minimum front yard setback, a minimum building frontage should be 50% of lot frontage. As the front yard setback increases, the minimum building frontage should increase proportionately up to 60% at the 25-metre front yard setback.
- For the purpose of building frontage calculation, the length of all major building components (primary building façades or extensions of the façade as decorative screens, and colonnades) could be applied cumulatively as a sum of the total building frontage.
- If alternate site planning demonstrates that the intent of this subsection is achieved, flexibility in the application of these guidelines should be considered.

X4.4.1.5 Building Elements

- Accentuate the corners of significant street intersections with the use of prominent building mass, addressing the intersection as well as the street fronts, and building features to provide landmarks within the Town's street system.
- New buildings should be designed and sited to preserve and enhance special street views and significant buildings.
- Discourage the use of blank walls, which are visually prominent. Where such façades exist, encourage the use of murals or landscaping to screen walls and provide visual interest.
- In the Mill Street Precinct, spacing, proportions, dimensions, quantity and general
 patterning of windows in new buildings should be sympathetic and similar to buildings
 of historical and architectural significance, and to adjust existing buildings. Rows of
 windows should be used to define each floor level.
- Continue the rhythm of storefront windows in new development along Mill street as such store fronts traditionally have large window openings to expose goods within shops to passers-by and encourage retail activity.
- Encourage the provision of retail or personal service space along pedestrian routes for pedestrian interest and security.
- The roof forms of proposed buildings should complement those of existing adjacent buildings.
- Parapet walls of complementary design and materials should be used to screen rooftop equipment where flat roofs are proposed.
- Materials and colours for proposed buildings, and for additions or renovations to existing structures, should complement and be compatible with adjacent buildings.

- Encourage the use of fine architectural detailing, compatible and in harmony with adjacent buildings, in the building façades, especially around windows and at the building's cornice lines. A variety of architectural details add richness and interest to façades, and builds on the tradition of craftsmanship established in heritage buildings of Downtown Acton.
- Doorways/entrances to buildings, especially commercial buildings, should be prominent and visible, and emphasized through entrance canopies, awnings, and other architectural elements.
- Pedestrian entrances to both single and multiple residential buildings should be spatially and architecturally prominent and welcoming.
- In multi-tenant development, the use of multiple pedestrian entrances into the building at street level is encouraged.
- The use of canopies should be encouraged to add colour and interest to streetscapes, and they provide weather protection for pedestrians and for merchant's goods.
 Canopies also reinforce the identity of individual retail and service outlets and may be used to accent entrances to residential buildings located on main streets.
- Canopies should have a minimum 1 metre in depth from the building face and a minimum clearance above sidewalks of 2.4 metres. The encroachment of any canopy is subject to municipal by-law.
- Retail area display openings should be provided along pedestrian routes to maintain interest and improve security.
- In the Queen Street Precinct, windows facing the street frontage, whether display windows for retail use or windows for office space should be large, occupying a minimum of 30% of the street elevation between the ceiling and floor at grade.
- In the Queen Street Precinct, clear glass is preferred for glazing, but some tinting based on functional considerations (building orientation, etc.) is acceptable. Reflective (mirror) glass at grade should not be used and its use at upper level windows/curtain wall should be examined for architectural merit.
- Garages for low density residential dwellings should not form the prominent feature of the dwelling façade. Garages should be well integrated into the overall house design.
- Garages and parking structures should not be located in front of medium and high residential buildings.
- Where steps and ramps provide access, these should be architecturally integrated with the building.

X4.4.2 STREETSCAPE

X4.4.2.1 Downtown District (Inner and Outer Core)

- Maintain established sidewalk widths, or increase sidewalk widths where possible (Figure X4.47, Figure X4.48), along retail commercial streets of the Mill Street Precinct. Ease of pedestrian movement is an important factor in retail areas.
- To create the Gateway Node at the Mill Street/CN Rail intersection, any expansion to the 'Olde Hide House' site and the adjacent land should be encouraged to locate close to Mill Street.
- A continuous and consistent streetscape should be developed in the Downtown
 District by selecting suitable streetscape elements, such as street trees, sidewalk
 materials, and lighting, and repeating these elements along these main streets.
- Paving materials and patterns for the Main/Mill Street Intersection (the 'Four Corners') should be selected to complement the historic architectural treatment, and these sidewalk patterns and materials should be continued along Mill Street. The same treatment can be used to accent areas along side streets of the Inner Core.
- Street tree species that are low maintenance, pollution- and salt-tolerant, and have good, year-round appearance should be selected.
- Trees should be planted at grade wherever possible for ease of pedestrian movement, and to reduce visual clutter.
- Trees should be planted at grade where there will be greater than 3m clearances from
 the trunk of the tree to the nearest wall. In narrow street cross-sections, pyramidal or
 narrowly growing plants suitable to these situations should be used. Where trees are
 unable to be planted, consideration should be given to the incorporation of hanging
 planters to provide vegetative relief and colour.
- In the Outer Core, existing sidewalk widths and materials should be maintained and sidewalks should be added to at least one side of the streets where they don't exist, and where possible within the planned street right-of-way.

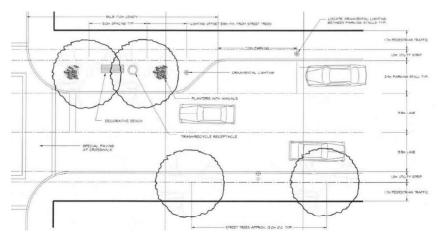


Figure X4.47: Plan view - Parking on one side of Mill Street

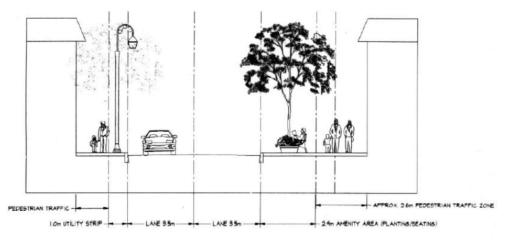


Figure X4.48: Cross section at the bulb out – Parking on one side of Mill Street

X4.4.2.2 <u>Young and Queen Street Precinct</u>

- Sidewalks should continue across driveways to indicate pedestrian priority.
- Consistent sidewalk widths and materials should be maintained.
- Landscape strips that are less than 1.0 metre in width and that are adjacent to a hard edge, such as a wall or curb, should be paced with feature paving material.
- Landscape strips between 1.0 and 2.5 metres in width, should consist of grass, ground cover and deciduous/coniferous trees, wherever possible.
- Street trees should be incorporated, to provide a rhythm to the street, to create shade and protection and to provide a dynamic green element.
- Standard shade trees planted within landscape strips should be spaced as recommended above. Small trees (such as Chanticlear Pear, Shubert Cherry, or Japanese Tree Lilac) should be used beneath hydro wires or in narrow (less than 2m) landscape strips, and planted in 10-metre intervals.
- High branching tree species (such as Honey Locust and maiden hair), or columnar trees should be used to allow views through to private commercial development.
- Two or three tree species should be used consistently within landscape strips along Young Street and Queen Street, and should be low maintenance and pollution- and salt-tolerant. Groupings of the same species of tree can be used provided that there are occasional plantings of other species to prevent monocultures and their associated hazards.
- Where tree planting occurs in a paving area, use of tree grates and guards should be provided. All landscape plans should be reviewed by Halton Hills staff to ensure that the proposed landscape design is compatible with adjoining land holdings.
- Trees that are planted on the street line should become the maintenance responsibility of the Town or the Region.

X4.4.2.3 <u>Gateway Features</u>

- To give a sense of arrival, the entrance points to Downtown Acton should be visually defined by the use of special streetscape features, such as flags, banners, accent planting or feature structures. The entrance points occur at the following intersections:
 - a) Main Street adjacent to Prospect Park;
 - b) Main Street and Brock Street; and
 - c) Mill Street/CN Rail intersection.
- Landmark features should be durable and in keeping with the scale of surroundings and should have regard to the travel speed of the passers-by (i.e. motorists and pedestrians).
- Where a gateway structure is to be located within the jurisdiction of the Ministry of Transportation (MTO) or the Regional/local municipality, design and construction of the structure will require the approval of the respective authority.

X4.4.2.4 Street Furnishings

- As existing sidewalks in the Mill Street Precinct of the Downtown Acton District are fairly narrow (Figure X4.49), planters within sidewalk areas should be discouraged. Planters may be used along the street line and within the development parcel to define the street edge,
- Hanging flower baskets, as a viable alternative, can be incorporated with pedestrian lampposts as an attractive streetscape element (Figure X4.50).
- Wherever sidewalk width permits, streetscape elements such as benches, waste receptacle, newspaper boxes and bus shelters should be grouped together in nodal areas, and located in conjunction with street trees and lights.
- The provision of bicycle racks should be encouraged within major new developments.
- Design detailing and scale of street amenities should be coordinated with the overall streetscape design and architectural character (Figure X4.51).
- Pedestrian streetlights should be located along intensively used areas.
- Light fixtures should be chosen to integrate into the overall existing streetscape design and architectural character. Fixtures and poles should provide visual interest and pedestrian scale during daylight hours.
- A style for Municipal Street Signage should be explored and established, which reflects the traditional image of the Downtown Core.
- Feature paving may be used along roads at Gateway Nodes, future transit shelters and at the main intersection, such as the Mill Street/Young Street/Queen Street intersection.

- Feature paving should be consistent in colour and pattern of use throughout.
- Pedestrian crosswalks at the Four Corners and at the Gateway Nodes should receive special paving treatment to emphasize their significance. The crosswalks may consist of concrete paving or a mixture of concrete and unit pavers on a concrete base.
- To facilitate safe crossing over wide paved streets (such as Queen Street), barrier-free pedestrian safety islands should be provided, where possible, at the median as a safe resting place for pedestrians.
- To enhance the sense of identity of the Mill, Young and Queen Street Precinct, a medallion with the District's name or logo may be designed for each precinct and incorporated into site furnishings and banners.
- The use of these banners should be emphasized at the Gateway Nodes and the Four Corners.





Figure X4.49: Narrow sidewalk on Mill St

Figure X4.50: Example of hanging basket



Figure X4.51: Street furnishings

X4.4.3 LANDSCAPE

- In the Queen Street Precinct, planting strips with minimum widths of 3.0 metres should be provided between the street line and parking lots. Buffer areas should be planted with a combination of grass or other salt tolerant ground cover, low shrubs and deciduous trees.
- In the Queen Street Precinct, on sites where buildings are to be located within 12 metres of the front lot line and no parking in front of the building is proposed, landscape planting will be required in order to frame the building. Alternatively, the construction of low metal and masonry fences to define the site will be considered and it should be coordinated with the overall streetscape design.
- Low fencing, combined with low shrubs, maybe used along property lines to protect
 parked vehicles in car dealerships, to contain litter from fast food outlets, and also to
 provide visual interest. Fencing design should be coordinated with the overall
 streetscape design.
- Where a commercial property abuts a residential zone, a planting strip of 3.0 metres minimum width should be provided for vegetation, fencing, and snow storage.
- Where commercial properties have parking lots which are adjacent to each other, a shared landscape buffer with a minimum total of 3.0 metres should be provided between lots, except where shared driveway access occurs.
- Shrubs should cover a minimum of 50% of the planting strip.
- Screen planting, where provided, should cover a minimum of 50% of the planting strip area and should form a continuous visual screen between properties.
- Landowners should be encouraged to provide landscape buffer or islands within parking lots on private lands.
- Planting strips with minimum widths of 3.0 metres should be provided between the street line and parking lots.
- Low fencing, combined with low shrubs, may be used along property lines to protect parked vehicles in parking lots, and also to provide visual interest.

- Decorative fences higher than 1.2 metres, or continuous planting of tall shrubs and coniferous trees, which obscure pedestrian views, should be discouraged.
- Landscape treatments should be provided within medians at major access driveways in the form of high branching street trees and low shrub planting, which do not obstruct vehicular views.
- Screen planting, where provided, should cover a minimum of 50% of the planting strip area and should form a continuous visual screen between properties.

X4.4.4 OPEN SPACE

X4.4.4.1 Prospect Park (Prospect Park/Bovis Channel to Acton Downtown)

- An event directory on Main Street to attract patrons to the park should be provided.
- A downtown Acton directory in the park to attract patrons to the downtown should be provided.
- Street furnishings in Prospect Park that reflect the street furnishings of Downtown Acton should be provided.
- Visual impact of the dam and waterfall as a landmark feature at the west terminus of the vista down Mill Street should be promoted (Figure X4.52).



Figure X4.52: View to Fairy Lake from Mill Street West

X4.4.4.2 Fairy Lake

- Fairy Lake should become one of the anchors that draw patrons to the area. Develop windows to the Lake from the downtown (Figure X4.53).
- Downtown should be married with the Lake through a unified signage design and streetscape program.
- A structure or water feature (Figure X4.54) should be developed in Fairy Lake that can be experienced from the Main Street realm. The 'window streets' to the Lake from Main

Street should frame views and encourage patrons of the downtown to experience one of Acton's finest assets.



Figure X4.53: Prospect Park and Fairy Lake as the west terminus

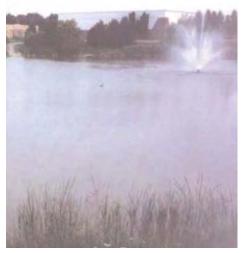


Figure X4.54: Example of water feature

X4.4.4.3 Olde Hide House Parkette

• Redevelopment or expansion of the Olde Hide House provides an opportunity to use the proposed buildings or expansion to frame an urban square or parkette at the Mill Street frontage (Figure X4.55). It is intended to form as part of the east gateway at the Mill Street Precinct. A partnership could be formed between the commercial owners and the Town to develop the parkette as a visual terminus at the east end of the downtown (Figure X4.56).

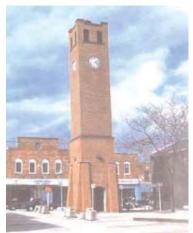


Figure X4.55: Tall element as focal point in urban square

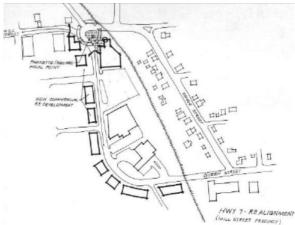


Figure X4.56: Highway 7 realignment via Eastern Avenue as an alternative

X4.4.5 ACCESS AND CIRCULATION

X4.4.5.1 Vehicular Access

- An access management plan for the study area should be initiated by the Town, in conjunction with the Region, to establish an overall strategy for future consolidation of access points to individual properties.
- Encourage an alternate alignment of Highway 7 from Queen Street, Eastern Avenue to Mill Street, subject to the possible extension of Queen Street to Highway 25 (Figure X4.56).
- Where possible, access to parking areas should consolidate access points through shared driveways to minimize disruption of the public sidewalk and to facilitate traffic movement to public roadways.
- Access into, and circulation within, an individual site should provide safe and well-defined routes. Proper lighting, landscaping, and pedestrian amenities along the circulation routes will enhance overall site appearance, promote public safety, and encourage the use of public transit in the future. Reference should be made to the relevant Regional or municipal documents in regard to safety.

 Landscaped traffic islands should be used to delineate the main drive aisles in the offstreet parking lot, where possible, subdivide large parking areas into smaller 'courts', and improve edge conditions between the public street and adjoining properties.

X4.4.5.2 <u>Pedestrian and Cycling Routes</u>

- Formalized cycling connection between the potential cycling route along Church Street and Downtown Mill Street should be encouraged.
- Formalized pedestrian connection between the proposed multi-use pathway north of the Downtown along creek corridor and Downtown Mill Street should be encouraged.
- The multi-use pathways should be connected through the north part of the downtown along creek corridors.
- The pathways should be connected to the downtown by means of signs and provision of gateways that reflect the street furnishings of Downtown Acton.
- Lighting levels along pedestrian routes should provide appropriate, continuous illumination.
- Pedestrian-scale light fixtures should be considered either in conjunction with vehicular lighting or as freestanding elements.
- Where appropriate, pedestrian access routes to the adjacent properties should be encouraged.
- To facilitate pedestrian gathering and access, a minimum 3.0-metre walkway and forecourt space should be provided between parking areas and main building entrance(s).
- The design of pedestrian and cycling routes should have regard to the relevant Regional or municipal documents in regard to safety.

X4.4.6 PARKING AND SERVICE AREAS

X4.4.6.1 On-street Parking

- On-street parking on the north side of Mill Street should be promoted to maximize the width of the pedestrian realm.
- Along Mill Street, pedestrian bulb-cuts at intersections to decrease the road crossing and to define the parking stall ends should be considered.
- On-street parking on two sides of Main Street should be encouraged.
- On-street parking on all side streets should be allowed, where pavement width permits.

X4.4.6.2 Off-street Parking

X4.4.6.2.1 Mill Street Precinct

- Large expanses of unattractive grade-level parking lots, especially those located in front of buildings, should be discouraged.
- Vehicular entrances to parking structures and areas should be located on side streets, and entrances along Mill Street should be avoided, wherever possible.
- Where surface parking for new development is necessary, parking lots should be located at the rear of buildings.
- Where possible, encourage the use of small, interconnected parking areas distributed throughout the site.

X4.4.6.2.2 Queen Street Precinct

- Where surface parking for new development is necessary, parking lots should be dispersed around the building. Where possible, parking should be discouraged in a yard fronting on a street.
- Large areas of unbroken surface parking should be avoided. Landscaping and landscaped traffic islands (minimum 3.C metres wide) should be used to define smaller parking courts and improve conditions, particularly at the street edge and principal building façades. If a landscaped traffic island incorporates a pedestrian walkway, the width of the island should be a minimum of 4.5 metres.
- A maximum of two rows of parking and a drive aisle should occur in a yard fronting on a street. The remainder of the setback depth should be used for landscaping and the forecourt of the building.
- Parking areas should not infringe on the forecourt of buildings facing the public street.
 A minimum 3.0 metre strip of land in front of the building face should be maintained for pedestrian circulation, paved entry courts, and landscaping.

X4.4.6.2.3 Young Street Precinct

Rear yard parking should be encouraged.

X4.4.6.2.4 General

- Each row of parking spaces should terminate, where possible with a landscaped island (minimum 3.0 metres wide).
- Where feasible, shared parking facilities between multiple uses on a single site should be used to encourage optimal daily usage.
- Light standards in the parking lot should be provided both at the pedestrian level along walkways, and at higher levels for security and vehicular circulation.

- Pedestrian walkways should be landscaped and lit to encourage convenient, safe, and frequent public use.
- Pedestrian walkways should also be barrier-free by allowing for unobstructed views from one end to the other.
- Designated barrier-free parking spaces should be located close to the barrier-free building entrances and clearly identified by signs or markings.
- Adequate bike racks should be provided in the parking lot and/or near the building entrances.
- Parking areas adjacent to residential properties should provide landscape planting and opaque fencing to buffer the visual and accustic impacts of the parking area.
- Lighting for parking areas should not spill over onto adjacent residential properties.
- Parking areas, which abut streets, should be buffered by using attractive low walls, decorative fences, planters, low shrubs, or rows of small street trees (Figure X4.57).
- The pedestrian zone should continue through all driveways into parking areas and facilities.
- The number of vehicular site entrances should be kept to a minimum.



Figure X4.57: Edge treatment to screen parking area

X4.4.6.3 Structured Parking

- Above-grade parking structures should be screened at grade and designed as part of the overall building. The design guidelines for building details also apply to parking structures.
- Retail or personal service uses should be encouraged at the street level of parking structures, where feasible.

- When exiting from the parking structure, vehicles should have a clear view of the pedestrian zone. Every entry into and exit from the parking structure should have a minimum stacking area equal to one car length or 6.0 metres behind the property line. The gradient of this stacking area should be less than 5%.
- Parking structures should be well lit to ensure pedestrian safety and provide for ease of identification.
- The exteriors of pedestrian entrances to parking structures should be illuminated with overhead lighting.

X4.4.6.4 Parking Strategy Plan

 Update of the Parking Study (1990) for the Acton Downtown District is recommended. It should be initiated by the local BIA, in conjunction with the Town and the Region (where appropriate), to have an updated analysis of the parking supply and demand and to further develop solutions and implementation strategy for the potential parking shortage, if any.

X4.4.6.5 Service and Loading Areas

- Loading, garbage facilities, and other service functions should be screened from the public street. Location of these facilities within or at the rear of buildings is encouraged.
- Co-prdinate the entrances to service areas with those of parking areas to reduce the amount of vehicular interruptions along pedestrian streets.
- The location of service area entrances along Mill Street should be discouraged. It is
 preferable to locate these off side streets, or rear service laneways.
- Service (including exterior garbage storage and recycling containers) and loading areas should be located away from the primary building face, preferable to the rear of the building.
- Appropriate buffering and screening of service and loading areas should be incorporated using landscaping or built screens, or a combination of both. Any building materials used to create screens should relate to those of the primary building exterior.
- Adjacent properties should be considered in the treatment of service and loading areas and should be suitable buffered or screened.
- Where appropriate, service area access driveways should be separate from access driveways related to the primary building face.

X4.4.7 OPEN STORAGE AND OUTDOOR DISPLAY AREAS

 No outdoor storage or outdoor display areas should be allowed in the Mill Street and Young Street Precincts.

X4.4.7.1 Queen Street Precinct

- All inventory merchandise should be placed in the designated open storage area located inside all rear yards.
- The designated open storage should be screened from view cf adjacent streets and properties.
- Tall, opaque fences and/or walls, preferably enhanced with landscaping treatment and integrated with primary building in material and colour, should be used as the screening devices for the open storage area.
- All merchandise for outdoor display and marketing purposes should be set back from the property line and placed within the designated outdoor display area.
- Along Queen Street, the frontage of the designated outdoor display area should not
 exceed the primary building frontage facing the same street. This will result in a
 balanced contribution to the street edge among the elements of building façade,
 display area, and landscaping area.
- The designated outdoor display area should be clearly defined on all sides with landscaping and/or architectural edge treatment. Landscaping edge treatment may include the combination of low walls, formal hedges, dense planting strips, or architecturally detailed bollards (with heavy duty chain). Architectural treatments may also include independent colonnades or an extension of the building façade.
- The architectural and landscape edge treatments for the outdoor display areas should be integrated by design and also serve as a theft prevention barrier. Chain link and/or barbed wire fences should be prohibited in front yards.
- Lighting for open storage and outdoor display areas should not spill over onto adjacent residential properties.

X4.4.8 SIGNAGE

- Street signs within the public right-of-way should consider a unified, thematic appearance that contributes to the urban character of Acton.
- Signs marking the Gateway Nodes should reinforce a sense of arrival to the commercial area. Gateway sign designs and locations should be clearly visible and relate to both the scale of vehicles and pedestrians.
- Freestanding signs addressing private development are encouraged to be consolidated for each development and located within the property line parallel to the street frontage and mounted in a landscaped setting. Sign materials should be consistent with the building design.
- Freestanding signs should be located so that they do not obstruct vehicular and pedestrian views.

- Building identification signs should be incorporated as an integral, coordinated element of the principal building façade and should be compatible with the building design in scale, colour, and materials.
- In the Queen Street Precinct, a single primary identification sign should be allowed per business frontage. Where there is a wider building frontage, an additional, smaller secondary sign may be allowed.
- Second storey business signs should be smaller than the first storey signs.
- Multiple tenant retail developments should encourage a thematic sign design to contribute to a unified building presence.
- Street address signs should be clearly visible from the street curb, located at grade on the principal building façade.
- If alternate signage design demonstrates that the intent of this subsection is achieved, flexibility in the application of these guidelines should be considered.

X4.4.9 RAIL CORRIDOR

X4.4.9.1 Noise, Vibration and Safety Mitigation Measures

- A berm, at approximately 2.5 metres in height, should be constructed as a safety element along the railway.
- A noise attenuation wall should be provided above the safety berm to protect residential properties.
- Design specifications of the safety berm, noise fence and vibration measure and development setback should conform to the CN's Secondary Mainline requirements.
- The noise wall should have a unique design character. Planting should be provided along the whole north side of the noise attenuation wall to soften the visual impact of the wall, while a low maintenance planting material (such as fescues and wildflowers) should be planted to the rail side to contribute to the ambience of the GO station.
- Tree planting in these areas should be generous, providing high level screening. Shrubs should be planted according to their size to create masses and continuous planting beds on 50% of the land surface of the buffers. Grass maintenance should be minimized or eliminated from areas within the jurisdiction of GO transit.

X5 HAMLET OF NORVAL DESIGN AND HERITAGE PROTECTION GUIDELINES

Much of Norval's character is defined by the heritage architecture displayed by its buildings, as well as their scale and their relationship to each other. An important objective of these guidelines is to ensure new development, both public and private, is compatible with the heritage character of the area.

The following guidelines are designed to protect the unique hamlet character prevalent in the community while still allowing room for individual architectural impression. They are to be used by residents and developers in the design of projects as well as Town staff in reviewing zoning by-law amendments and site plan control applications.

Figure X5.1 identifies "gateways" and "focal points" as important elements towards achieving urban design objectives. Reference should be made to Figure X5.1 when reading the following guidelines.

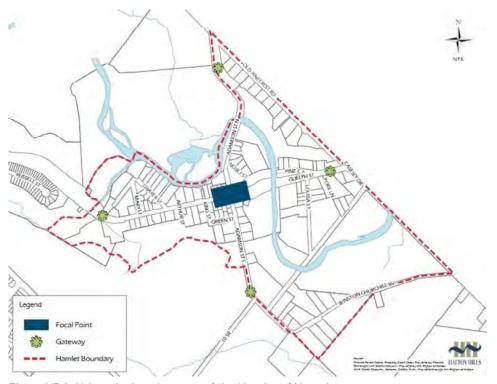


Figure X5.1: Urban design elements of the Hamlet of Norval.

X5.1 DESIGN GUIDELINE 1 – SUSTAINABILITY

A sustainable community is diverse, well connected and walkable and characterized by a strong respect for local identity and natural heritage.

X5.1.1 SUSTAINABLE BUILDING DESIGN

- New buildings are encouraged to reduce the energy consumption of building and site systems (HVAC, hot water, lighting) through the use of appropriate mechanical and construction technology (natural cooling, light recovery, passive solar design, etc.);
- Water use reduction technologies are encouraged, including water-efficient appliances, such as aerators, low-flow shower heads, dual-flush toilets, front-loading washers, waterless urinals and high-efficiency dishwashers;
- Waste water technologies, such as rain barrels or cisterns, are encouraged in new buildings to collect and filter rain water to be recycled for non-potable domestic uses; and,
- All buildings should have conveniently located waste management facilities to support the separation of waste into different streams according to reuse and recycling regulation (i.e. compost, paper, plastics, etc.).

X5.1.2 SUSTAINABLE MATERIAL CHOICE

- Where possible, construction materials should be recycled to reduce the
 environmental impacts of extracting and manufacturing new materials. If there are no
 salvageable materials available, efforts should be made to purchase materials from
 demolition sales, salvage contractors and used materials dealers;
- New construction materials should be locally sourced to reduce the impacts of transportation. Canadian products are generally designed to withstand our climate; and.
- Construction materials should be durable and should be considerate of life cycle costing to avoid premature replacement.

X5.1.3 SUSTAINABLE LANDSCAPING

- Recommended landscape materials should include non-invasive, non-cultivar species
 that are native to the area to support sustainable urban biodiversity. Species that are
 generally drought resistant and require minimal maintenance are encouraged;
- Landscape design should incorporate strategies to minimize water consumption (i.e. use of mulches and compost, alternatives to grass and rainwater collection systems);
- Existing significant trees, tree stands and vegetation should be protected and incorporated into site design where feasible;
- New trees should be planted to contribute to the Town's existing tree canopy. Where
 the rhythm of existing trees is interrupted, new trees should be planted as infill to
 maintain a continuous canopy; and,

 Site design should minimize impervious hard surfaces. The surface area of driveways and parking areas should be as small as possible within allowable standards, and porous pavement and landscaped areas should be maximized.

Note: For additional information related to sustainability, please refer to the Halton Hills Green Development Standards.



Figure X5.2: Solar panels, bioswales, permeable pavement and adaptive landscaping are encouraged in Norval.

X5.2 DESIGN GUIDELINE 2—GATEWAYS

Gateways are important features that symbolically define Norval, create identity and help people find their way around. As the basis of first impressions, gateways play an important role in the economic development of a community.

Development at gateways should therefore help shape this sense of identity by the nature and quality of landscaping, built form and urban design features such as public art.

- Gateway features should include taller architectural elements, which symbolize entry into the Hamlet, including customized lighting fixtures, landscape features (i.e. tree plantings), flags, special signage, and banners;
- Where buildings are located at gateways, they should prominently address streets through enhanced design treatments, such as taller corner elements, enhanced entry treatments and large expanses of glazing;
- Buildings within Gateway designations must incorporate streetscape improvements that will serve to provide shelter to pedestrians at these major intersections. For

example, this can be accomplished by setting back the building and developing a public space that incorporates, landscaping, public art, lighting and/or shelters;

- In order to strengthen the gateway image, different public art features such as sculptures, fountains, and decorative walls with murals may be used. Gateways should be given first priority when considering the placement of public art features;
- Gateway areas should be centres for information and wayfinding, directing visitors to key destinations within the Hamlet (i.e. Norval Park, Credit River, L.M. Montgomery Garden); and,
- Special ambient lighting and light effects may be employed in order to strengthen the "nightscape" of gateways.





Figure X5.3: Gateways should be defined by neighbourhood features, such as parks and landmark buildings.

X5.3 DESIGN GUIDELINE 3 - FOCAL POINTS

Built forms at focal points should be of the highest architectural quality to make it memorable and recognizable.

The intersection of Guelph St. (Highway 7) and Adamson St. (Winston Churchill Boulevard) is an important focal point of the community that provides a visual anchor, a point of interest and open space opportunities with access to the Credit River. The strengthening of this intersection through good urban design will improve its attractiveness in terms of tourism as well as general commerce and community pride.

- Built form and development (especially commercial, cultural or entertainment on the ground floor space) should be oriented toward public streets and spaces in order to make public space vibrant and pedestrian-friendly;
- On corner sites, a similar level of architectural expression should be used on both frontages, including enhanced facade articulation, a significant amount of glazing (minimum of 40%), signage etc.;
- Main building entrances of corner buildings should be close to the corner.
 Alternatively, access can be provided from both frontages;
- Corners should be accentuated by developing to the maximum height limits or with the positioning of entrances;
- Frame prominent intersections by locating new buildings or other structures closer to the street and defining the intersection space; and,
- Activities that attract or generate pedestrian traffic such as cafes, retail functions and public art are highly desirable at the focal points.



Figre X5.4: New buildings at focal points should be vibrant and pedestrian friendly.

X5.4 DESIGN GUIDELINE 4 - CROSSWALKS

Clearly marked crosswalks provide safe opportunities for pedestrian movement.

- Crosswalks should be a minimum of 3.0 metres wide, with visible edge bands to identify them as a continuation of the pedestrian surface;
- In certain locations, crosswalks may be completely raised to accommodate easier access for seniors and children as well as to serve as a traffic calming measure;

- Additional mid-block pedestrian signals and courtesy crossings with specialized markings and signage should be considered within the Community Core; and,
- Within the focal area, opportunities to integrate public art into crosswalk design should be explored.



Figure X5.5: The design of crosswalks may be used to celebrate the history of Norval through artistic interpretations.

X5.5 DESIGN GUIDELINE 5 – SURFACE PARKING AND SITE CIRCULATION

Surface parking lots should be appropriately located, well landscaped and visually divided into smaller courts to minimize their impact on the public streetscape.

Access to parking should be from rear lanes and side streets. Shared entrances to parking areas and loading areas (for 2 or more properties) are encouraged, in order to minimize the number of curb-cuts and to minimize impact on street and pedestrian traffic.

- Parking lcts be oriented to the rear or side lot areas of the building site. Parking lots should not dominate the frontage of streets. Where parking areas must be situated adjacent to the sidewalk, a landscaped buffer should be located between parked vehicles and the sidewalk. This buffer should be located within the private realm to not reduce the total sidewalk width;
- Planting strips, landscaped traffic islands and/ or paving articulation should be used
 to define smaller parking 'courts' that provide pedestrian walkways, improve edge
 conditions and minimize the aesthetic impact of surface parking; Surface parking lots
 should be appropriately located, well landscaped and visually divided into smaller
 courts to minimize their impact on the public streetscape.

- The amount of landscaping should be proportionate to the overall parking lot size, but generally, 1 tree for every 8 parking spaces is recommended. These can be clustered to facilitate snow clearing;
- Pedestrian-scaled lighting should be provided along pathways to enhance visibility and security; and,
- Where appropriate, permeable paving should be considered to promote drainage.
 Well-crained snow storage areas should be provided or snow should be removed off-site.

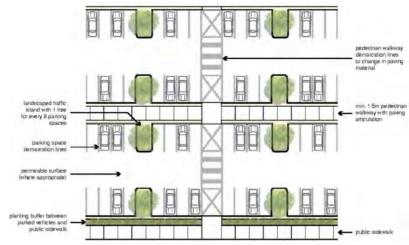


Figure X5.6: The illustration above demonstrates the key components used to mitigate the negative impacts of surface parking lots.



Figure X5.7: To minimize their impact on the public realm, surface parking lots should be located behind buildings, and should be designed as more intimate parking 'courts'.

X5.6 DESIGN GUIDELINE 6 - STREETS AND BOULEVARDS

Create boulevards that combine safe, unobstructed pedestrian travel routes with places to stop and socialize.

Boulevards are the interface between private and public spaces and other circulation systems. They represent one of the most important elements of the streetscape performing functional, aesthetic and social roles in the daily lives of the residents of Norval.

- Street and boulevard grades must be designed not to obstruct the movement of pedestrians;
- Within the Community Core, new development should maintain continuous sidewalks on both sides of Highway 7 and Adamson Street. Outside of the Community Core, sidewalks on one side of the street is acceptable.
- At points of congestion (focal points with outdoor patios, entrances to civic or entertainment buildings), sidewalks should be at least 1.85 metres wide to accommodate increased numbers of pedestrians and activities;
- Wherever possible, sidewalks should have elements for weather protection (permanent porticos or arcades, fixed or removable hanging canopies, permanent or temporary awnings);
- On-street parking may be situated within bulbouts, where appropriate. The bump-outs should be landscaped with mature street trees or low level ground cover;
- On-street parking should not conflict with bicycle/ pedestrian travel;
- Street furniture and landscaping should be located between the sidewalk and vehicle traffic. This zone may contain landscaped areas with site furnishings and infrastructure facilities such as benches, bicycle locks, transit stops, and utilities;
- In the long-term, where sidewalks are located directly adjacent to vehicle travel lanes, they should be relocated to accommodate the above furniture and landscape zone (please refer to Page 15 for example street sections).
- Street trees should be offset a minimum of 1.5 metres from the curb to accommodate snow storage, large vehicle movements and to minimize salt damage. Trees should be spaced consistent y at 6.0–9.0 metre intervals;
- A transition zone between the sidewalk and the building or property line provides a
 dedicated area for window shopping, spill-cut retail, building entrances, street
 furniture and signage. In areas not bounded by buildings, this transition zone may
 include landscaping or a second row of trees;
- Sidewalk surface textures should be designed to be sufficiently smooth and flat to accommodate safe and pleasant use for people of all ages and abilities. Similarly, surface textures should provide additional visual qualities through use of different colors, shapes or materials;

- Pedestrian-scaled boulevard lighting should be provided in areas of high use, such as focal points, and where the future tree canopy may impact light levels; and,
- All boulevards should be designed to accommodate snow storage.



Figure X5.8: Street furniture and landscaping should be located between the sidewalk and vehicle traffic and parking. Street furniture and biycycle parking are encouraged throughout Norval, particularly at key destinations (i.e. Community Core) and should be situated where they will not interfere with pedestrian circulation.

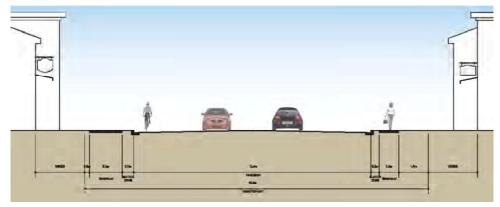


Figure X5.9: Existing Condition: Narrow boulevard widths limit the potential for enhanced boulevard treatment.

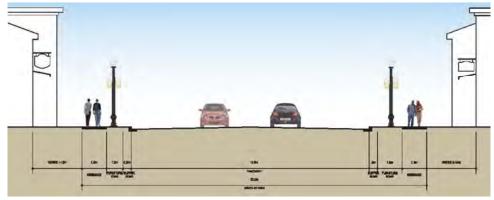


Figure X5.10: Alternative 1 (Short-term) - The relocation and narrowing of the sidewalk provides a buffer between pedestrian and vehicle traffic and accommodates basic pedestrian amenities (i.e. lighting and banners).



Figure X5.11: Alternative 2 - Providing bulbouts along Guelph Street provides the opportunity for on-street parking and the addition of street trees, seating, and pedestrian amenities.

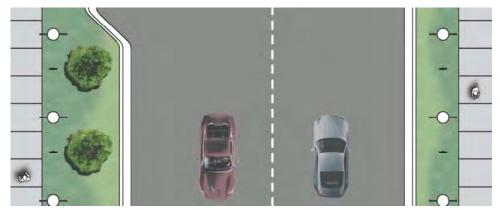


Figure X5.12: Landscaped bulbouts provide space for additional boulevard treatments.



Figure X5.13: Alternative 3 (Long-term) - As part of the reconstruction of the Guelph Street right-of-way (in combination with the Norval interchange), a wider right-of-way width could allow the proper boulevard width to accommodate street trees, lighting and banners, and pedestrian amenities on both sides.

X5.7 DESIGN GUIDELINE 7 – LIGHTING FIXTURES

Well-placed lighting standards create safe, active streetscapes.

Exterior lighting is an important and relatively inexpensive way to improve streetscapes and open spaces. This is particularly true during winter periods where daylight is reduced. Lighting, properly employed, attracts people, and provides safety and comfort.

- At gateways and focal areas, the Town Standard for decorative lighting should be applied to reinforce the cultural character of the Hamlet;
- In the Community Core where buildings are built to the edge of the sidewalk fixtures may be mounted directly on buildings;
- Alternatively, light fixtures should be placed regularly between sidewalk and curb cuts to allow unobstructed pedestrian movement;
- Lighting fixtures should be no more than 0.6 metres from the curb;
- Spacing of lighting fixtures should vary according to the intensity of pedestrian use.
 For the typical situation, spacing will be approximately 10 metres;

- An average luminary mounting height should be 3.6 metres (4.2 metre maximum);
- Downcast, pedestrian-scaled lighting enhances safety and visibility on streets. At gateways and focal points, lighting can be used to accent special features, such as heritage properties, landscaping and signage;
- Private property lighting should ensure safe and well lit pedestrian areas, including parking areas and building entrances; and,
- All pedestrian and street lighting should be "dark sky" friendly to minimize light pollution.



Figure X5.14: Appropriately designed lighting fixtures add to the façade's aesthetic while offering nighttime visibility. Light standards throughout Norval should reflect the historic character of the community.

X5.8 DESIGN GUIDELINE 8 – SIGNAGE

The Hamlet of Norval has a rich and diverse cultural heritage, which should be enhanced by appropriate signage.

In most cases, communities lack proper community identification, which can increase civic pride and awareness of the community. Such identification provides direction to visitors and through traffic and provides basic information on local history and architectural heritage.



Figure X5.15: Ensuring signage is high quality and is appropriately located within the Hamlet will enhance wayfinding, celebrate the history of Norval, and help to facilitate tourism. Portable signs (like "sandwich boards") provide interest and add vitality to the streetscape, though their use should be regulated.

- Signs which obscure architectural elements on heritage building are not permitted;
- Traditional materials such as wood, brass, or bronze are the most appropriate
 materials for signage within the Hamlet Community Core. Some modern materials may
 be considered if they blend with the material of built structure upon which the sign is
 to be located:
- Utilization of symbols, and historic lettering is encouraged;
- In historical areas, in general, each building is permitted one ground sign, canopy sign, one projecting sign, one soffit sign, one wall sign and window sign;
- In a case where the operations of a store have expanded into a number of adjoining storefronts, individual repeating signboards should be considered for each of the original storefronts;
- Pedestrian scale signs (window, hanging, awning signs) should be small and positioned to interfere as little as possible with neighbouring signs;

- Free-standing signage should not interfere with pedestrian circulation or accessibility;
- Within the Hamlet Community Core Area animated, portable or roof signs are discouraged, as well as billboards and internally illuminated signs;
- The amount of information on signs should be limited the shortest message has the greatest impact; and,
- Historical photographs may be used to establish the styles and types of signage appropriate to a building within its district during the era of its construction and early life and use these models for contemporary signs.

Note: Notwithstanding the above guidelines, all signage along Guelph Street/Highway 7 must conform to the Ministry of Transportation's Corridor Signage Policy.

X5.9 DESIGN GUIDELINE 9 - TRAILS

Provide alternative transportation options, and recreational and tourism opportunities through a well-connected trail network.

Trail development is an important component of providing non-vehicular access through the Hamlet of Norval and along the Credit River Valley. Trail development in the Norval Secondary Plan Area must be consistent with the Halton Hills Trails and Cycling Master Plan and the following policies.

- Trails within Norval should have minimum widths of 3.0-4.0 metres to accommodate pedestrians, bicyclists, and other types of recreational users;
- Trails should be designed, wherever possible, as separate linkages from other vehicular traffic:
- Development of trails that link existing natural areas, parks and open spaces, particularly along the Credit River Valley, should be encouraged;
- Design of trails should allow easy access for every user group. Surfaces of the trails should be carefully graded and finished to allow full accessibility except where such finishes have an impact on Greenlands areas. In these sensitive areas, the trails should be constructed cf low impact materials that are porous and stable, such as crushed rock, wood chip paths or board walks;
- Design of trails should consider elements of public safety, avoiding creation of entrapment spots by non-transparent landscaping or through creation of walls or similar built features and should be designed to have frequent, clearly-marked exits to areas of high pedestrian and car traffic;
- Trails should be clearly marked with attractive way-finding (signage) systems;
- Trail development should explore opportunities to introduce environmental or cultural / historical learning experience and other educational experience (flora, fauna, local history) such as those that have developed at the Willow Park Ecology Centre; and,

Trails should generally have lighting, except in Environmentally Sensitive Areas where
light could negatively impact on natural habitat areas. The necessity for and level of
lighting, as well as the type of light fixtures will depend on the size and character of
the trail.



Figure $\times 5.16$: Trails should provide links throughout the Hamlet and Region with easy access for a range of users.

X5.10 DESIGN GUIDELINE 10 - BUILDING CHARACTER

Create an active, attractive public realm through buildings that have a distinct image and quality.

The Hamlet of Norval has a wide variety of building styles. These styles, while different, have a variety of similar elements that should be reflected through high quality building design that supports the unique character and scale of the Hamlet. Uniqueness, achieved through creative use of forms, details and colours should enhance pedestrian enjoyment along the street.



Figure X5.17: Typical heritage façade articulation elements in the Hamlet.

- New buildings, particularly in the Community Core, should reflect the scale, and common elements that define the heritage building character (please refer to the diagram on the right);
- Character should be achieved through creative and sensitive architectural design utilizing:
 - building silhouette;
 - spacing between buildings;
 - setbacks from street property line;
 - massing of building form;
 - location and treatment of entrances;
 - surface materials, textures and finishes;
 - shadow patterns from massing and decorative features;
 - style of architecture; and,
 - landscaping on the site;

- Existing buildings within the Hamlet reflect a variety of building styles, including Post-War American, smaller "cottage" character, and a more traditional Victorian style (predominantly found on the Hamlet's heritage churches). These styles have a number of key elements that should be reflected in new development, including:
 - gabled roofs;
 - protruding eavestroughs;
 - façades with vertically oriented windows and a wide variety of wall detailing;
 - double-hung windows;
 - stone lintels;
 - columns:
 - bending and arches of same or contrasting colour;
 - ground arches;
 - wide front porches; and,
 - wood detailing, etc.;
- In addition, door lintels, window lintels and sills, window shutters, horizontal bands and cornices, different types of decorations (tiles or sculptural elements), light lamps, fences or balustrades should be taken into consideration during architectural design of new buildings in Norval;
- Set-backs should enhance the streetscape if they denote an important/public building or should create a well-defined public realm which is highly usable and pedestrian friendly; and,
- All front yard and side property lines in residential areas should be delineated with low hedges or similar plantings (rows of shrubs, linear flower beds). High, solid, fencing (over 2.0 metres) in front yards is strongly discouraged unless the property is adjacent to an industrial or commercial use that requires visual buffering.



Figure X5.18: I⁻ intensification occurs within the Commercial Core and new commercial buildings are developed, they should reflect the key elements that define the character of the existing buildings within the Hamlet.



Figure X5.19: Buildings in the Community Core should reflect the heritage character of Norval. Window lintels and sills, window shutters, wood and stone detailing and façades with vertically oriented windows are important character components of residential buildings in the Hamlet.

X5.11 DESIGN GUIDELINE 11 – BUILDING HEIGHT

Create a strong street edge and a human scaled environment through appropriate built form, height and massing.

Building heights are regulated in the Official Plan and should not exceed 2 storeys. Within these restrictions, the following guidelines should be considered.



Figure X5.20: Buildings should be uniform height to create a defined street ceiling. Renovations and additions to existing buildings should not be more than 1/3 of the existing building volume. The illustrations above demonstrate an example of an appropriate addition that is consistent with the existing character of the building.

• Buildings should generally be of uniform height that does not vary more than 25 % from each other to define a street "ceiling";

- Infill buildings abutting existing structures at the building line should generally match
 the adjacent building height, or provide a clear offset in height so as to maintain the
 visual integrity of the existing structure;
- Buildings abutting lower scale buildings should ensure a transition in scale. The location of windows, horizontal lines and cornices, gables and rcofs can be used to scale and proportion buildings and create transitions;
- Additions and renovations to existing buildings should ensure a final building that reflects the height, scale and massing of adjacent buildings;
- Additions/renovations to existing buildings should not be greater than 1/3 of the total building volume, and should be limited to no more than 1 storey above the existing height of the building (to a maximum of 2 storeys);
- Within the Community Core, vertical additions should result in building heights no greater than 2 storeys (7.5 metres);
- The height of planned buildings should comply with the permitted number of stories allowed by these design guidelines. Since the Secondary Plan proposes mixed use development in the Hamlet Community Core Area it is advised that the approximate maximum allowed heights per individual storey be:
 - for commercial ground floors: 4.2m;
 - for office use second floors: 3.6m;
 - for standard residential floors: 3.3m; and,
 - for non-standard residential lofts (mansards, attics): 3.6m max, although all abovementioned heights may be doubled if the architectural concept proposes loft-type of space;
- Mechanical penthouses, clock towers or similar architectural features shall not be subject to these height restrictions, but their massing and proportions should be well integrated and in direct relation to the building;
- Building heights should be used as a tool for assuring a minimum of 5 hours of daily sunlight in the public realm. Building envelope and height should be derived from the sun angle (on the shortest day in the year Dec. 21) desired for a particular part of the street; and.
- Building height should be utilized in conjunction with setback control in order to establish proper sun radiation to public spaces.

X5.12 DESIGN GUIDELINE 12 – BUILDING MATERIALS

Finishing materials should be of a high quality and should extend to all sides of the building, including projections.

Building materials are one of the predominant factors which determine character and quality of the building exterior. Careful consideration of materials, especially with respect to colour and texture, will make a significant contribution to the overall streetscape.

- Extensive mixtures of different materials should be discouraged. Exterior materials should be limited to no more than two complimentary materials, to avoid cluttering or an overly complex appearance;
- Acceptable exterior materials are: solid brick, cut stone, stucco, wood shingles, wood siding, glass, ceramic tiles or adequate combinations of them;
- Use of building materials should complement each other and complement traditional materials in the Hamlet Community Core. Although, there are many new materials on the market, more natural, traditional materials (brick, stone, wood) are encouraged in Norval:
- Imitation materials are discouraged. Building materials should not be used to replicate other materials (i.e. shingles that resemble bricks, etc.); and,
- Contemporary materials, such as aluminum, steel panels, coloured glass, ceramic tiles, etc. may be considered for use in future developments in conjunction with traditional materials. They should be used as accents for no more than 30% of front facades.



Figure X5.21: Preferred cladding materials include brick, stone, metal, glass, in-situ concrete, pre-cast concrete and stucco. Building materials should be complementary to the heritage and character of the Hamlet, especially in the Community Core.

X5.13 DESIGN GUIDELINE 13 - RESIDENTIAL BUILDINGS

The built form, height and massing of residential buildings should be sensitive to adjoining areas, and the Hamlet of Norval as a whole.

X5.13.1 GENERAL

- The mass and scale of residential buildings should be sensitive to adjoining areas. Currently, the majority of residential cwellings in Norval are between 1 and 2 storeys and future buildings should respect this 2 storey height limit;
- Dwellings should be oriented towards streets and/ or open spaces to provide a sense
 of enclosure and enhanced safety through "eyes on the street";
- Primary building facades, particularly those which face streets, parks, and open spaces, should exhibit increased architectural detailing and generous amount of window openings to give attention to the prominence of these building faces and encourage strong visual connections between the private dwelling and public street; and,
- Flanking façades should have a design and materials standard equal to the front façade through the use of wrap-around porches, sun rooms, bay windows and side entrances.

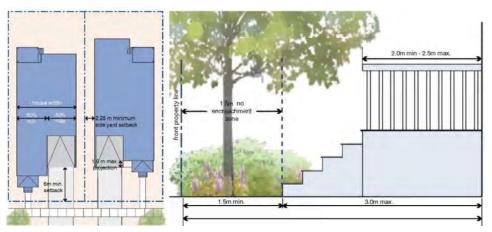


Figure X5.22

X5.13.2 SINGLE DETACHED DWELLINGS

- A range of front yard setbacks currently exists within Norval, and should continue to create a diversity of setbacks on the streetscape. However, front yard setbacks should range between 4.5 to 7.5 metres;
- Within the Community Core, front yard setbacks should range between 3.0 to 5.0
 metres to create an appropriate transition between the public and private realm, while
 still maintaining a connection to the street;
- 1.5 metres of this minimum setback, from the front property line, should be a "no encroachment" zone. The remaining setback may contain uninhabitable building elements (e.g. porches, steps, roof elements, etc.);
- Where dwellings have a front yard garage, a minimum 6.0 metre setback is recommended between the front of the garage and the front property line to accommodate one vehicle without disrupting the sidewalk;

- Interior side yard setbacks should be a minimum of 2.25 metres (including roof overhangs), or 3.0 metres where a garage is accessed by a side-yard driveway. Exterior side yard setbacks should be a minimum of 4.5 metres;
- There should be a minimum rear yard setback of 7.5m measured either to the rear property line or, in instances where a garage is present in the rear yard, to the face of the garage which is closest to the residential dwelling;
- Garage design should be complementary in character and quality of detail to the principal dwelling. To ensure garages are not a dominant feature of the community, they should be no wider than one half the width of the house;
- The minimum depth for porches and decks should be 2.0 metres; and,
- The top of the front porch should not be higher than 1/2 a storey above grade.

X5.14 DESIGN GUIDELINE 14 – COMMERCIAL BUILDINGS

Commercial buildings should promote attractive, pedestrian-supportive streetscape with a variety of public amenities.

Commercial buildings should have a high quality of architectural design to enhance and activate the streetscape.

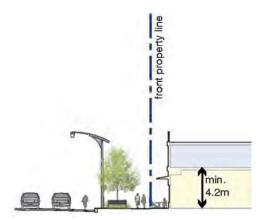


Figure ×5.23: Buildings in the Community Core with retail at-grade should have a minimum ground floor height of 4.2m.

- Commercial-|elated features that detract from the streetscape, such as excessive or illuminated signage, are discouraged. Pedestrian amenities, including walkways that connect entries, seating landscaping and human scaled lighting are encouraged wherever possible;
- Buildings should incorporate architectural detail such as vestibules, recessed entrances and covered walkways, canopies and awnings to reflect the heritage character of the Hamlet, and to provide weather protection;
- Commercial buildings should not have blank façades facing the street. The facades should have distinct architectural detailing, including entrance and window design;

- A significant amount of the building frontage on the ground floor and at the building base levels should be glass to allow views of the indoor uses and create visual interest for pedestrians;
- Landmark buildings are encouraged at the intersection of Guelph Street and Adamson Street, and should reinforce the prominence of this location through appropriate massing, building projections, recesses at-grade, lower storey design and open space treatments:
- A 4.2 metre floor-to-ceiling height is recommended at-grade to create a strong street presence and allow for flexible commercial space; and,
- Where setbacks vary on both sides of a proposed commercial building, the average of the two setbacks should be used.

X5.15 DESIGN GUIDELINE 15 – INSTITUTIONAL BUILDINGS

Institutional buildings should be designed to reflect their civic role through prominent, high quality architecture.

Existing institutional uses, such as places of worship and educational facilities, are focal points in the Hamlet. As required, opportunities for additional institutional uses (i.e. community centre, museum, etc.) should be explored, and can be attractive destinations within the Hamlet.



Figure X5.24: New institutional buildings should be attractive landmark sites within the Hamlet.

 Institutional buildings should be located at gateways and focal points, and should be highly visible;

- Building design should promote safety and ease of access through well-defined entrances and windows facing the public street and primary walkways;
- Main entrances should be highly visible and distinguished through the building's architecture and detailing (i.e. door size, entry and windows); and,
- Façades should maximize the use of operable windows for natural illumination and ventilation.

X6 HAMLET OF GLEN WILLIAMS DESIGN AND HERITAGE PROTECTION GUIDELINES

The heritage character of the hamlet is rooted in Glen Williams' history as a mill town of the 1800's, a character that is reflected in the architectural tradition of buildings from time. The consultant team, through the public participation process, has recognized that the community has a strong desire to preserve this history and the social, intimate characteristics typical of a small town.

The hamlet design analysis has revealed that, despite the strong impact of heritage buildings in the hamlet centre, the overall architectural character of Glen Williams is a variety of building forms and styles, representative of Glen Williams' organic pattern of growth over the last century.

The guidelines below describe how the heritage character of the community should be retained both in its infrastructure and its building forms, both existing and future

X6.1 STREET TYPE AND PATTERN

Older streets in the hamlet have street sections as narrow as 12 and 15m. Narrower streets allow for houses to have "eyes on the street", which contributes to a safe and intimate pedestrian environment. There is a strong sense of this "community supervision" in the hamlet. The following guidelines should be considered when developing or improving new roads:

- Consider the use of rural road or rolled curb sections to promote the rural character of the hamlet;
- Consider modifying road engineering and lot grading standards, without compromising safety standards, where new streets encounter topographical features, woodlots, single trees, and other natural features, to preserve the natural character of streets;
- Utilize a range of street/block types including irregular blocks, short orthogonal blocks, winding streets, and rural cul-de-sacs to preserve the varied character of the hamlet street system; and,
- Limit block lengths to 175m, in keeping with the smaller block lengths of the hamlet centre.

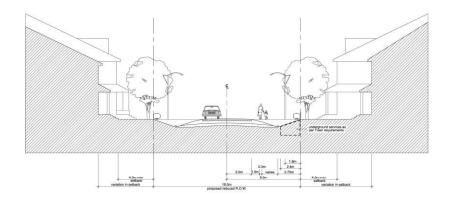


Figure X6.1: Proposed Rural Cross Section. Note: This sketch is for illustrative purposes, and does not replace Town standards.

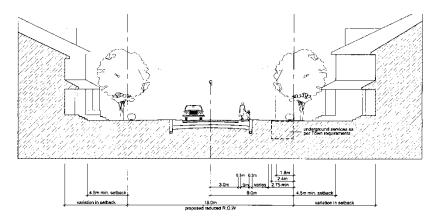


Figure X6.2: Proposed Rolled Curb Street Section. Note: This sketch is for illustrative purposes, and does not replace Town standards.

X6.2 LOT CONFIGURATION

- Vary lot frontages and depths within each streetscape to maintain the hamlet's random lot pattern. Allow adjacent lots to vary in lot configuration.
- Ensure that lot sizes allow for the safe and effective installation/connection of sanitary services (private, communal or municipal), per regulatory requirements.
- Avoid streetscapes with uniform lot frontages. Permit adjacent lot frontages to vary up to 50%. It is recommended that no more than four consecutive lots shall have the same frontage. Beyond a maximum of four lots, allow adjacent lot frontages to vary by 50%.

X6.3 SETBACKS

X6.3.1 FRONT YARD

- Encourage flexibility of front yard setbacks to maintain the variety of setbacks found on hamlet streetscapes. It is recommended that no more than four consecutive lots shall have the same front yard setback.
- Ensure that no front wall of a house shall be set further back than half the length of the adjacent house to maintain privacy of rear yards.
- On one streetscape, ensure that a minimum of 30% of the front wall of houses are located at the minimum setback to provide a sense of enclosure to the street and a pedestrian oriented environment. Consider revising the current 50ft (15m) minimum front yard requirement to 4.5m.

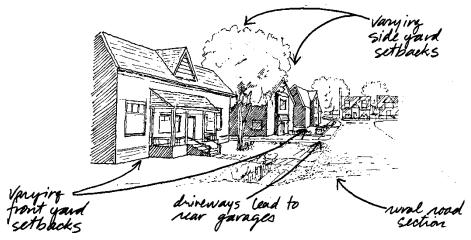


Figure X6.3: Setbacks

X6.3.2 SIDE YARD

- Side yard setbacks should allow for access, servicing requirements, variations in grading and natural features.
- Side yard setbacks in the hamlet vary from as low as 2m up to 35m. Ccnsider revising the current 15ft (4.5m) interior setback to 2.25m to allow for flexibility of siting of the main house. Refer to "Houses at Corner Lots and Pedestrian/Open Space Links" for reference to exterior side yard setbacks.

X6.3.3 REAR YARD

The current 25ft (7.6m) rear yard setbacks can be maintained for all lot depths.

X6.4 HOUSES AT FOCAL LOCATIONS

X6.4.1 CORNERLOTS

- Houses at corner lots are important within a streetscape as they are visible from both streets and create the entrance condition or a "gate" to the street. Flanking elevations, garages and private yard enclosures are exposed to the public realm at these locations. The design of these buildings and elevations should have special consideration.
- Exposed elevations should have equal importance with respect to openings and attention to detail. The use of wrap-around porches and corner bay windows is encouraged to link the two facades and to accentuate the corner condition. The main entrance should be located on the long frontage to avoid blank sections of walls.

X6.4.2 HOUSES AT PEDESTRIAN TRAILS/LINKS AND OPEN SPACE AREAS

- Houses that border upon open space are also visible from two sides, similar to corner lots. Both elevations should have equal importance with respect to openings and attention to detail.
- The main entrance should face the street. The use of wrap-around porches and corner bay windows is encouraged to link the two facades, to accentuate the corner condition; to link the two elevations; and, to provide a visual connection from the house to these public areas.
- For both corner and pedestrian link locations, consider a reduction of the current exterior side yard setback of 30ft (9.1m) to 4.5m to increase the sense of community supervision at these public space connections.

Note: A 10 metre setback will be required from valley top of bank to lot lines to allow adequate space for pedestrian trails.

X6.5 GARAGES AND AUXILIARY BUILDINGS

- Encourage the use of detached garages that are located at the rear of the lot. Many garages in the hamlet are detached and to the rear and/or side of the lot. To encourage this design strategy, consider exemption of the area of rear yard garages from calculations for maximum coverage, under the zoning by-law.
- Where garages are attached, they shall be recessed a minimum of 1.0 m from the face of the house. Avoid garages that project forward from the front wall of the house.

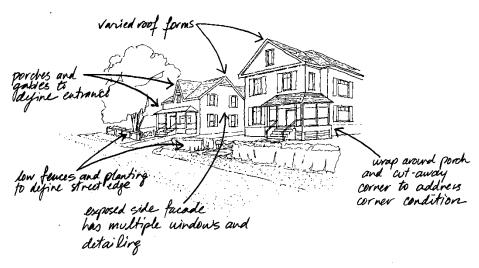


Figure X6.4: Urban Design Principles

X6.6 ARCHITECTURAL DESIGN PRINCIPLES FOR NEW DEVELOPMENT

The following guidelines are intended to aid developers and builders to create buildings and streets that contribute to the quality of intimate, random and individual qualities of streetscapes that can be found in the heritage district and that could foster the kind of atmosphere that can be defined by "hamlet character".

X6.6.1 STREET ADDRESS

The main elevation of houses shall address the lot frontage to provide a clear identification of the street address. Architectural elements such as the front entrance; habitable spaces with windows to the street; porches and stairs; and, terraces and balconies, convey the sense of houses "looking out onto the street".

X6.6.2 ENTRANCE ARCHITECTURE

- The design of houses should accentuate the main entrance. Attention should be given to the architectural detailing of entrances and their importance in setting the character, or "identity" of the streetscape.
- The use of porches is encouraged as a means to define the entrance and create well-proportioned front elevations. The detailing of porches should be integrated with that of the house as a whole.
- Porches foster social activity between the house and the street, which is very common along the streets of Glen Williams. Porches should be generous enough in depth and length to allow for furniture and planting. A minimum depth of 1.8m is recommended.
- Walkways from the entrance to the street are encouraged as a means of linking street and property at a pedestrian scale.



Figure X6.5: Entrance Architecture

X6.6.3 RELATIONSHIP TO GRADE

The relationship of the house to grade is important in the streetscape. The main floors of houses in the hamlet tend to be at grade or close to grade. In cases of strong topography, entrance levels are related to grade through terracing. Basement garages or high service floors do not appear in the hamlet and should be avoided.

X6.6.4 WINDOWS AND PROJECTING ELEMENTS

- The design, placement and size of windows are important in creating architecturally well-proportioned streetscapes and affect the sense of privacy between properties. Special attention should be given to the location and detailing of windows.
- Projections such as bay windows and balconies, chimney elements, projecting cornices and roof eaves are encouraged to create variety along the streetscape.
- Bay windows, balconies, porches and porticoes may project up to 1.8m from the main building face into the front yard setback. This is intended to encourage houses to have these elements and be located close to the street edge.
- Bay windows may be single or double storey in height. Their proportions should be appropriate to the building from which they project.

X6.6.5 ROOFS

Because of the various ages of houses in Glen Williams, no single roof type or pitch is prevalent. Heritage homes typically have steeply-pitched roofs with a variety of roof forms such as dormers and gables, while bungalows have shallower hip roofs. A variety of roof forms appropriate to the scale and architecture of the built form is encouraged.

X6.6.6 CONSTRUCTION MATERIALS

 A variety of building materials is used throughout Glen Williams. To promote the character of the hamlet, the use of materials found in heritage buildings, such as brick, stone and wood is encouraged.

- Some houses and porches in the hamlet, mostly those of wood siding, are painted light colours. This creates an attractive, lively streetscape. The use of colour is encouraged for building facades and/or for architectural details to create streetscapes that are in keeping with those of the hamlet centre.
- Materials for garages and outbuildings should be similar to those used for the main house.

X6.6.7 LANDSCAPING

- The use of fences and landscaped elements, used in combination, is encouraged to delineate between properties.
- Where an existing natural feature is located within a property, such as a woodlot or single tree, it should be integrated into the landscaping design as a means to promote and preserve Glen Williams' natural setting.
- Many paths to houses in the hamlet are identified with planted features. Where
 walkways extend to the street, they should be augmented with planting both to
 provide an alternate means of street address and to bring ratural elements to the
 street edge.

X6.7 IMPLEMENTATION

X6.7.1 DESIGNREVIEW

The Design Review process shall occur in conjunction with applications for Draft Plan Approval and prior to application for building permits. The Design Review process shall monitor the realization of the vision for Glen Williams including:

- preservation and promotion of the character of Glen William's built form;
- protection and enhancement of Glen William's open space retwork and natural environment:
- improvement of pedestrian connections to the commercial and community facilities of the hamlet core and to Glen William's open space system; and,
- preservation of the balance between development in the hamlet and adjacent natural lands.

The Design Review process shall determine how new development fulfills the hamlet design recommendations for:

X6.7.1.1 Street System

- A street pattern that responds to significant natural features and / or topography.
- Street sections and streetscape elements.

 Connection of parcel to other reighbourhoods and/or open space with pedestrian paths, where possible.

X6.7.1.2 <u>Lot Configuration, Setbacks, Housing Types, and Garages</u>

- Variation of lot sizes.
- Setbacks.
- Proposed housing types and garage locations.

X6.7.1.3 Houses at Focal Locations

 Treatment of houses at corner lots, those abutting pedestrian trials and open spaces and at other focal locations.

X6.7.1.4 <u>Architectural Principles</u>

- Response of new development to heritage character, where new development is in proximity to, or includes within the site, buildings of heritage character.
- Intended architectural character of built form.



Figure X6.6: Landscaping

X6.7.1.5 <u>Landscaping Principles</u>

- Integration of natural features on the site.
- Character of new landscaping and streetscape features.

X6.8 GATEWAYS

Gateway features should be established at key entry points within the community to help strengthen the character and identity of Glen Williams Development at gateways should therefore help shape this sense of identity by the nature and quality of landscaping, built forms and design features such as public art.

Depending on location and available space, gateway features may include taller architectural elements that symbolize entry-like gateposts such as columns and customized lighting fixtures. Landscape features (such as plantings, flags, special signage, and banners) may also accentuate gateways.

In order to strengthen the gateway image, different public art features such as sculptures, fountains, and deccrative walls with murals may be used. Gateways should be given first priority when considering the placement public art features.

Building developments within Gateway areas must incorporate streetscape improvements that will serve to provide shelter to pedestrians at these major intersections. For example, this can accomplished by setting back the building and developing a public space that incorporates, landscaping, public art, lighting and/or shelters.

X6.9 DOCUMENTATION

The information required for the Design Review process, <u>in addition to normal requirements of draft plan application</u>, shall be prepared by a qualified architect and or landscape architect and include:

- a) Site Plan(s) indicating:
 - i) setbacks, heights and housing locations;
 - ii) clear location and site dimensioning of septic beds, if privately serviced;
 - iii) indication of pedestrian connections and access to open space;
 - iv) topography and new grading;
 - v) existing vegetation and proposed character of landscaping; and,
 - vi) roads, walkways, driveways, terraces and other impervious surfaces location of public features such as postal kiosks and any above grade utilities; and,
- b) cross sections of each street type showing:
 - i) width of right-of-way;
 - ii) type of road section being used with all services located as per the Town's requirements;
 - iii) location of street lighting and furniture;
 - iv) boulevards; and,
 - v) streetscape elevations illustrating proposed residential character, including:
 - entrances and porch locations;
 - heights;

- roof form; and,
- fenestration.

X7 HAMLET OF GLEN WILLIAMS TERMS OF REFERENCE FOR ENVIRONMENTAL IMPLEMENTATION REPORTS

An Environmental Implementation Report (EIR) must be prepared according to the policies of the Glen Williams Secondary Plan, on a tributary basis. The complexity of the EIR will be dependent on the environmental sensitivity of the subject tributary and adjacent watercourses. It is suggested that the proponent consult with the Town of Halton Hills, Credit Valley Conservation (CVC) and the Region of Halton prior to beginning to prepare the EIR. The EIR can be prepared concurrently with any other studies that are required.

X7.1 PURPOSE

The purpose of the EIR is to:

- ensure the goals and objectives set out in the Scoped Subwatershed Plan for Glen Williams are met when land use changes are planned;
- develop an appropriate plan that will achieve the targets that have been set for individual environmental resources:
- streamline the review and approval processes; and,
- collect and provide sufficient detailed data so that the proposed implementation reports and stormwater management reports can be developed.

X7.2 PROCESS

The EIR consists of fourteen steps divided into three parts:

- Part A Background Review;
- Part B Detailed Studies/Impact Assessment; and,
- Part C Implementation.

The EIR process is summarized on Table X7 and the steps in each of the three parts are detailed below.

TABLE X7: ENVIRONMENTAL IMPLEMENTATION REPORT PROCESS

Part	Description	Output	Step
X7.3	Background Review	Background Report that includes:	1-5
	 Brief description of the proposed land use change 	General site mapDevelopment schedule	
	 Describe and implement monitoring 	Literature cited	

Part	Description	Output	Step
	to collect baseline conditions • Field work carried out to better define the environmental resources	 List of background data consulted Constraint map that includes all environmental and water-related features, in and adjacent to the proposed area of land use change List of detailed studies needed for Part B 	
X7.4	Detailed Studies and Impact Assessment Describe the purpose of the land use change Describe the activities associated with the land use change Describe possible alternatives to the proposal	Impact Assessment Report that includes: Detailed location map Site plan Surface water and groundwater resources study Geomorphology study Aquatic resources and water quality study	6-9
	 If insufficient information exists to adequately assess the impact of the proposal, then detailed studies need to be completed The hydrogeology study requirements are more detailed for extraction developments that plan to go below the water table An impact assessment will be included in this phase – a statement that describes the 	 Terrestrial resources study Hydrogeology study to assess areas of potentially higher recharge Hydrogeology impact associated with aggregate extraction Summary of alternative scenarios, the associated impacts, and a list of mitigative 	

Part	Description	Output	Step
	potential impacts that the land use change will have on environmental resources Show how the proposed land use change has considered the environmental resources in planning/design proposal Set environmental targets	 Revised constraint mapping Forecasted changes in all environmental resources Note: Acceptable mitigation must conform to the goals and objectives, and must meet targets. 	
X7.5	 Will include a long-term monitoring plan to determine if and where change is occurring Includes a recommended plan that shows how goals and objectives are achieved Includes recommendations for implementation 	Implementation Report that includes: Stormwater Management Plan Long-term monitoring plan Conclusions Recommendations Mitigating measures Executive Summary of Parts A, B and C Note: Monitoring plan must be designed to evaluate if the targets set are being met.	5-þ, 10- 13

X7.3 PART A – BACKGROUND INFORMATION

X7.3.1 STEP 1 INTRODUCTION TO PROPOSED LAND USE CHANGES

The purpose of this component is to focus on the tributary of concern and translate pertinent known information to establish initial constraints and baseline conditions. The end product is to be able to identify the needed detailed studies to be done in Part B.

This section should include:

- A brief description of the proposed land use change.
- A general map of the area.

X7.3.2 STEP 2 BASELINE MONITORING

Monitoring is completed to check the impact that the proposed land use change has on the environment. The purpose of the baseline monitoring is to establish the baseline conditions and existing environmental trends to which future monitoring results will be compared.

Information should be collected on (but not limited to):

- water quality;
- fisheries:
- hydrology;
- groundwater quality and quantity;
- stream morphology; and,
- terrestrial resources woodlots, wetlands, wildlife habitat, Environmentally Sensitive Areas, Areas of Natural and Scientific Interest.

When preparing a baseline monitoring plan, it is important to ensure that many different disciplines are being monitored at the same site when possible and appropriate. For example, fisheries and water quality monitoring should take place at the same site.

An explanation of how indicator parameters were established, for example, what criteria were used when deciding what to monitor, will be included in this section.

It is essential that baseline monitoring be included in the project work plan, and that associated costs are included in the project budget.

X7.3.3 STEP3 BACKGROUNDINFORMATION

Include literature cited, all background data, a listing of information sources contacted during the study, and a listing of the professionals on the study team.

X7.3.4 STEP 4 EXISTING CONDITIONS AND INITIAL CONSTRAINT MAPPING

Fieldwork should be carried out to better define the existing functions, linkages and limits of the natural environmental resources. Detailed constraint mapping at the tributary scale will be prepared that highlights the environmental resources detailed in the appropriate Tributary Fact Sheet in the Scoped Subwatershed Plan for Glen Williams, as well as agency and municipal setback requirements (i.e. the Environmental Protection Strategy, the Fisheries Act, valleyland setbacks). This part of the submission will show how the proposed land use change has been designed in conformity with the initial constraint mapping and will show how the EIR conforms to the general concepts of the Scoped Subwatershed Plan for Glen Williams. The mapping specifications are outlined under Item 14.

The mapping may include, but is not limited to:

- all hydrologic features including watercourses, swales, ponds, depression areas, springs, seepage areas and existing stormwater management facilities;
- Regulatory Floodplain as per the CVC Flood Plain Management Policies;
- present day land use;
- wetlands, woodlots and other terrestrial and riparian communities;
- terrestrial corridors (existing and potential);
- water quality;
- aguatic communities and habitat, and appropriate setbacks;
- fill lines, valley slopes, top of bank, ecological considerations and geotechnical hazard areas as per the CVC Watercourse and Valleyland Protection Policies;
- groundwater recharge and discharge areas, and the linkages between them;
- groundwatersheds (extending outside the study area if applicable);
- stream morphology, channel sensitivity, and setbacks required to allow natural channel functions (migration, meander belt width, flooding); and,
- limit of extractable resource, and grade and type of extractable resource.

X7.3.5 STEP 5 REPORT

Once the requirements of Steps 1 to 4 have been met, a Background Report will be prepared and submitted for review and approval prior to proceeding to the following steps.

X7.4 PART B - DETAILED STUDIES AND IMPACT ASSESSMENT

X7.4.1 STEP 6 DETAILED STUDIES

If found through completing Part A that insufficient information exists to complete the constraint mapping or develop protection, restoration and enhancement plans for the subject

area, then detailed studies must be prepared. The need for, and scope of, the detailed studies should be confirmed with the Town of Halton Hills, the CVC, and the Region of Halton at the conclusion of Part A. Detailed studies may include, but are not limited to:

- surface water and groundwater resources study;
- aquatic resources and water quality study;
- geomorphology study;
- terrestrial resources study;
- hydrogeological analyses, including field investigations, to assess identified areas of potentially higher recharge; and,
- hydrogeological impact associated with aggregate extraction.

X7.4.1.1 <u>Surface Water and Groundwater Resources Study</u>

Note: The groundwater detailed study is more extensive if the proposed land use change is an aggregate resource area – additional study components are required. If this is the case see the section on Hydrogeological Impacts Associated with Aggregate Extraction.

The constraint mapping will have identified hydrologic features within the study area, however, the overall hydrologic system must be described. The components of the system to be addressed by the detailed studies include:

- a) identification of flow characteristics in on-site watercourses and swales, and a general description of the water balance on the site;
- b) characterization of all hydrologic features (watercourse, swales, natural areas providing flood storage/attenuation, depression storage areas, recharge areas, seepage areas and springs);
- c) determination of the volume and distribution patterns of the major discharge areas and a representative location used for monitoring; and,
- d) description of the relationship and dependencies between these features and the surrounding terrestrial, wetland and aquatic resources.

The above analyses should be carried out using technical methods and procedures that are in conformity with the protocols and requirements of the Town of Halton Hills, the CVC, and the Region of Halton. These agencies should be consulted prior to initiating the studies to confirm computer modelling techniques and watershed parameters to be employed (e.g. rainfall distribution, recession constants, curve numbers, etc.) as well as the scope and format of the supporting documentation.

X7.4.1.2 Aguatic Resources and Water Quality Study

The constraint mapping will have identified fish habitat and water quality classification for the tributaries. The detailed study is to provide the following information in support of the habitat classifications and planned land use change conditions:

- a) The direct and indirect physical impacts on water bodies and water quality from the activity;
- b) The fish species present, and the direct and indirect biological impacts of the physical impacts in (a); and,
- c) An assessment of whether the impacted habitat represents a limiting factor for the proposed land use change.

X7.4.1.3 Stream Morphology Study

The study will describe the physical form of the watercourse. The following information will be included:

- a) Characterization of geomorphic features including sensitive reaches, areas of erosion and aggravation, meander belt width, and channel migration; and,
- b) Description of the relationship between the geomorphologic and hydrologic characteristics of the system.

X7.4.1.4 Terrestrial Resources Study

The study will describe the physical form and function of the ecological features of the area, any functional relationships to adjacent areas, define what additional issues must be examined (e.g. buffers) and demonstrate how the proposed land use change will maintain or compensate for the areas existing ecological and hydrological functions. Reference to Section 5 of the Natural Heritage Reference Manual (MNR, 1999) will be of some assistance.

The terrestrial resources study will contain, but not be limited to:

- a) maps illustrating land ownership, and land use zoning;
- b) maps illustrating any of the following features that occur in or within 120 metres of the proposed land use change:
 - i) significant wetlands;
 - ii) significant portions of the habitat of threatened or endangered species;
 - iii) significant woodlands or valleylands;
 - iv) significant wildlife habitat;
 - v) areas of Natural and Scientific Interest (ANSIs); and,
 - vi) Environmentally Sensitive Areas (ESAs); and,
- c) a biological description of the natural environment that might reasonably be expected to be affected by the proposal for land use change.

X7.4.1.5 <u>Hydrogeology Analyses - Recharge Considerations</u>

The Scoped Subwatershed Plan for Glen Williams identified several areas within the Glen Williams Planning Area that represent potential areas with higher infiltration characteristics. This conclusion was reached primarily from available information produced as part of the Regional-based groundwater studies prepared by the Region of Halton.

Detailed hydrogeology investigations should be conducted on a tributary or site-specific basis to determine and quantify the following:

- The nature and composition of the native soils;
- The infiltration capacity of the native materials;
- An estimate of the groundwater recharge volume that is being achieved, and its significance to the receiving watercourse; and,
- If warranted, identify appropriate Best Management Practices that are in accordance with the direction provided by the Scoped Subwatershed Plan for Glen Williams, and which should be employed to maintain current levels and/or minimize potential impacts.

X7.4.1.6 <u>Hydrogeology Impact Associated with Aggregate Extraction</u>

If required, the proponent is expected to follow the Provincial standards set out in the document Aggregate Resources for Ontario and the following more detailed requirements:

If extracting above the water table:

- a) establish the water table elevation before extraction occurs; and,
- b) determine how hydrology and hydrogeology will change, and the effect of the change on fisheries, terrestrial resources, geomorphology, surface water, water quality, etc.

If extracting below the water table, the study should, but not be limited to:

- a) the general groundwater setting and linkages between the local and surrounding groundwater system;
- b) approximate high water table location;
- c) groundwater flow and direction, and the general geologic setting;
- d) potential recharge and discharge areas on, and adjacent to, the site;
- e) local groundwater resource usage;
- f) location and usage of water wells within 1 km of the site;
- g) detailed description of the local geologic conditions and the function of the geologic units from a hydrogeologic perspective;

- h) detailed assessment of the groundwater flow system, local flow direction, linkages to surface water and the regional groundwater flow system;
- i) detailed local and Regional water budget related to the groundwater system. The emphasis should be on estimating recharge to the site, groundwater flux off-site to the local system, regional system and local and regional discharge. The water budget should be evaluated from a sensitivity perspective to potential change in groundwater movement on a subcatchment and subwatershed scale;
- j) delineate major and local aguifers in the area and interpret the connection to the site;
- k) studies on springs, surface watercourses or discharge to surface water that focus on groundwater/surface water interaction, determining linkages to recharge and discharge areas through baseflow assessment, vertical gradients and water table location. This information should be incorporated into the water balance; and,
- l) proposed water diversions or storage and drainage facility studies should focus on the linkage of the surface water to the groundwater.

X7.4.2 STEP 7 DESCRIPTION OF PROPOSED LAND USE CHANGE

Section 7.0 should include, but not be limited to:

- a) the purpose of the proposed land use change;
- b) a detailed location map and site plan;
- c) activities associated with the proposed land use change both during the construction phase and the post-development phase that may have an impact on the natural environment;
- a schedule of the proposed land use change, including any phasing for the development;
- e) a discussion of the "do nothing" alternative and other alternatives to the proposal; and
- f) an explanation of how the proposed land use change has incorporated the environmental resources into planning/ designing the proposed land use change.

X7.4.3 STEP8 IMPACT ASSESSMENT

A concise description of potential impacts for each study completed will be included. This will include how linkages between environmental resources and the functions of the resources, will be affected. Predicted changes in all natural features will be included.

A revised or updated Constraint Map will be required to reflect the results of the Impact Assessment.

X7.4.4 STEP 9 REPORT

Once the requirements of Steps 6 to 8 have been fulfilled, a report on Part B (Impact Assessment Report) will be prepared and submitted to the Town of Halton Hills, the Region of

Halton and the CVC for review and approval prior to proceeding to the following steps. The report will include environmental targets for the area should the land use change be approved.

X7.5 PART C - IMPLEMENTATION

The implementation section should focus on how the recommendations and findings will be addressed. There may be several recommendations related to various aspects of the natural environment. Stormwater management is a consistent requirement, and as such is outlined here.

X7.5.1 STEP 10 STORMWATER MANAGEMENT PLAN

Stormwater management facilities and enhancement techniques will be required to ensure that hydrologic characteristics of the subwatershed will be maintained and ecological resources will be protected.

A fundamental goal of the stormwater management plan will be to determine the most appropriate type of control and enhancement measures and facilities that should be incorporated into the development proposal. Particular attention will be required in dealing with Tributary E, as identified in the Scoped Subwatershed Study for Glen Williams, which is a sensitive cold water watercourse. Accordingly, consideration must be given to incorporating management measures that will avoid the creation of potential thermal impacts that would be harmful to the environment.

Accordingly, the stormwater management study will define and provide the following:

- a) Description of existing and proposed runoff conditions by subcatchment;
- b) Identification of significant watercourses;
- c) Identification of management practices and design considerations necessary to ensure that the stormwater management plan conforms to the Scoped Subwatershed Plan for Glen Williams and the Credit River Water Quality Strategy;
- d) Identification of downstream problems and methods to mitigate or eliminate them;
- e) Identification, screening and design of alternative management practices based on guidelines provided in the Scoped Subwatershed Plan for Glen Williams, the Stormwater Management Practices Planning and Design Manual (MOEE, 1994) and the CVC Stormwater Management Guidelines (CVC, 1996);
- f) Where basins are proposed, confirmation of location, catchment area, functional considerations, outlet characteristics and preliminary design elements;
- g) Documentation and adherence to criteria related to water quality, water quantity and base flow protection;
- h) Location, size, type and design of all stormwater management facilities. Details to be provided include: determination of whether an on-line or off-line facility should be used; selection of wet pond or wetland; forebay dimensions; operating characteristics; targets that will be achieved; integration with existing natural features, etc. Reference

should be made to the Scoped Subwatershed Plan for Glen Williams for guidance in regard to the screening and selection of the stormwater management measures, and the initial listing of the preferred alternatives;

- i) Detailed implementation steps and programs; and,
- j) A summary of the technical findings and recommendations.

X7.5.2 STEP 11 LONG-TERM MONITORING PLAN

Monitoring should continue after baseline conditions are established. The monitoring plan should be designed in order that impacts can be distinguished from natural trends at an early stage.

If impacts are detected:

- a) A more aggressive type of monitoring should take place that determines where, why and how fast the change is occurring;
- b) cause-effect relationships between environmental resources and land use change should be determined;
- c) appropriate mitigative measures should be proposed to deal with change; and,
- d) a focus should be placed on evaluating ongoing or proposed management practices.

Areas that should be monitored over the longer-term include, but are not limited to:

- a) water quality;
- b) fisheries:
- c) hydrology;
- d) groundwater quality and quantity;
- e) stream morphology; and,
- f) terrestrial resources woodlots, wetlands, wildlife habitat.

It is essential that long-term monitoring is included in the project work plan, and that monitoring costs are included in the project budget.

X7.5.3 STEP 12 IMPLEMENTATION

This section will include, but not be limited to:

- a) a comparative evaluation of alternative management options leading to the selection of the preferred option;
- b) conclusions and recommendations including the advisability of proceeding; and,

c) mitigation measures – if impacts are expected, what plans are in place to maintain functions within the natural system.

X7.5.4 STEP 13 EXECUTIVE SUMMARY

Include a summary at the front of the report that contains a description of the land use change, the effects on the environment, and all recommendations. The summary should include information from Parts A. B and C.

X7.5.5 STEP 14 REPORTING FORMAT

A complete description of all the work and conclusions involved in the EIR (Parts A, B and C) needs to be included here.

Reports should be submitted in hard copy along with an electronic copy in Microsoft Word on a labeled 3.5 inch floppy disk, CD or via e-mail. Diskettes should be scanned for viruses and corruption prior to delivery. Three copies of the report, each containing a full set of maps must be prepared, and one copy submitted to the Town of Halton Hills, Credit Valley Conservation, and the Region of Halton.

X7.5.5.1 Graphics

All graphics will be submitted in Microsoft PowerPoint format. The graphic should be delivered on disk separately from the main document, although it should also be incorporated into the main document file.

X7.5.5.2 Artwork

All artwork should be provided in Corel Draw format and should be delivered on 3.5 inch floppy disk separately from the main document, and also incorporated into the main document. If the artwork has to be scanned, it may be delivered in GIF or TIF bitmap format.

X7.5.5.3 Mapping

Mapping should be at a scale of 1:5000 or less. It should be noted that ArcView 3.0 and PC ArcInfo comprise the software currently in use at the Town of Halton Hills and CVC. As such, ArcInfo format coverages are considered to be standard for the organization. In general, digital graphic data:

- must be georeferenced in either UTM (preferred, using NAD 83) or latitude-longitude coordinates:
- must be clean (i.e. polygons are closed, dangles eliminated, polygons with common borders should not overlap, etc.);
- should be packaged/organized into logical layers (e.g. soils layer, wetlands layer, etc.);
- must be in vector format, unless otherwise specified; and,
- should be either uncompressed ASCII ArcInfo Export (.E00) format, ArcView Shapefile or AutoCAD exchange DXF format.

If provided in DXF format, the elements necessary to produce correct topology in ArcInfo should be included, such as feature codes and attributes. Peripheral graphics such as page borders and title boxes should be included only if they are stored in layers distinct and separate from the actual map graphic. All features should be in separate named layers, and layers should be colour-coded. A single unique numeric label feature ID should be placed inside of polygons. Attributes may be provided in separate tables, although it should be ensured that a common variable exists between the attribute table and the map features, such as feature ID, to allow their association and/or joining.

X7.5.5.4 <u>Tabular Attribute Data</u>

Attribute data should be provided in Microsoft Access 97 format files (preferred), dBase IV format files, or in formatted (i.e. with defined columns) ASCII files.

X7.5.5.5 <u>Textual Data for Graphics</u>

Text should be provided in Microsoft Word or ASCII format. Please be aware that any tabular data to be referenced to actual map features should not be provided as tables in a Word document.

X7.5.5.6 Digital Photos

Digital photos, whether they are scanned photographs or computer-generated artwork, should be provided in Corel Draw 5.0 (i.e. for vector graphics), encapsulated postscript (EPS), or bitmap (either TIF or PCX) format for scanned graphics.

For more information on delivering digital data, refer to the document Specifications for the Delivery of Digital Data to Credit Valley Conservation.